

**POSITION PAPER** 

# Aid and the Social **Sectors**

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#### **Preface**

This position paper on Aid and the Social Sectors was prepared by UNU-WIDER under the ReCom programme of Research (Re) and Communication (Com) on foreign aid. It aims to provide a coherent up-todate overview and analysis of an extraordinarily important issue in the development field: The contribution of foreign aid to human development.

Social sector policy and the services that they provide are recognised for their intrinsic values and instrumental qualities for the functioning of individuals in particular, and the development strategies of countries more general. There is overwhelming evidence that links good quality social services to labour productivity, economic growth, poverty reduction, and ultimately, human development.

The position paper examines a large number of cutting-edge policy innovations, and based on scientific evidence, addresses four central and interrelated questions: What works' in social sector policy? What could work' if policy designs are fine-tuned? 'What is scalable', i.e. what are the basic conditions needed to bring promising but small pilot projects to national level? 'What is transferable', i.e. what policy innovations in one socio-economic and political context have been successfully replicated in other contexts? These four questions are, and will remain, at the heart of present and future international co-operation efforts.

The position paper adopts a typology that emerges as a response to significant advances in knowledge about the causes and nature of poverty. It recognises the importance of taking a holistic and multi-dimensional approach to poverty, and therefore looks at policy actions and strategies that enhanced human development through the provision of healthcare, education, safe water and sanitation infrastructure, as well as social protection.

The position paper relates to the ReCom results meetings on 'Aid and the Social Sectors' held in Stockholm, Sweden, on 13 March 2013. The initial draft of the position paper was prepared before the ReCom results meeting and has been subsequently updated and revised based on critique, comments, as well as research inputs received from a wide range of stakeholders. The paper has benefitted substantially from this process and from the deliberations at other ReCom results meetings.

Background research and materials on which the UNU-WIDER team has drawn includes: (i) existing research published in a variety of forms reviewed under the ReCom programme; (ii) background papers prepared for ReCom by members of UNU-WIDER's global network, including a range of leading specialists in the area of aid and social sector policy across the developing and developed world; as well as (iii) research by UNU-WIDER staff. Further information on background papers, research studies, and other outputs from ReCom is available online at http://recom.wider.unu.edu/results and in the list of Commissioned papers in the Appendix 3, which are referred to throughout

this position paper. The theme leader for the position paper on Aid and the Social Sectors is Miguel Niño-Zarazúa, who received assistance from Lena Lindbjerg Sperling. Other UNU-WIDER contributors include Tony Addison and Roger Williamson. They have worked alongside the UNU-WIDER communication and position paper production support team consisting of: Kennedy Ambang, Dominik Etienne, Heidi Kaila, Anu Laakso, Carl-Gustav Lindén, Susan Servas, James Stewart, Paul Silfvenius, Minna Tokkari, Janis Vehmaan-Kreula, Anna-Mari Vesterinen, Annett Victorero, Tuuli Ylinen and Lumi Young.

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Finn Tarp Director, UNU-WIDER 14 March 2014

#### About ReCom

**IMAGE 1** 

ReCom-Research and Communication on Foreign Aid is a UNU-WIDER coordinated research programme implemented over 2011-2013 in partnership with Danida (Ministry of Foreign Affairs of Denmark) and Sida (Swedish International Development Cooperation Agency). The Danish Institute for International Studies (DIIS) and the UNU-WIDER global network of partner institutions and researchers were also involved in ReCom research. The aim of the programme was to research and communicate what works and what can be achieved through development assistance. For this purpose, a specific programme website wider.unu.edu/recom has been created.

The ReCom website Search ReCom RESEARCH & COMMUNICATION ON FOREIGN AID Home UNU-WIDER Media Archive Growth & Employment Governance & Fragility Social Sectors Gender Equality **Environment & Climate Change** Advanced search V Sign up for ReCom monthly newsletter E-mail address Neotrusteeship in ReCom results <u>w</u> meeting: Aid for Gender Equality states – lessons from Kosovo... Past newsletters 31/10/2013 - October 2013 - newletter from ReCor Kosovo and East Timor share many similar 01/10/2013 - September 2013 - newletter from ReCo characteristics, and yet they have had divergent results in post-conflict state building. are central to improved living standards, well-being, and economic growth. UNU-WIDER / OCT 2013 ReCom Researcher Identifying 'what works' ir Position Papers - how does aid work? foreign aid The knowledge gathered through the ReCom research project culminates in five position paper, one on each of the themes of the MIGUEL NIÑO-ZARAZÚA programme.

Source: wider.unu.edu/recom

UNU-WIDER / JUNE 2013

Foreign aid is a complex and multi-faceted issue, involving many countries, institutions, and people—researchers, aid officials, policy makers, NGOs, companies and civil society organizations. Currently, the evidence for what works in aid is fragmented and not easily accessible thereby limiting, in particular, the transfer of successful interventions across countries. There is limited evidence for what works on a large scale—understanding this is a key objective if more aid is to be used well, and if challenges such as adaptation to climate change are to be met successfully.

To better understand and improve the effectiveness of aid requires a multidisciplinary approach—bringing together the best from social sciences, in particular economics and political science, as well as other relevant disciplines. Better understanding can only come from mobilizing a global network of development researchers and practitioners to share their knowledge. No single actor can grasp all of the dimensions of aid, especially when we take into account the number of complex issues—such as conflict, climate change, the emergence of new aid donors—involved in the context that aid is operating in. Many developing economies are growing, a success in part due to aid itself, but immense development challenges remain, not least in adapting to climate change and reducing poverty. It is the power of the network that guarantees ReCom its credibility as a source of knowledge on development and aid when communicating these new trends and challenges, and what they mean for aid practice and for achieving aid effectiveness.

Over 2011-2013, ReCom has been bringing together some 300 social scientists from all parts of the world—in fact from 60 different countries, including 21 African countries—to research and communicate what works, and what could work, in development assistance, including the potential to scale-up and transfer small but successful interventions as larger aid programmes. Some 240 individual studies have been published or are forthcoming, mainly in the WIDER Working Papers series—each of them summarized in a research brief published on the ReCom website (see Appendix 5). An important part of the quality assurance process of ReCom is to publish studies in peer-reviewed fora. A large number of the studies have been submitted to, or have already been published in, internationally refereed journals and as UNU-WIDER books (see Appendix 1).

The thematic focus of the research programme covered five key issues in international development assistance: growth and employment; governance and fragility; social sectors; gender equality; and environment and climate change. Poverty and inequality cuts across all these issues, for there can be no sustained poverty reduction without achievements for aid in each. By these means, ReCom is also helping to shape the debate on the Millennium Development Goals (MDGs) and the post-2015 development agenda.

To be of use the new knowledge generated by research must be customized and shared. This is done by effective communication with national policy makers, aid officials, parliamentarians, and other practitioners in NGOs and social movements. Communication has been as important to ReCom's success as research.

ReCom's knowledge-sharing process therefore involved the exchange of information and views. Discussion of the research results set up new questions for further investigation. These exchanges were designed to capture the insights of policy makers and practitioners, which then fed back into further rounds of knowledge creation and sharing. This has been the core of ReCom.

Through more than 75 presentations and seminars, seven ReCom results meetings, and a website (wider.unu.edu/recom) dedicated to communicating the research, ReCom has focused on adding to the existing evidence base and communicating with policy makers as well as the broader audience 'what aid has done, and what aid can do better in the future' thereby improving aid practice and policy, ultimately increasing the benefits of aid for recipient countries. Appendix 2 provides a list of all ReCom presentations and seminars that took place during 2011-2013. In addition, social platforms (YouTube, Twitter, Facebook, etc.) and a monthly ReCom newsletter have been used to disseminate the knowledge produced through ReCom.

#### **Box 1: ReCom results meetings**

People-to-people knowledge sharing has been a central part of the overall communication strategy of the co-ordinating partners of ReCom. Especially the ReCom results meetings have been the anchor of the communications activities as they have proven to be an excellent vehicle for bringing researchers, practitioners and policy makers together to exchange knowledge on key development and aid issues, and because the knowledge transferred and communicated in them contained the essential facets of each research theme. During the programme period, the following seven ReCom results meetings took place in Copenhagen and Stockholm:

- 'Aid, Growth and Macroeconomic Management', Copenhagen, 27 January
- 'Democracy and Fragility', Stockholm, 10 May 2012
- 'Jobs Aid at Work', Copenhagen, 8 October 2012
- 'Aid and the Social Sectors', Stockholm, 13 March 2013
- 'Aid and Our Changing Environment', Stockholm, 4 June 2013
- 'Challenges in Fragility and Governance', Copenhagen, 23 October 2013
- 'Aid for Gender Equality', Copenhagen, 16 December 2013

**IMAGE 2** ReCom results meeting 'Aid and the Social Sectors'



Source: © UNU-WIDER

The ReCom research findings have been compiled in five substantive position papers, one for each theme, that speak to a broad audience interested in foreign aid and the respective theme. The position papers specifically target policy makers in donor agencies and their partner countries, as well as private foundations and civil society organizations.

The social sectors theme addressed in this position paper draws on a large academic and policy literature on aid effectiveness and social sector policy.

The relationship between the provision of good quality social services and human development has long been well established. The fact that Economic theory and empirical evidence strongly shows that the activities that social sector policy represent, and which largely focus on investing in what it is often referred to as human capital, are critical for economic growth and development. Education, healthcare, access to safe drinking water and sanitation facilities, as well as the provision of social protection are key elements that facilitate the process of innovation, knowledge creation, and information that have profound effects on the long-term patterns and future prospects of economic growth and development of a country. In that perspective, investing in the factors that enhance human development becomes fundamental.

A crucial part for a successful development strategy largely depends on how effective social policies are in achieving the intended objectives. In contexts of significant financial constraints, the ability of poor households to invest in education and health is limited. Poor health and education lead to low income, and in extreme situations, to poverty traps that are difficult to break in the absence of exogenous policy interventions. Effective policies require strong institutions, financial and human resources, and the administrative capacity to deliver social services. But many developing countries still face important challenges in achieving that goal. It is in those contexts that aid can play an important supportive role.

Since the 1990s we have witnessed a great engagement and interest in social sector policy among multi- and bi-lateral organizations. Global initiatives, such as the MDGs, the Social Protection Floor, and public-private initiatives, for example the GAVI Alliance, the Global Funds to fight AIDS, Tuberculosis and Malaria, in combination with national development plans and strategies have been largely supported by foreign aid. There has been not only a sharp increase in the overall aid disbursements, but also in the contribution to social sectors.

The increase in development funding has been accompanied by a proliferation of actors that provide financial resources, manage aid programmes and projects, and allocate resources. This wide variety of actors has delivered development assistance to the social sectors using different funding modalities that are often contingent on specific socio-economic and political environments.

But more actors and funds have also created costs for recipient countries. Indeed, concerns have arisen with regards to issues related to aid fragmentation, co-ordination, alignment, accountability, and impact. The Paris Declaration on aid effectiveness in 2005, and subsequently Accra Agenda for Action in 2008 have stressed the need to accelerate the progress towards addressing these concerns. These policy considerations are discussed and examined thoroughly with a critical but objective lens.

In the context of scarce resources, any development policy decision with regard to aid should be based on reliable scientific evidence. It is from this perspective that the analysis of aid effectiveness in the social sectors is a prominent consideration. Addressing the question of 'what works' in social sector policy is nevertheless an intricate enterprise. There are two general reasons for that: first, evaluation data from developing countries is often incomplete and of poor quality, and second, establishing a causal relationship between aid, social services, and human development is methodologically cumbersome, as it involves evaluating a counter factual scenario, in which aid recipient households, communities and countries are also affected by prices, incomes, and public interventions that substitute and/or complement the intended policy, and all this under intricate socio-economic and political interactions.

This position paper divides the literature of aid effectiveness into two broad categories: the first category is made of studies that rely on aggregate macro data to examine the macro, cross-country level dimensions of aid and its relationship with growth and welfare dimensions, notably associated with education and health outcomes. The second category of studies relies on household-level data of experimental, quasi-experimental, and nonexperimental nature to examine the micro dimensions of aid and its impact on households and individuals. Unlike the macro analytical approach that focuses on policies, the micro analytical approach focuses on aid projects or programmes.

The two categories of studies covered by ReCom background papers address specific issues and sectors. From this work, a significant number of successful aid interventions have been identified, analysed, and summarized throughout the position paper and its appendices. The position paper aims to substantiate the conclusion that the overall current knowledge and evidence base about aid and social sector policy is indeed rather limited, although growing. To put this into proportion, the reader should keep in mind that ReCom was not meant to fill existing data gaps. In fact, such activity was explicitly excluded from the approved activities.

Focus in ReCom efforts has therefore been on a number of research activities: first, to conduct systematic literature reviews on key social sector related issues. These reviews have guided the overall synthesis of studies and helped to establish a much needed perspective of what works in aid and social sector policy. Research shows that efforts in the aid to the social sectors had traditionally been addressed via supply-side interventions. More recently, important innovations have been experimented to address demand-side 'bottle necks'. These have aimed at changing behaviours via incentives, improving informational asymmetries, and enhancing community participation in the process of delivering and monitoring social policies. The evidence arising from some these innovations is encouraging but still scant. Overall, they show that beyond design features, contextual factors are often the key determinants in ensuring policy success. The position paper tries to bring out these complexities and identify key future policy challenges.

Specific ReCom contributions to the research literature on aid, and social sector policy include 42 published and forthcoming UNU-WIDER Working Papers. They are listed and referred to in this position paper (see Appendix 3). Some of these contributions have, during the project period, found their way into academic publications. More specifically, one special issue on 'Experimental and non-experimental methods to study government performance' is forthcoming in the Journal of Globalization and Development, and two specials issues, one on 'Aid, social policy and welfare in developing countries' and another on 'Education aid and development' are under preparation. In addition, a book volume on 'Aid and public health policy in developing countries' is under consideration by Oxford University Press.

## Acronyms and abbreviations

ACTs Artemisinin-based Combination Therapies

AIDS Acquired Immunodeficiency Syndrome

ALRI Acute Lower Respiratory Infection

**AMO** Assistant Medical Officers

AMF-m Affordable Medicine Facility for Malaria

ART Antiretroviral Treatment

ΑU African Union

BINP Bangladesh Integrated Nutrition Project

Conditional Cash Transfer CCT

CPT Co-trimoxazole Preventive Therapy

DAC Development Assistance Committee (OECD)

DAH Development Aid for Health

Danida Danish International Development Agency

DFID Department for International Development (UK)

DRC Democratic Republic of Congo

DTP Diphtheria-Tetanus-Pertussis

**EFA** Education for All

EPI Expanded Programme on Immunization

ΕU European Union

FAO Food and Agriculture Organization

**FHP** Family Health Programme

**GBS** General Budget Support

**GDP** Gross Domestic Product

Global Health Initiative GHI

Generalized Method of Moments GMM

GNP Gross National Product

HIPC Heavily Indebted Poor Countries initiative

HIV Human Immunodeficiency Virus

HSV2 Herpes Simplex Virus 2

HDI Human Development Index

ILO International Labour Organization **IMF** International Monetary Fund

IPC-IG International Policy Centre for Inclusive Growth

IPT Isoniazid Preventive Therapy

Intermitted Preventive Treatment **IPTp** 

**ITNs** Insecticide-Treated Nets

LEAP Livelihood Empowerment against Poverty (Ghana)

Low- and Lower Middle-income Countries **LLMICs** 

**LMICs** Low- and Middle-income Countries

**MDGs** Millennium Development Goals

**MDS** Ministry of Social Development and Fight against Hunger

(Brazil)

M&E Monitoring and Evaluation

MMR Maternal Mortality Rate

**MNCH** Maternal, Newborn, and Child Health

NGO Non-Governmental Organization

**NREGS** National Rural Employment Guarantee Scheme (India)

**ODA** Official Development Assistance

ODI Overseas Development Institute

**OECD** Organisation for Economic Co-operation and Development

**PACES** Plan de Ampliación de Cobertura de la Educación Secundaria

PARE Mexican compensatory programme

**PBA** Programme-Based Approach

PBP Performance-Based Payments

**PEPFAR** [US] President's Emergency Plan For AIDS Relief

PSNP Productive Safety Net Programme (Ethiopia)

**RCT** Randomized Controlled Trial

RR Relative Risk

SD Standard Deviation

SES Socio-Economic Status

Sida Swedish International Development Cooperation Agency

SSA Sub-Saharan Africa

STI Sexually Transmitted Infection

**SWAp** Sector-Wide Approach TBTuberculosis

U5MR Under-five Mortality Rate

UCT Unconditional Cash Transfer

United Nations Educational, Scientific and Cultural **UNESCO** 

Organization

UNICEF United Nations Children's Fund

US United States

USAID United States Agency for International Development

Value Added Tax VAT

World Food Programme WFP

WHO World Health Organization

## **Executive summary**

This position paper on Aid and the Social Sectors draws on a huge volume of academic and policy literature on aid effectiveness and social sector policy. Much of this is analysed and summarized in the following pages. Education, healthcare, access to safe drinking water and sanitation, and the provision of social protection are fundamental to development. Poor and vulnerable families and poor societies face pressing resource constraints and often cannot provide for the basic necessities for human development. This has been recognized much more strongly since the 1990s in global initiatives, such as the Millennium Development Goals, the Social Protection Floor, GAVI, Global Funds to Fight AIDS, Tuberculosis and Malaria, as well as national and local approaches.

The evidence collected throughout the ReCom programme brings important insights and policy lessons for researchers, policy makers, practitioners, and the general public, interested in the concern of aid, social sector policy, poverty, and human development.

One thing that has become clear is that, when looking at successful stories in economic and social development over the last 50 years, development processes often require 'trial and error' to arrive to certain diagnosis about 'what works' in social sector policy. Socio-economic and political environments as well as key policy choices have proved to be at the centre of any development success. A crucial part in that process largely depends on how effectively a country exploits its abundant human resources for production and exchange in the global economy.

There has been a movement from infrastructure (hard) to social sector (soft) aid investment in recent decades. In education, the recent emphasis for aid has mainly been in primary education, reversing the earlier trend of concentrating on secondary and tertiary education, which were considered to be important for contributing to economic growth. The Education for All initiative is central here.

Aid to the social sectors is primarily justified in practical terms as assistance in breaking poverty traps and by social justice arguments for supporting the poorest and most vulnerable. With the changes in distribution of poverty, with more poor people now living in middle-income countries than hitherto, there is an important debate about how poor people in middle-income countries with a severely skewed income distribution can best be helped.

Despite the commitment to move to sector-wide and budget support, project aid still dominates in donor involvement. The Paris Declaration (2005) and Accra Agenda for Action from 2008 have sought to improve donor coordination and lower the transaction costs of aid. Programme-based approaches in the social sectors provide evidence that budget support works. The position paper summarizes examples of sector- wide approaches from developing countries, notably sub-Saharan Africa (SSA).

Global health initiatives, such as those of the Bill and Melinda Gates Foundation, the Global Fund and GAVI, as well as addressing the particular emphasis for which their programme is designed, can strengthen the health system, particularly if the diagonal approach is adopted. Here the focus is on a particular disease, but additional inputs are used to strengthen the health system.

Major bi-lateral programmes, such as the United States President's Emergency Plan for AIDS Relief, European Union programmes and the activities of the Bill and Melinda Gates Foundation, raise concerns that such large programmes reflect donor priorities rather than the most urgent needs or country priorities. Donors tend to crowd around particular countries meaning that universal coverage is not achieved. The unpredictable nature of aid flows makes consistent programming more difficult.

In education, the Global Partnership for Education (Riddell 2012); Education for All (UNESCO 2011); increasing aid to education to one per cent of gross domestic product (Michaelowa and Weber 2006; Dreher et al. 2011); support for female students; cash transfer schemes; and financial incentive programme to reduce teacher absenteeism (Duflo and Hanna 2005), are all approaches which are analysed in the paper and found, at some level, to have worked.

In order to ensure best use of scarce resources, there is an understandable desire to ensure that aid is used effectively. This increasingly translates into a 'results-based' agenda which is, however, often based on incomplete or poor quality data. At the macro-level, the position paper notes the special attention given to the aid-social sector growth connection. At the micro-level, randomized experiments are becoming increasingly popular, but they raise ethical and practical issues. Aid to education has been less poverty focused than aid to health and population.

Recent studies suggest that fungibility is not as large a problem as has previously been thought. Both for health and education, the overall picture is difficult to evaluate as statistics are often for commitments not disbursements. It is also important in evaluating results that an appropriate time-period is chosen, for example, a child starting primary school now is unlikely to be productive for 15 years or more. This particular example illustrates a more general point.

A ReCom study (Arndt et al. 2011) bears out that aid's impact can best be assessed in the long run. Findings suggest that foreign aid does have a positive impact on economic growth. This is confirmed by a systematic review of the extensive literature conducted by Mekasha and Tarp (2013).

The position paper distinguishes between two types of aid effectiveness studies. Macro, cross country level studies focus on aid and its relationship with growth and aggregate welfare dimensions associated with social sector policy. The second group of studies focuses on the micro dimension of aid and its impact on households in specific developing countries. These studies analyse the link between aid and welfare outcomes through examination of impact analysis of aid-supported projects or programmes.

For maternal and child health, the paper records successes in countries including Sri Lanka, Niger, Ghana, Mexico, which resat on well-planned domestic health policies, supported by carefully channelled external finance and technical assistance (Bhutta and Aleem 2013).

In education, Riddell (2012) stressed that bi-lateral aid to education is still very project focused, a conclusion confirmed for health by Martinez Alvarez and Acharya (2012) and Blanchet et al. (forthcoming).

Three non-clinical approaches to tackling HIV/AIDS, TB, and Malaria have been used with a degree of success-financial resources; promoting behavioural change; improving accessibility of antiretroviral and other resources. All of these show some success, and they are often used in combination in mixed interventions (Amaya and Niño-Zarazúa forthcoming).

Treatable childhood diseases kill millions of children every year in low and middle-income countries (LMICs). Pneumonia (1.6 million) and diarrhoea (1.3 million) account for almost three million deaths. Almost half of the deaths of young children are in one of five countries, India, Nigeria, Democratic Republic of Congo, and Pakistan. Research in identifying and implementing effective non-clinical interventions against child mortality and morbidity beyond clinical interventions remain limited.

The position paper identifies a number of non-clinical strategies that range from hygiene and sanitation, water supply, water quality, to multiple interventions that introduce water supply, water quality, sanitation, and/or hygiene education elements in the case of diarrhoeal diseases, and education and training programmes in the case of acute respiratory diseases (Seguin and Niño-Zarazúa 2013).

Polio cases have rapidly dropped largely due to global efforts to tackle the disease. In the 1980s, more than 400,000 polio cases were registered on an annual basis; by 2011, only 700 cases were reported.

Maternal mortality (death during pregnancy, labour, or in the immediate postpartum period) has decreased from 543,000 in 1990 to 287,000 in 2010—a 47 per cent decrease despite growing population. Bhutta et al. (2010) identify important drivers to improve maternal health outcomes. These include prompt recognition of complications and strong referral system; combining maternal health and family planning; promoting women's education and empowerment; addressing poverty and gender inequality; and having skilled birth attendants which is vital to improve child survival and reduce maternal mortality.

The position paper also reviews what works to improve the quality and efficacy of health systems. The mixed evidence on contracting out and the efficacy of private sector providers is presented.

What works and does not work in education policy? There has been significant progress towards universal primary education (United Nations 2013). For SSA, the world region with lowest primary school enrolment rates, figures improved for boys from 57 to 78 per cent, and for girls from 50 to 74 per cent in 20 year period (1990-2010).

Petrosino et al. (2012) analysed five different types of policies aimed at improving primary and secondary school enrolment in developing countries; 1) economic; 2) educational programmes and practices; 3) healthcare and nutrition; 4) new schools and infrastructure; and 5) provision of information and training. The largest effects were found for new schools and infrastructure and the smallest for the provision of information and training, as well as educational programmes and practices.

Masino and Niño-Zarazúa (forthcoming-b) stressed that it is important to look at supply-side capability interventions, demand-side factors, and participationrelated factors. They stress that there is a need for the demand side as well to be effective.

Conditional cash transfers give positive results, and are seem more effective than unconditional cash transfers in encouraging school attendance. The paper also studies the positive impact of giving vouchers to low-income students for school attendance in various Latin American countries. School incentive programmes have proved successful in SSA but with some caveats.

School-based feeding schemes have proved positive, and have wider effects outside the classroom. Government-subsidized schemes have been instituted in, e.g., India, Bangladesh, Brazil, Swaziland, and Jamaica (World Food Programme 2002).

School incentives to teachers in Chile and India have yielded differing results. Top down, government led (Nicaragua and Argentina) and bottom up (El Salvador, Honduras) school management reforms are summarized.

The position paper also contains a major review of social protection policies covering approaches, such as workfare, social safety nets, microcredit, cash transfer programmes, as well as provision of antiretrovirals and support for livelihoods of those on the programmes. Examples were given from Africa, Asia and Latin America. In a detailed and nuanced presentation, many successful outcomes were registered.

Evidence shows that aid does not seem to work as effectively in countries where the policy environment is poor, even though some carefully targeted, vertical aid policies can confer some limited benefits. Recent work on the importance of institutions and the policy environment for development also has strong explanatory impact for education and health. The key factors include:

- Strong internal (government) and external (donor) leadership.
- Collaboration across governments, donors, and non-governmental organizations in project design.
- Consistent, predictable funding support, even after success has been achieved.
- Simple and flexible technologies that can be adapted to local conditions and do not require complex skills to operate and maintain.
- Programmatic approaches that recognize and address the need to help build health system infrastructure, especially in human resources.
- Household or community participation in the design, execution, and monitoring of programme activities.
- Rigorous impact M&E systems that facilities the assessment and if needed, fine-tuning of programme features.

A key lesson arising from ReCom is that sustainable policy choices cannot and will not be achieved through individual short-lived projects, even if those projects are successful in their own right. Aid to the social sectors needs to be seen as a long-term process, whereby capacity development and expansion of policy innovations require more active involvement of governments in recipient countries to manage and co-ordinate such policies. Introducing these innovations on a much larger scale involves an altogether different set of challenges, which are directly connected with the concern of scalability.

The position paper focuses in particular on three core challenges: first, political commitment from incumbent governments and elites; second, the long-term financial sustainability of social policies; and third, the administrative capacity of governments to deliver social services. Financing, in particular, is seen as a major concern.

The position paper presents a number of policy strategies that could potentially increase the fiscal space needed to scale-up social sector policies in developing countries. These include revenue mobilization via taxes, redistribution, and shifting public expenditure.

What works in one context may not necessarily work in another. The concern of transferability of 'good policy' has proved to be a very challenging enterprise, particularly given the heterogeneity of contexts and factors that determine wellbeing conditions. ReCom studies have shown that the simple replication of successful policy stories does not always work. The most successful projects and programmes are those that make an effort to understand the local needs and tailor their design features, objectives, and strategies to the socioeconomic, political characteristics, and social norms that govern specific societies. In that process, giving governments and other local partners real ownership over the development process has proved to be fundamental.

All in all, the discussions and analysis throughout the position paper indicate that aid has been generally good for development. It has supported the building blocks of economic growth and progress. But even though foreign aid has produced positive outcomes, it should not be looked upon as a panacea. The impact of aid is positive but moderate, and does not work well at all times and in all places. Democratic processes (and good governance) are sine qua non conditions to ensure better and more optimal aid allocations to the social sectors.

ReCom background papers have addressed and summarized a large number of social sector policies. From this work, a significant number of successful aid interventions have been identified and analysed throughout the position paper. The evidence arising from this work is encouraging but still scant. Overall, they show that beyond design features, contextual factors are often the key determinants in ensuring success in aid policy. The position paper has brought out these complexities and identified key future policy challenges.

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#### Introduction and statement of issue

Social sector policies, and the services that they provide, have long been recognized for their intrinsic values and instrumental qualities for the functioning of individuals in particular, and the development strategies of countries more general. A person certainly appreciates the benefits of having a healthy life regardless of the instrumental role that health plays in facilitating his or her participation in economic transactions, productive arrangements, social interactions, and political participation. This is in essence what Amartya Sen refers to in terms of functionings and capabilities (Sen 1999).

From the perspective of a country's development trajectory, economic theory strongly suggests that the elements of what social sector policy constitute, and which largely focus on investing in human capital, are critical for economic growth and development (Lucas 1988; Romer 1994). Education and health policies, and the measures that facilitate the process of innovation, knowledge creation, and information, are found to have profound effects on the long-run patterns and future prospects of economic growth and development of a country (Barro 1991; Rebelo 1991; Benhabib and Spiegel 1994; Barro and Salai-Martin 1998).

Education, for instance, is intrinsic to achieving economic growth and development. The development of skills in literacy, numeracy, and critical thinking not only offer a pathway out of poverty but also contribute to the growth of the economy at the macro level. For example, an additional year of schooling is estimated to increase an individual's earnings by 10 per cent and the average annual growth of gross domestic product (GDP) by 0.37 per cent (UNESCO 2011). These effects are larger if we consider cognitive skills instead of just years of schooling—an increase of one standard deviation (SD) in student scores on international assessments of literacy and mathematics lead to a two percentage point higher annual growth of per capita GDP (Hanushek and Woessmann 2012). The role of education as a tool that helps expand human capabilities (and freedom) has long been recognized—enshrined in Article 26 of the Universal Declaration of Human Rights, and more recently as the second objective of the Millennium Development Goals (MDGs).

Continuing investments in education is crucial: As of 2011, 57 million primary school aged children were out of school (United Nations 2013). Although significant strides have been made since the establishment of the MDGs, challenges remain, particularly with respect to girls and fragile states. Not only are the economic returns to female education high, research has also found that it leads to greater female empowerment by giving women greater control over their fertility and a larger role both within the household and in the community. Prioritizing education in fragile states is particularly important as it: (i) boosts economic development; (ii) augments humanitarian action; (iii) helps in post-conflict recovery by supplementing peace-building and statebuilding efforts; and (iv) helps in preparing for and mitigating the effects of disasters (Winthrop and Matsui 2013). But closing the gender education gap in fragile states, such as Afghanistan, Somalia, and Pakistan, remains a challenge.

A crucial part for a successful development strategy largely depends on how effectively a country exploits its abundant resources or 'factor endowments' for production and exchange in the global economy. An efficient way to upgrade a country's factor endowments is related to its comparative advantage in the use of abundant resources. With higher birth rates and family-oriented social and economic structures, developing countries enjoy the abundance of human resources, although it is only through their transformation into human capital via effective investments in the social sectors that they can find a competitive economic structure (Haq 1996; Lin 2008).

## 1.1 Development co-operation to the social sectors

What do we mean by 'social sectors'? It is surprising that a well-defined taxonomy of the social sectors is absent in the literature. While organizations, such as the World Bank and the International Monetary Fund (IMF) have traditionally focused on supporting institutions and actors that work in the health and education sectors, other multi-laterals including the International Labour Organization (ILO) and the United Nations Children's Fund (UNICEF), include water and sanitation, and more recently social protection as part of the core areas of social sector policy.<sup>2</sup> To a great extent, the latter definition has emerged as a response to the significant advances in the general knowledge about the causes and multi-dimensional nature of poverty, and the importance of taking holistic approaches to tackle extreme deprivation across the globe through policies that secure not only high but steady economic growth, good public service provision, and social protection. This position paper follows a holistic and multi-dimensional approach to defining social sector policy, and looks specifically at policy actions and strategies in the areas of health, education, water and sanitation, and social protection.

Following the World Health Organization (WHO), health policy is defined here as those 'strategic decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society' (WHO 2013). From a development perspective, health policies are critical as they set the strategies, outline priorities, and define roles and activities of different actors involved in the provision of health services, including donors, national and local governments, private sector providers, and non-governmental organizations (NGOs). A good health policy informs the public and builds consensus around policy decisions among political constituencies.

Education is a fundamental human right for the reasons outlined above. It is a key ingredient to achieving economic growth, sustainable development, peace and stability. We adopt a definition of education policy that considers the principles policy strategies, and rules that facilitate the development of education systems (Bell and Stevenson 2006).

Access to safe drinking water and sanitation infrastructure is fundamental for human development, and yet, around 1.1 billion people globally still do not

have access to safe drinking water, whereas 2.4 billion people do not have access to any type of sanitation. Poor sanitation and contaminated water is associated with diarrhoeal diseases that lead to two million deaths every year, most of them small children. The most affected are people in developing countries, living in extreme conditions of poverty.

Key factors that exacerbate this situation include lack of financial resources, limited water supply and sanitation services, poor hygiene practices, and inadequate sanitation in public places.

The ILO divides the notion of social protection into three general categories: social insurance, labour market regulation, and social assistance. Social insurance includes contributory schemes designed to protect workers against life-course and work-related contingencies. Labour market regulations are legal frameworks aimed at ensuring minimum standards for employment and safeguarding workers' rights. Social assistance includes tax-financed policy instruments designed to address poverty and vulnerability (ILO 2001). In this position paper, the concept of 'social protection' is used with specific reference to social assistance, as those programmes represent the most significant changes to the social protection systems in the developing countries that have received support from aid agencies.

Since the post-war era, there have been important shifts in the provision of development co-operation into the social sectors. Infrastructure and 'hard' sectors were favoured in the earlier decades, and 'softer' social sectors were preferred in the first decade of this century. For instance, during the 1960s education aid constituted just eight per cent of total international assistance, increasing just marginally to around 11 per cent during the 1970s. The priority given to health and education was again reduced from the late 1970s through 1980s, something that reflected, as Coombs (1985) points out, the joint view of donor agencies and developing country authorities that important competing priorities in physical infrastructure needed to be addressed.

Two central features characterized aid flows to the social sectors during the 1970s and 1980s. First, donor support was largely concentrated on supporting the building of physical infrastructure and provision of equipment as well as technical assistance via project aid, aimed at addressing the issue of accessibility to public service provision. Tilak (1988) shows that two-thirds of World Bank educational lending during that period was directed to construction of schools and some 30 per cent was used for purchasing equipment. The remaining funding was directed for technical assistance, including the supplying of advisers, experts, other technical manpower, and teachers, as well as on scholarships for overseas studies. In most developing countries, these came in the form of project aid, with the perils that accompanied these projects in terms of scope, reach, and long-term sustainability. In fact, much of the global efforts concentrated in strengthening the supply-side capabilities that were expected to lead to better welfare outcomes, enhanced productivity, and economic growth. Heyneman (2004) points out that education began to be included in foreign aid policy to support workforce development plans, emphasizing vocational training, and engineering education. Infrastructure investments were priorities for countries' development, but they needed skilled maintenance.

The second feature of aid flows was that they focused on strengthening the factors that were seen as critical for the provision of public services. For example, in the field of education aid was allocated to support secondary and higher education, as these were regarded as catalysts for growth and development (World Bank 1980). *Improving teaching abilities* via teacher competencies and learning materials, such as books, were seen as the most effective way of enhancing educational quality in developing countries. Similar trends were also observed among bi-lateral organizations during the 1970s and 1980s, which channelized no more than ten per cent of total education aid flows to basic education. In fact, nearly 50 per cent of bi-lateral co-operation went to secondary and nearly a third to tertiary and technical education (OECD 2012).

Reiff (1983) points out that World Bank's lending to the basic education sector was nearly absent during the 1960s, and as little as five per cent of total education budget during the 1970s. Training programmes for teachers, learning methodologies, and materials were strongly supported based on professional intuition and upon scant evidence that often reflected very different socioeconomic conditions. As discussed above, the assumption was that by increasing access to social services that would eventually lead to an upgrading in human capital endowments needed for the development process.

Insufficient attention was given to other demand-related factors, such as incentives, and information that seem to be important in changing attitudes, behavioural, and social determinants of the utilization of social services. It was not until the late 1980s and early 1990s when the strong relation between primary education and poverty reduction was established, and donor agencies began to pay attention to these demand-related factors.

In the area of education policy, the shift was triggered by the World Bank's publication of an education policy paper in 1980 that diversified the analytic models for assessing education outcomes beyond forecasting manpower needs to include calculating the economic rates of return on education investments (World Bank 1980; Heyneman 2009; 2010). A common finding was that primary education had the highest economic returns, leading to calls for public financing to shift from higher to primary education, and for higher education to be financed by raising private costs through tuition (Psacharopoulos et al. 1986).

That was followed in the 1990s by an approach known as Education for All, with strong emphasis placed by donors on primary education (UNESCO 2007). This approach has since become the dominant paradigm of education aid, with significant and often negative consequences for the sector as a whole (Heyneman 2009, 2010, 2012).

Similarly, the early 1990s, with the publication of the 1993 World Development Report, was a period marked by an unprecedented era of growth and innovation in development assistance for health. Since then, the global health landscape has changed dramatically with many new actors spending far larger amounts of funding to health policies (Blanchet et al. forthcoming). Since the 1990s, development aid to health, population and reproductive health rates has tripled to reach nearly 20 billion at constant 2010 US\$ (OECD 2012). The prominence of recognition of HIV/AIDS as a global threat resulted in a proportion of development aid for health going to HIV/AIDS, rising from being around 10 per cent of the total amount of development assistance for health (DAH) in 2000, to nearly 40 per cent by 2007 (Martínez Álvarez and Acharya 2012; Blanchet et al. forthcoming).

## 1.2 What justifies foreign aid to the social sectors?

From an economic perspective, aid flow allocations to the social sectors can be justified based on two general principles. The first principle suggests that in situations of budgetary constraints, the ability of poor households to invest in human capital is limited, particularly in situations of fragmented credit markets, which constraint the possibility of poor families to invest in, for example, children's education and healthcare. Deficiencies in human capital investment can lead, in extreme situations, to 'poverty traps' that are difficult to break in the absence of exogenous interventions (Zimmerman and Carter 2003; Carter and Barrett 2006).

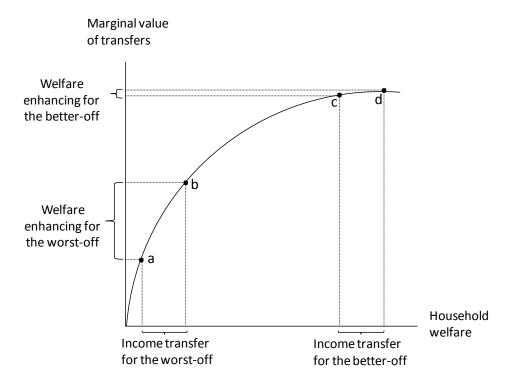
By lifting budgetary constraints, foreign aid is expected to facilitate human capital investment, particularly in low- and lower middle-income countries (LLMICs). This proposition seemed to be reinforced by early studies, which strongly pointed out that education had a higher contribution to economic growth in Africa and Asia than in North America and Europe (Psacharopoulos 1983).<sup>3</sup> Early findings on the returns to social sector investment, notably on education and health, were pivotal in shaping donor priorities in social sector policy, particularly as a prelude to the MDGs introduced in 2000.

The second principle argues for a focus on low-income countries, and more specifically, on the poorest and most vulnerable groups in societies. The judgment of focusing on the poorest has a strong foundation in the principles of social justice. Welfare economics suggests that policies focusing on the poorest are welfare-enhancing. This can be illustrated by the concept of diminishing marginal utility of income, which is captured by the increasing concave function of household welfare depicted in FIGURE 1. The vertical axis measures the impact on marginal utility from additional units of income represented in the axis. An income transfer from aid to the worst off, represented by the distance between points a and b would yield a larger welfare enhancing outcome than an equivalent transfer to the better off, the distance between points c and d.

The figure implicitly tells us that a dollar of aid money spent to help the poor is more valuable than a dollar spent on the better off. In this sense, there is a strong justification for donors to assist low-income countries and, in particular, the poorest communities and households—a point also highlighted by proponents of Egalitarianism (see Dworkin 1977; Roemer 1998).4

In accordance with these set of principles, donor agencies, both bi- and multilateral, would strive their policy strategies towards the poorest and most vulnerable. Much work is being carried out to improve the efficiency of aid allocation and produce 'evidence-based' policies to both increase impact and address political economy issues, which oftentimes arise from the demands of groups that have not directly benefitted from aid allocations in the social sectors. These political economy concerns are at the heart of the many challenges low-income countries face to scaling-up project aid initiatives.

Marginal value of an income transfer relative to household welfare



Source: Barrientos and Niño-Zarazúa (2011a).

Identifying the poorest for selection into social programmes is a major challenge facing programme implementers. A recent ReCom study assessed various targeting mechanisms to learn lessons about which approach is most effective at minimising inclusion and exclusion errors (Sabates-Wheeler et al. fortcoming). The authors conclude that community-based targeting was the most accurate of the three approaches, followed by categorical targeting by age and methods that rely on household dependency ratio. However, they point out that targeting performance is strongly affected by implementation capacity and modalities.

Shared perceptions about the causes of poverty can nevertheless play an important role in persuading political constituencies in donor countries to support social sector policies. Knowledge about 'who is poor' and 'who should receive support' seems to be dominated by the preconception that most of the poor live in poor countries, ergo low-income countries should be the priority of development assistance. This was a true assessment until very recently: Just two decades ago, 90 per cent of the 1.8 billion people in poverty worldwide lived in low-income countries. In 2000, there were still 63 countries classified as low-income economies. By 2011, this number had dropped to 36, with most of these countries located in sub-Saharan Africa (SSA) (Sumner 2010). The fact that 30 countries have upgraded to a middle-income status, including populous countries, such as India, Pakistan, and Nigeria, has meant that for the first time, 75 per cent of the world's poor reside in middle-income (not lowincome) countries.

This has also provided the justification for traditional donor countries to cease their assistance. The recent decision of United Kingdom to stop development co-operation with India from 2015 onwards vividly illustrates the problem.<sup>5</sup> For example, with respect to health and the achievement of the MDG 1c targeting the malnourishment of children—the decreasing support to India is problematic as around 50 per cent of the malnourished children in the world live there. The study by Baulch and Le (2013) shows that only four per cent of the aid targeted for health and population went to India, reflecting that the disbursements were not progressive when looking at the share of children under-five who were underweight.

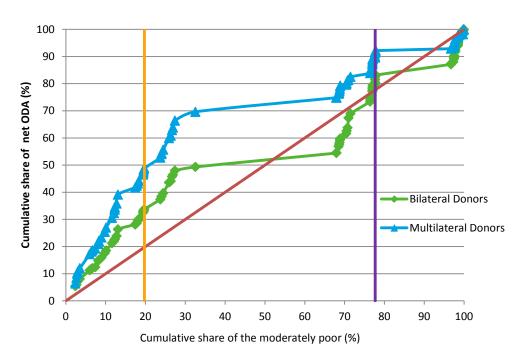
Poverty in such contexts reflects a complex set of structural roots and interlinked deficiencies that include, inter alia, dysfunctional institutions, market imperfections, and pervasive social norms, which inhibit the poor and vulnerable to take full advantage of the growth process. Political considerations can also shape governments' willingness to taking up donor-driven projects that are often of small scale, and require the co-operation of national and local governments as well as private providers, including NGOs.

An important question from the 'new' reconfiguration of world poverty distribution, which relates to the future of the global development agenda, is whether development co-operation, channelled either via bi- or multi-lateral organizations, should continue working on the basis of assisting 'poor countries' or begin to consider focusing on 'poor people', regardless of where they live. Recent efforts to transfer knowledge and scale-up social sector innovations, such as conditional cash transfers (CCTs) in middle-income countries of SSA, seem to suggest the latter, with the caveats and limitations they may entail for the long-term sustainability of policies.

There are also factors which are associated with domestic and foreign policies in donor countries that do not always respond to the principles of social justice outlined above. This means that aid allocations are not always directed where they are most needed. Indeed, donor motivations are not purely altruistic and may be driven by national security priorities or designed to boost international trade objectives. This has led to many donors crowding around countries which are seen as strategically important (Shepherd and Bishop 2013). The United States (US), for instance, allocates the majority of its bi-lateral assistance to Iraq, Israel, West Bank and Gaza, Egypt, Jordan, and Afghanistan. Similarly, most of French bi-lateral aid goes to French speaking countries, such as Democratic Republic of Congo (DRC), Côte d'Ivoire, Senegal, as well as to members of the Organization Internationale de la Francophonie, including Morocco, Vietnam, and Lebanon (Heyneman and Lee 2013).

These domestic motives and priorities, as legitimate as they might be, can hardly be seen as adopting a prioritarian approach to allocating aid resources to the poorest and most vulnerable. Despite the theoretical underpinning suggesting that aid money is best spent on the poorest, empirical evidence from a ReCom study (Baulch and Vi An Tam 2013) shows that the bi-lateral donors are neutral in their support in contrast to the multi-lateral donors, who are more progressive (see FIGURE 2).<sup>7</sup>

FIGURE 2 Aid concentration curves for bi- and multi-lateral donors using Moderate Poverty line, 2009-11



Note: The concentration curve presents whether the aid disbursements have been progressive (above the 45 degree line) or regressive (below the 45 degree line).

Source: Baulch and Vi An Tam (2013).

There has been a greater engagement among multi- and bi-lateral organizations in adopting broader development frameworks while giving more emphasis on demand-side considerations, vertical and horizontal inequalities, and relationships with external actors, including NGOs. In 1990, the World Declaration on Education for All was adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and other multilaterals, giving strong emphasis to strengthening countries' efforts to improve basic education for all. The same year, the WHO and UNICEF pushed the Universal Childhood Immunization campaign that led to a significant increase in the number of children being immunized with the six Expanded Programme on Immunization (EPI) vaccines—tuberculosis (TB), diphtheria, tetanus, pertussis, measles, and polio.

The role that development co-operation played in the process is unquestionable: To illustrate, in 1980 only 17 per cent of children in the developing world were immunized against Diphtheria-tetanus-pertussis; by 2011, more than 80 per cent of children were regularly immunized. This is a remarkable achievement. Similarly, Polio cases have rapidly dropped largely due to global efforts to tackle the disease. In the 1980s, more than 400,000 polio cases were registered on an annual basis; by 2011, only 700 cases were reported.

Equally important is the reduction in deaths from diarrhoeal diseases, which can be considered to be one of the most significant public health successes of the 20th century. Nevertheless, and as discussed later in the position paper, diarrhoeal diseases still account for a significant burden of childhood morbidity and mortality in low- and middle-income countries (LMICs). In a ReCom paper, Cash and Potter (forthcoming) show that the progress made in the past several decades has, to a significant extent, been supported by a variety of both bi- and multi-lateral donors aiming to make an impact in reducing this burden, although they also point out that diarrhoeal diseases remain an unfinished agenda in global health and international aid.

These initiatives and wellbeing progress paved way to the introduction of global strategies that have given strong attention to the social sectors, notably the MDGs, the Social Protection Floor, and public-private initiatives, such as the GAVI Alliance and the Global Funds to fight AIDS, Tuberculosis and Malaria, among others. This is reflected in composition of aid flows. There has not only been a sharp increase in the overall aid disbursements but also in the contribution to social sectors. In 1960, US\$36.4 billion were allocated to development activities. By 2011, aid flows had multiplied by four, to the amount US\$146 billion. As illustrated in FIGURE 3, aid contributions to the social sectors increased significantly from just above five per cent of total aid flows in the late 1960s to around 40 per cent in 2011. In real terms, aid to social sectors increased from an average of US\$ two billion a year in the 1960s to US\$50 billion in the 2000s (in 2011 it reached US\$64 billion).

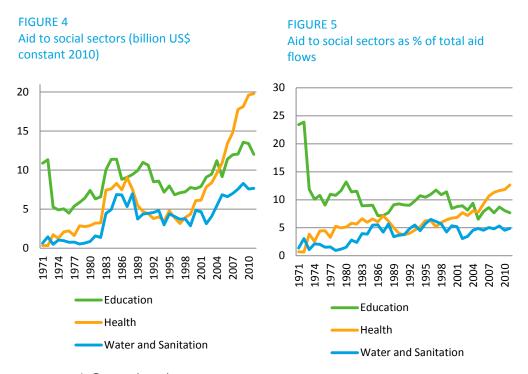
45% Social Sectors 40% 35% Economic 30% Infrastructure 25% Production 20% Sectors 15% 10% Environment, Gender, Rural-5% Urban Development በ% 1981 1983 1987 1989 1999 1999 1999 2003 2005 2005

FIGURE 3 Total official development assistance (ODA) and aid to the social sectors, 1970-2011

Source: ©OECD (2012).

Education as well as water and sanitation, but notably healthcare as well as reproductive and population policies, have largely benefited from development co-operation (see FIGURES 4 and 5). Water and sanitation policies in particular have been the 'natural' subjects of aid for several decades. However, these sectors also were among those most affected by recent changes in aid approaches and tools. Despite of attracting significant funding, the amount is smaller than what is needed to achieve MDG sanitation target. In a ReCom paper, Bain et al. (2013) estimate that the levels of spending achieved in developing countries during the MDGs period was in the order of US\$80 billion per year. Aid represented a substantial proportion of total water and sanitation sector financing in SSA and Oceania (25 and 10 per cent, respectively) but less in other regions. Longitudinal analysis showed no detectable effect of volume of aid on progress. They conclude that as the world approaches universal access to improved water, aid must increasingly focus on sustaining progress and assisting countries that still have sizable unserved populations. Similarly Anand (2013) points out that further progress may require the development of appropriate tools so that aid is used more often in effectively catalyzing a range of institutions in finding solutions and less in terms of directly investing in delivery of services.

The increase in development funding has been accompanied by a proliferation of actors that provide financial resources (e.g., governments, private foundations, individuals, and the corporate sector); manage aid programmes and projects (e.g., bi-lateral agencies, inter-governmental agencies, global health partnerships, NGOs, and private foundations); or allocate resources (multilateral agencies, the UN, global health partnerships, private sector, and lowand middle-income governments, as well as civil society organizations) (McCov et al. 2009). A wide variety of actors deliver development assistance to the social sectors using different funding modalities, depending on the amount of earmarking they require and the extent to which they rely on governmental systems for planning, disbursement, and monitoring of funds. These include project aid, sector-wide approaches (SWAps), and budget support, with projects having the largest financial support (see FIGURE 6 and also Foster and Leavy 2001). The focus on the social sectors can in that context been linked to the knowledge about the importance of the provision of social services to the process of growth and development.



Source: Both ©OECD (2012).

The MDGs signalled a growing intention on the parts of donor countries to stop direct intervention through stand-alone project support with singular objectives and a short-term time-window, and move towards sector-wide and budget support which are, in principle, more consistent with the need for crosscutting sectorial objectives and the broader poverty reduction goals. This process led to the Paris Declaration on aid effectiveness in 2005, where donors, recipient countries, and multi-laterals agreed on five principles of 'good practice': ownership; alignment; harmonization; mutual accountability; and results-based management. The mid-term evaluation found that although some progress had been made, it was not fast enough (OECD 2008b). This led to the signing of the Accra Agenda for Action in 2008 to accelerate progress towards ownership, inclusive partnerships, and results (OECD 2008c; Wood et al. 2011).

In part, this was due to an increasing recognition that the success of policy reform requires the involvement and commitment of national and local governments. However, despite of the general consensus around the principles underpinning the Paris Declaration, a large percentage of aid disbursements, including those accruing to the social sectors, have been executed differently by multi- and bi-lateral donors. While multi-lateral donors provide aid progressively targeting the poorest countries, bi-lateral aid is still dominated by inter-country relations and history, and characterized by the phenomenon of donors crowding around particular countries, often referred to as aid fragmentation.

Fragmented aid delivery creates costs for recipient countries, which have to deal with multiple donors and projects simultaneously. Indeed, there are concerns among developing countries that their specific needs and priorities have not been given due consideration by donor agencies. With a large number of bi-laterals, development banks, multi-lateral programmes, and UN agencies, issues of management and co-ordination have risen in recipient countries (see TABLES A4.1 and A4.2 in the Appendix 4). There are accounts of local officials being so occupied with meeting the demands of donors that they are unable to focus on the activities and responsibilities they are supposed to carry out. For example, in Tanzania, health workers in some districts have spent over 20 days per quarter writing reports for different donors (Deutscher and Fyson 2008).

## 1.3 Project aid

Naturally, the larger the number of donors, and the less co-ordination between them, the greater the burden placed on the already fragile capacity of developing countries. Another issue concerning the unfinished Paris Declaration agenda is associated with the favoured aid modalities by donor agencies. Project aid in particular continues to dominate the development cooperation landscape.8 In fact, in 2011, more than two-thirds of aid disbursements went to projects (see FIGURE 6). In addition to concentration

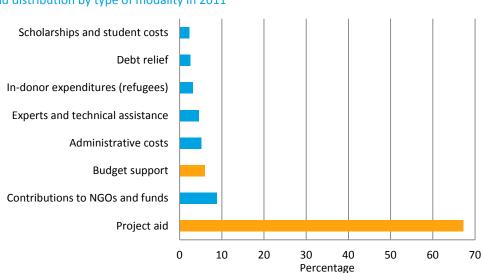


FIGURE 6 Aid distribution by type of modality in 2011

Source: ©OECD (2012).

flows towards project aid, it seems that the development goals focusing on specific areas, notably health, have gained more attention than others, such as education, as the support to health is more progressive targeting the poor SSA countries than the aid to education (Baulch and Vi An Tam 2013).

Although with project aid, donors can more closely control the design, monitoring, disbursement, and accountability procedures, it has the problem of high transaction costs while diminishing the ownership over the development process in the recipient countries (Marshall and Ofei-Aboagye 2004; Quartey 2005; NORAD 2008). It also discourages governments from making long-term financial commitments alongside donors to increase social sector investment (Leader and Colenso 2005; Martínez Álvarez and Acharya 2012). Project aid also limits the knowledge base about what works in development assistance; as by design, projects usually have very limited coverage and are implemented under a shorter than optimal time-window.

Indeed, a study of World Bank financed projects found that the success of projects was not only correlated with overall country performance but also that the true impact of projects only became apparent over time (Denizer et al. 2011). The study also found that while high preparation costs and low country ownership were associated with lower impact of projects, smaller size as well as good management and supervision were correlated with a higher impact of projects, with the local context playing a critical role in the success of project outcomes. Despite the wide criticism, aid projects have in certain contexts reported positive impacts on their developmental objectives (see TABLE 1), although their long-term sustainability is consistently a wide concern.

TABLE 1 Project aid interventions in the health sector

Author(s)	Country/ Region	Impact Methodology	Main findings
Denizer et al. (2011)	World	Non-experimental (regression analysis)	The study found that the success of projects was correlated with overall country performance. It highlighted that the true impact of projects only becomes apparent over time. Some factors, such as high preparation costs and low country ownership, were associated with lower impact of projects. Smaller size, good management and supervision were correlated with a higher impact of projects
Munishi (2003)	Tanzania	Case study	The Dar es Salaam Urban Health Project succeeded in creating an organized health system, introducing the minimum health services package, strengthening monitoring and evaluation (M&E) and improving community participation. Key in achieving this was the sequencing of activities, where structural quality was addressed before implementing other activities, such as the provision of drugs. Lack of political support and the reliance on donor funding were major concerns for the project sustainability.

Author(s)	Country/ Region	Impact Methodology	Main findings
Edwards and Saha (2011)	Bangladesh	Non-experimental	The study found that women living in the catchment area of the project have much better outcomes than the national average. The authors attribute this to the integrated system of care, providing a continuum of care between the hospital and the home, the provision of health worker training and community involvement. The study acknowledged that the model was resource-intensive and would not be sustainable
Buse et al. (2008)	Ethiopia, Ghana, Malawi, Uganda	Non-experimental	The villages taking part in the project achieved gains in health indicators, although with some differences across countries. The success of the project was linked to the concentration of resources at the community level and the priority given to low cost, effective interventions. There were concerns about the scalability of the project to the national level, as the budget was too limited
Mize et al. (2008)	Timor-Leste	Before-after study	The evaluation attributed the project success to the technical ability of staff and investments in their skills as well as the leadership from government, research and community consultations carried out before designing the project.
Hounton et al. (2008)	Burkina Faso	Quasi-experimental	The study found that the Skilled Care Initiative project increased the number of babies delivered at health facilities (the aim of the project); however, it had no effect on pregnancy related mortality. The authors found a low rate of caesarean sections, related to existing barriers to service delivery.

Source: Martínez Álvarez and Acharya (2012).

## Programme-based approaches

More recently, programme-based approaches (PBAs) to aid delivery, such as SWAps and budget support, have been advocated as a response to address the concerns of long-term sustainability and weakening of country systems, which are commonly associated with project aid. Despite the commitments taken at the Paris Declaration, its final evaluation in 2008 found a general reluctance on the part of the donors to move towards PBAs, mainly due to the slow pace of recipient countries' domestic reforms, the required resources, and coordination efforts needed to implement the programmes (OECD 2008a).

Although the evidence on the impact of the SWAps appears to be mixed, it is important to highlight the fact that SWAps involve reforms in the way aid is given as well as in the relationship between donors and governments, and therefore, they vary across countries, being often conditional upon the specific administrative and political contexts that shape their effectiveness (Hutton and Tanner 2004; Sundewall and Sahlin-Andersson 2006).

In a similar vein, the success of budget support has been linked to the governance and policy environment of the partner country with concerns

associated with corruption and misuse of funds, often linked to donors' unwillingness to engage with this aid modality (Bourguignon and Sundberg 2007). That reflects, as shown in FIGURE 6, the very limited use of budget support (just above six per cent of all aid) on allocating development assistance. Nevertheless, recent studies of the impact of general budget support (GBS) find positive results (see TABLE 2 for an illustration). Overall, they find that GBS is a relevant aid modality that increases government ownership, accountability, and capacity for public financial management. In addition, it enhances the quality of aid by improving donor harmonization as well as alignment and lowering the transaction costs of aid programmes (Marshall and Ofei-Aboagye 2004; Leader and Colenso 2005; Carter and Lister 2007; Dom 2007). Similarly, a study in six African countries found that sector budget support contributed to improve the efficiency of government by supporting the planning, budgeting, management, and accountability processes (Williamson and Dom 2010). However, it also found that although access to social services had been improved, the quality and equity in the delivery of these services remained in general at a sub-optimal level.

Programme-based interventions in the health sector

Author(s)	Type of aid modality	Country/ Region	Impact Methodology	Main findings
Chansa et al. (2008)	SWAp	Zambia	Case study	The SWAp was found not to have achieved the expected improvements in efficiency due to partial implementation and limited commitment by all donors
Buse (1999)	SWAp	Bangladesh	Case study	The study found that the SWAp did not succeed in allowing the government to play a leading role in aid management. This was in part due to donors not trusting country systems and in part because of the politics and power associated with aid co-ordination.
Bowie and Mwase (2011)	SWAp	Malawi	Cost- effectiveness analysis	This study found that the SWAp invested in more cost-effective interventions than donor governments acting on their own. This leads the authors to conclude that the SWAp has resulted in an improvement in health service delivery at low cost.
Lister and Carter (2006)	GBS	Burkina Faso, Malawi, Mozambique Nicaragua, Rwanda, Uganda, Vietnam	Case study	Partnership in GBS was found to improve harmonization, alignment, and policy development in all countries reviewed, as well as having a positive influence on allocative and technical efficiency of public financial management in five of the countries. However, the study also found unpredictability and volatility in GBS as a problem.

Author(s)	Type of aid modality	Country/ Region	Impact Methodology	Main findings
Caputo et al. (2011)	General and sector budget support	Mali, Tunisia and Zambia	Case study	They study found that budget support had resulted in better budget management, although its design, harmonization and alignment were not optimal. Budget support was associated with increased public expenditure on social services, which resulted in improvements in health. In Zambia increased health service provision was associated with a decrease in the incidence of TB, malaria, diarrhoea, as well as maternal and child mortality. However, concerns were associated with the quality of services.
Visser- Valfrey and Bibi Umarji (2010)	Sector budget support	Mozambique	Case study	The study found an increase in the number of donors engaging in sector budget support, better co-ordination and a positive influence on sector management, policy, and M&E. More progress was needed to improve the budgeting process, systems for financing de-centralized services and technical assistance and capacity development.

Source: Martínez Álvarez and Acharya (2012).

#### Global health initiatives

Recent increases in the levels of development assistance for health have not only been associated with different funding modalities but with the arising of new donors and initiatives. Since the year 2000, there has been a proliferation in global health initiatives (GHIs), which tend to focus on a single disease or group of diseases. Some of the more prominent GHIs include the Bill and Melinda Gates Foundation, the Global Fund for AIDS, Tuberculosis and Malaria, the GAVI Alliance in support of childhood vaccination and the Stop TB Partnership. However, there are many others. Their increase in popularity (and funding) has sparked a debate between vertical, disease-focused programme, and horizontal health system approaches.

Proponents for vertical disease-focused programmes advocate that the urgency of tackling the spread of some diseases means specific programmes have to be designed and implemented for them (Biesma et al. 2009; World Health Organization Maximizing Positive Synergies Collaborative Group et al. 2009). Nevertheless, broader health systems constraints have been identified as slowing down progress towards making improvements in these diseases, and in health more generally (Shiffman 2006; Lieberman et al. 2009; Cavalli et al. 2010). There has been mixed evidence on the impact of vertical programmes on the health system, although it has been found that weak health systems are particularly vulnerable to the negative effects of GHIs (Cavalli et al. 2010).

The evidence on which this debate is based is scarce, with both sides using anecdotal evidence to make their case. However, some recent studies have shed some light on this. A multi-country review carried out by the WHO's Positive Synergies Collaborative Group (2009) found that although there were significant gaps in the data, there was potential for GHIs to positively interact and reinforce the health system. A seven-country study by Spicer et al. (2010) found that although GHIs (the Global Fund for AIDS, Tuberculosis and Malaria, particularly) have had positive effects on co-ordination at the national level, they increased the complexity of the aid architecture, undermined alignment, and lacked harmonization, especially at the sub-national level (Spicer et al. 2010). In contrast, Dodd and Lane (2010) found that global health partnerships have successfully innovated new approaches to raising and delivering funds and can provide longer-term funding, from which other donors should learn—more details on these can be found in Box 2.

An alternative 'middle' way has been put forward, known as the 'diagonal' approach. This approach consists of using single disease projects and programmes to address broader health systems issues, such as human resources, drug supply and financing (Frenk et al. 2003). However, there are warnings that unless accompanied by an increase in funding, this new approach will fail (Ooms et al. 2008). Examples of the diagonal approach include the Global Fund's health systems strengthening programmes<sup>10</sup> and the US President's Emergency Plan For AIDS Relief (PEPFAR) investments in human resources, supply chains, and health systems infrastructure (Moore and Morrison 2007).

In fact, evidence shows that donors have different preferences in terms of how to channel funds. For example, donors that provide the largest amount of DAH tend to dominate the global health landscape through their choices. To illustrate this, a huge chunk of US funding over the last 15 years has focused on HIV/AIDS with the PEPFAR far outstripping any other bi-lateral assistance programme for Africa. Similarly, the European Union (EU), Bill and Melinda Gates Foundation, and some governments have focused on issues that derive from their own priorities or strategic directions, many of which are not necessarily attached to global priorities (Bhutta and Aleem 2013b).

There are; however, some successful models for donor pooling for addressing global concerns. Some examples are in the area of healthcare, such as the work of GAVI and the recent Commission for Life Saving Commodities. However, corresponding investments in implementation are sparse and few donors have funded integrated strategies for improving maternal, newborn, and child health (MNCH) and nutrition.

There are also cases of bi-lateral co-operation, which show that countries can work towards similar objectives. For example, a partnership between Brazil and Mozambique to combat HIV/AIDS has yielded positive results (Sridhar 2010). Other important initiatives can be found in regional partnerships that have focused on shared experiences in terms of policy implementation and design. After having achieved success in polio eradication, India has been advising other countries in Asia and Africa that are still struggling to control the disease. Similarly, Bangladesh continues to provide guidance to control diarrhoeal diseases whereas the Aga Khan Development Network facilitates knowledge transfer in integrated primary and secondary care services in poor communities of south and central Asia and east Africa.

The fact that donors crowd around particular countries can also limit the effectiveness of foreign aid by fragmenting the allocations to the social sectors. Fragmented aid delivery coupled with co-ordination and harmonization problems as well as limited capacity of governments to direct the efforts and create costs for recipient countries that have to deal with multiple donors and projects simultaneously. Some of the direct costs include considerable amounts of money and time spent managing and overseeing donor projects. There are also indirect (and opportunity) costs to bear in mind. The presence of a large number of un-coordinated aid agencies in a country can drain the recipient country of local staff and cause duplication of projects (see Box 2).

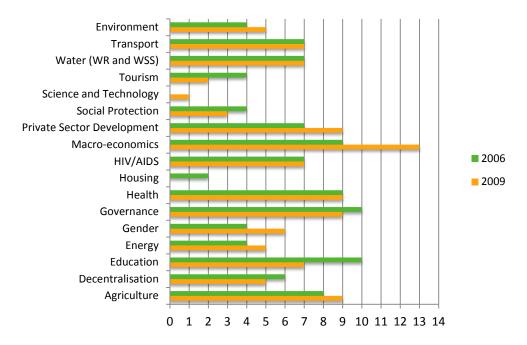
The unpredictable nature of aid flows, which show as discussed earlier, often runs in parallel with foreign policy priorities, contribute to hinder the ability of recipient governments to plan longer-term strategies, particularly when aid money pays for an important share of social sector budgets. The uncertainty and unpredictable nature of aid discourages governments from making longterm commitments in the social sectors, which in turn focus more on covering recurrent costs than improving investment. Ultimately, aid that is unpredictable is less likely to be spent effectively compared to aid which is delivered in a timely and reliable manner. While the limiting factors identified above are relevant to most low-income countries, ensuring that social sector aid is effective requires adapting these principles to take into account the local capacities. Evidence suggests that the most successful projects and programmes are those that give local partners real ownership over the development process. This particular issue is discussed in the sections below.

#### Box 2: The Paris Declaration in practice: The case of Zambia

In the case of Zambia, and with regard to donor co-ordination, various evaluations have found that there is evidence of progress towards enhancing aid effectiveness in the country (Chigunta and Matshalaga 2010). However, a closer examination of the entire process reveals serious doubts about donors' willingness to implement the Paris-Accra agenda, particularly when it runs against their own foreign policy priorities. This was strongly supported by the findings of an evaluation of the Joint Assistance Strategy for Zambia conducted in 2010 (OPM 2010). Initially, the government had proposed a structure with no more than five donors in each of the 19 economic and social sectors. However, donors were reluctant to move out of their preferred sectors, especially health and education policy. After lengthy discussions with the donors, a distribution of sectors was agreed among donors. Such distribution was nevertheless more of a reflection of donor preferences than government's priorities and needs. In 2009, the sector distribution was revised, leading to some, albeit not necessarily substantial, 'decongestion' of oversubscribed sectors. While the number of active or lead donors decreased in some sectors, notably education, other sectors, such as macroeconomics and private sector development, saw new donors entering their domain (see FIGURE 7). Arguably, these shifts were not the result of increased efforts by donors to improve the division of labour but more likely reflected a change in policy preferences.

Source: Based on Leiderer (2013).

FIGURE 7 Number of lead or active donors per sector in 2006 and 2009: The case of Zambia



Source: Based on Leiderer (2013).

# Summary of outcomes

The purpose of this section of the position paper is to provide an overview of the outcomes of the work on this theme. Readers are naturally encouraged to read the entire report since there is a methodological danger of seeing the 'answers' without working through the steps which show how these outcomes are derived. The analytical approaches are described in Section 3, and subsequent sections give a much fuller insight into the range of approaches and programmes developed through health, education, water and sanitation and social protection interventions. In addition, throughout the text, detailed overviews of interventions are provided, sector by sector, and TABLES A4.6 to A4.10 in the Appendix 4 present a synthesis of evidence of what works (and does not work), what could work, what is scalable, and what is transferable in social sector policy. The synthesis of evidence focuses in particular on maternal and child health, general health, education, water and sanitation, and social protection policies. Appendix 3 provides the specialist reader with the detailed abstracts of new research commissioned by ReCom on this theme. This synopsis adds to the cumulative picture.

In answering the ReCom questions, it is worth making the most fundamental observation concerning what does not work. Health, education, and basic welfare are essential for individuals, families, and the wider society. Development and human wellbeing require them. The loss of human potential through sickness, lack of education and extreme poverty (what Robert Chambers has called 'ill-being') is immense. In terms of development, this does not work. The MDGs make it clear that what is under discussion is addressing the most extreme forms of social deprivation.

Section 1 has already commented on the international commitment to Education for All and the successes of the Universal Childhood Immunization programmes. Few now question whether vaccination works. Increasing immunization rates against diphtheria-tetanus-pertussis 11 from 17 per cent of children to 80 per cent in three decades since 1980 is a huge achievement.

Additionally, Section 1 summarizes how such initiatives provided the impetus for global strategies including the MDGs, the Social Protection Floor, and private-public initiatives including the GAVI Alliance and the Global Funds to fight AIDS, Tuberculosis and Malaria. Aid to social sectors increased from an average of US\$ two billion per year in the 1960s to US\$64 billion by 2011. In terms of resource mobilization, what works includes sharp focus on clearly identifiable health challenges. It is not a trivial point that one can provide immunization for more children, or more antiretroviral for AIDS patients if one has more money. However, one cannot simply extrapolate and assume transferability and assume that more money is always the answer. Nor can one assume that more money for one health programme necessarily means the best outcomes for health, or more broadly, for development.

As in other areas of development activity, for the social sectors the Paris Declaration on aid effectiveness is important because of its stress on better coordination and the need for sector-wide and budget support interventions, rather than stand-alone projects. The Accra Agenda for Action (2008) called for acceleration towards ownership, inclusive partnerships, and results (OECD 2008c). For the social sectors, as more broadly for development, the Paris Declaration's five principles of good practice (ownership, alignment, harmonization, mutual accountability, and results-based management) do work and could work better. Some ideas of the co-ordination and management challenge with the proliferation of donors and programmes just for maternal and child healthcare is given by TABLES A4.1 and A4.2 in Appendix 4.

Section 1.4 has reviewed the evidence on PBAs including budget support. Donors are still reluctant, in spite of the Paris Declaration commitments to move to budget support and other PBAs, mainly due to the slow pace of recipient countries' domestic reforms and implementation capacity (OECD 2008a). In general, such an approach could work if domestic reform is achieved and donors live up to their commitments. The ReCom work on Governance and Fragility is of clear relevance here, as poor and fragile states are, in general, those least well equipped to provide from domestic resources for the social sectors.

ReCom studies in education (Riddell 2012), and health (Martinez Alvarez and Acharya 2012) as well as Blanchet et al. (forthcoming) show that bi-lateral aid still continues to be mainly targeted on specific projects—contrary to the logic of the Paris Declaration.

TABLE 2, Programme-based interventions in the health sector, summarizes a number of studies on SWAps and records mixed results. The conclusion must be that this approach can work but that the particularities of the context are important. Success in terms of goals, such as better service delivery and health outcomes, co-ordination and/or cost savings, is not guaranteed.

The rapid rise of and substantial funding levels for GHIs has prompted a debate about the vertical, disease-based programmes, and horizontal health system approaches. Section 1.5 reviews the arguments and evidence. Proponents of the vertical funds argue that the urgency of dealing with specific illnesses or health issues and the availability of resources argue in favour of the vertical funds. The counter argument is that strengthening health systems must be the priority. The mixed evidence—including attempts to use the additional resources also to strengthen the health system (the diagonal approach) is also presented in Section 1.5.

A detailed methodological discussion of what one means by success (what works) in aid to social sectors is provided below. As a snapshot of the ReCom conclusions, Arndt et al. (2011) can be cited. A long-term, annual inflow of aid equivalent to five per cent of GDP has among its impacts augmenting schooling by 1.4 years per child, boosting life expectancy at birth by four years and reducing infant mortality by 20 in every 1,000 births—as well as the growth and poverty reduction outcomes. In terms of health and education outcomes, long-term, sustained aid works.

Box 3, Successful initiativess on maternal and child healthcare, provides a clear illustration of why the aid co-ordination agenda is important. The examples of progress on maternal and child healthcare in Sri Lanka, Niger, Ghana, and Mexico show that rapid and cost effective progress can be made on these issues. With well-coordinated domestic health policies and external donor support progress at a national level is achievable. These approaches work, they are scalable and the experience in transferable. However, as was noted above, funding has proved hard to find for integrated strategies for improving MNCH and nutrition. TABLES A4.1 and A4.2 in Appendix 4 show that both approaches can be successful.

# HIV/AIDS, Tuberculosis and Malaria

These three big killers are responsible for five million deaths per annum, 95 per cent of which are in developing countries. There is as yet no clinical health innovation or vaccine to stop the spread of AIDS. In some countries in Southern Africa, 40 per cent of the population is affected. Given the geographical dispersion of these diseases, it was predictable that two-thirds of the studies focus on the same small selection of countries (Malawi, South Africa, Botswana, Kenya, Nigeria, Zimbabwe, Madagascar, and Ghana).

Amaya and Niño-Zarazúa (forthcoming) have developed a typology of three approaches which have been adopted by external donors to address HIV/AIDS, TB, and malaria: increasing financial resources; promoting behavioural change; and improving access to antiretroviral treatment (ART), and other resources.

TABLE A4.3 in Appendix 4 provides a synthesis of evidence on 'what works' in aid policy against major poverty-related diseases (HIV/AIDS, TB, and Malaria). More detail is provided of provision of financial resources in such schemes (which can be cash transfers, microcredit, or other incentives). Sufficient evidence is provided from a variety of contexts to show that such schemes can be successful in improving the recipients' socio-economic situation and that these could be transferable and scalable.

Lengeler (2009) is one source of analysis of the use of insecticide-treated bed nets (ITNs) in SSA. Widespread use is advocated by various actors, notably Roll Back Malaria. Studies provide evidence that ITNs work—this is a project which is scalable—indeed it is considerably more effective with higher percentage coverage. Universal deployment would be a considerable challenge both in terms of funding, co-ordination, and logistics. Most of the interventions have an element of promotion of behavioural change and that these interventions often can have an impact (Schwartländer et al. 2011).

Table A4.3 (Appendix 4) also summarizes the high cost implications of antiretrovirals and long-term TB treatments, but documents studies showing the positive impact where such treatments can be accessed and treatment maintained—in brief, they can work.

#### 2.2 Treatable childhood and maternal diseases

The scale of treatable childhood and maternal diseases is significant. There are 1.6 million deaths from pneumonia and 1.3 million from diarrhoea annually, with almost half in one of the following five countries—India, Nigeria, DRC, Pakistan, and China (Black et al. 2010) There have, though been notable successes in this area. Maternal deaths have decreased from 543,000 in 1990 to 287,000 in 2010—approximately 47 per cent. In spite of the extensive research, there remain relatively under-researched areas including the effectiveness education and training programmes, and/or improved sanitation, water supply, water quality, and hospital equipment.

Most of the life-threatening obstetric complications arise suddenly, so wellfunctioning maternal healthcare systems with skilled birth attendants with the appropriate drugs, supplies, and equipment are essential (Nyamtema et al. 2011).

Bhutta et al. (2010) have provided an overview of health interventions to improve maternal health outcomes. Skilled healthcare professionals also need supportive policy and regulatory frameworks, adequate supplies, appropriate equipment and infrastructure, as well as an efficient and effective system of communication, referral, and transport. Their proposal for drivers which could improve health outcomes in developing countries specifically mention prompt recognition of complications and a strong referral system, combining maternal health and family planning, promotion of women's education and empowerment; addressing poverty and gender inequality and having skilled birth attendants, which is also essential for child survival rates.

Nyamtema et al. (2011) add further points relating to political commitment and leadership in health policy, as well as outlining basic elements of a wellfunctioning healthcare system. The literature makes it clear that these elements of maternal healthcare work and are scalable.

To give just one dramatic example of what works in healthcare, polio cases have rapidly dropped largely due to global efforts to tackle the disease. In the 1980s, more than 400,000 polio cases were registered on an annual basis; by 2011, only 700 cases were reported.

### 2.3 Health policies against diarrhoeal diseases

In this field, considerable progress has been made. The Hygiene Improvement Framework' (EHP et al. 2004) agreed by key international organizations and donors working in the field reports that mortality of children under-five as a result of diarrhoea have fallen from 4.6 million to less than two million during 1980-2000.

Deaths of children under-five have dramatically reduced. Rotavirus vaccines and implementation of vaccination programmes, as well as the use of antibiotics, probiotics, and zinc have all made, and will continue to make, a significant contribution.

As part of the ReCom research, Seguin and Niño-Zarazúa (2013) have conducted a systematic review analysing policy interventions aimed at addressing diarrhoeal diseases and acute respiratory infections. This is summarized in detail in SECTION 4.2.2, and covers hygiene as well as sanitation, water supply, water quality, and multiple interventions. The various studies analysed recorded reductions in incidence of childhood diarrhoea ranging from 18 to 61 per cent. It can therefore be concluded that such interventions are known to work.

TABLE A4.1 in Appendix 4 provides an overview of selected donor initiatives in the area of maternal and child health channelled through government, and the counterpart table which focuses on maternal and child healthcare channelled through NGOs (Table A4.2, Appendix 4) show that both approaches can be successful.

Overviews of what works in policy against major poverty-related diseases (HIV/AIDS, TB and Malaria) (Table A4.3, Appendix 4) and in aid policy against preventable and treatable childhood diseases (Table A4.4, Appendix 4) both show the huge variety of contexts in which successful treatment has been applied.

### 2.4 Improving the efficacy of healthcare systems

One of major policy issues currently under discussion in many countries is whether private sector providers produce better health outcomes than government-run health services. Against the background of resource constraints, low pay, high workload, and other weakness in public health clinics, it is essential to ensure that standards of care improve. It is essential to ask what works and whether private care is better, but there are considerable difficulties in obtaining a clear overall picture. For example, on the issue of contracting out primary healthcare services, Liu et al. (2008) were able to determine the conditions which made it likely that contracted out services improved quality of care, but not to answer the more basic question whether contracted out services were better overall. Other studies (Bloom et al. 2006; Lagarde and Palmer 2009) either found no significant improvement or insufficient evidence.

There is a wide-ranging literature of the success of contracting out of health services—overall, the implication is that this can work to improve services.

Berendes et al (2011), in a study of 80 LMIC healthcare systems, found that the private health sector performed better on a number of aspects of service delivery.

Additionally, the position paper reviews studies on a wide range of issues including staff retention strategies—a key point especially in remote rural areas. The studies cited indicated positive outcomes.

#### 2.5 Aid to education

A recent typology of aid interventions in primary and secondary education distinguished between the following: 1) economic; 2) educational programmes and practices; 3) healthcare and nutrition; 4) new schools and infrastructure; and 5) provision of information and training (Petrosino et al. 2012). In terms of what works, the largest effects were found for new schools and infrastructure, and the smallest impact for provision of information and training as well as educational programmes and practices.

Masino and Niño-Zarazúa (forthcoming-b) distinguish between supply-side interventions, demand-side factors, and participation-related factors. Supplyside interventions attempt to raise student achievement by resource provision, i.e., targeting deficiencies in infrastructure and/or organisation. An overall conclusion is that it is not enough to concentrate on the supply side.

The position paper provides an insight into the arguments on the relative merits of conditional (CCTs) and unconditional cash transfers (UCTs) in the educational context. Baird et al. (2013) conclude that CCTs are more effective in increasing school enrolments (41 per cent increase in likelihood, as opposed to 23 per cent).

The most effective way to stop children leaving education for work is to extend and improve the quality of schooling. It is necessary both to increase the value of education and to increase the relative value of education (also by decreasing the direct and indirect costs of schooling). The position paper also looks at school incentive schemes (both for teachers and children), feeding programmes, and deworming. Additional material is presented in TABLES A4.5 and A4.8 in Appendix 4.

### 2.6 Social protection and transfer schemes

In terms of nutrition and health, social transfer schemes, such as Ethiopia's PSNP have played an important role in combating seasonal malnutrition and income variability among poor households in low-income countries (Gilligan et al. 2009)

Impact studies of CCT schemes have shown strong evidence on positive impact on the use of health services, nutritional status and health outcomes. Skilfull programme design requires attention to targeting mechanisms, effective monitoring, and careful setting of the cash incentive level (in relation to the poverty level). In health services, there is a limit to what can be achieved through CCTs if there are supply-side constraints—for example, if the vaccines and the staff to administer them are not there for child immunization programmes.

Evidence related to improvements in nutrition as a result of transfer programmes appears to be strong across programmes and countries. Much of the evidence comes from state-funded programmes in middle-income countries. This raises questions about replicability and whether aid to lowincome countries could achieve comparable results. The transferability of Latin American experience to SSA is an important issue.

A clear example of what worked was the Food for Education programme in Bangladesh, which is reported to have improved school enrolment for girls by 44 per cent and for boys by 28 per cent compared to children outside the programme.

#### 2.7 What could work better in the social sectors?

The position paper gives some specific examples. For teachers, most programmes focus on financial incentives to improve performance and attendance. The proposal is made that more emphasis could be put on job satisfaction, workload, and opportunities for professional development.

In healthcare policy, much of the current debate is about contracting out, which is often seen as having the potential for improving services. The position paper concludes that it is not clear that private providers perform better on price and quality of service.

The challenge of scaling-up social sector policy centres around political, financial, and institutional issues, which even the most successful pilot projects cannot answer. SWAps and budget support are clearly desirable for governments in a reasonably well-functioning state, because they provide opportunities for co-ordination and planning. The corollary is, however, that donors have to accept system-wide monitoring rather than being able documenting clearly how 'their money' was spent. The position paper concludes that there are few possibilities for expanding wider approaches to aid delivery at the present time; it explains some of the inhibiting factors on both sides. Mangham and Hanson (2010) review the key issues for health, including absorption capacity, health service needs, quality, and equity.

For scale-up to work, constraints at a number of levels have to be overcome: demand for use at the community and household level, the health service delivery level; health sector policy and strategic management; and finally governance, political, and general public policy (Hanson et al. 2003).

Medlin et al. (2006) confirmed that strong country ownership, leadership and management, as well as realistic funding levels were decisive in successful scaling-up of programmes of healthcare. This can serve as a checklist for what works in national programmes (based on 17 case studies). The position paper lists a number of examples where clear policy and commitment by

governments has led to effective expansion of the primary healthcare system including Cuba, Iran, Sri Lanka and Kerala (India).

TABLES A4.6 and A4.7 in Appendix 4 present a synthesis of successful scaleup aid interventions in the health sector, provides an overview of studies of programmes which have worked, whereas TABLES A4.8, A4.9, and A4.10 (Appendix 4) focus on policies in the area of education, water and sanitation, and social protection, respectively.

### 2.8 Aid to social protection

The detailed summary on what works (and does not work) in social protection policies in TABLE A4.10 in Appendix 4 covers a range of interventions including social safety nets, workfare, and employment programme, microcredit in Africa, Asia, and Latin America. Careful study is recommended, but some observations are in order to provide a quick impression.

The review of microcredit programmes by Maitrot and Niño-Zarazúa (forthcoming) suggest positive impact on per capita income, non-land asset value, and poverty incidence but not on other variables assessed—suggesting that long-term positive impact is hard to achieve. In spite of the caveats and some negative evaluations of schemes, overall the verdict must be that microcredit often works or can work.

Programmes providing antiretroviral registered many positive impacts as did a number of the workfare programmes.

# 2.9 Summary conclusions

In conclusion, the position paper reiterates the key principles which lead to success in aid to the social sectors. These are:

- Strong internal (domestic political) and external (partner) leadership.
- Collaboration among government, donors, and NGOs in programme design and implementation.
- Consistent and predictable funding support.
- Simple and flexible technologies which can be adapted to local circumstances and requirements.
- Full household and community participation in the programme activities

# Analytical approaches to measure 'what works' or 'could work' in social sector policy

The importance of assessment for policy stems, in part, from the widespread recognition that in order to maximize the use of scarce resources, policy decisions with regard to aid allocations should be based on hard evidence. An 'evidence-based agenda' has thus become increasingly prominent in the planning of international donor agencies. This is complicated, given that evaluation data are often incomplete, of poor quality, or even invalid.

An extensive and growing literature on aid effectiveness in the social sectors can broadly be divided into two general groups. The first group consist of studies that focus on the macro-level dimensions linking aid, social sector spending, and growth. These studies, which are discussed in Section 3.1, rely on cross-country regressions and more recently dynamic panel econometric techniques to address key questions of interest. The second group of studies focus on the micro-level dimensions, looking in particular at the impacts of specific projects, programmes, or policies on the intended beneficiaries. These studies rely on experimental or quasi-experimental research designs and as discussed in Section 3.2, each has advantages and disadvantages regarding the internal and external validity of findings.

#### A macro-level approach to research enquiry 3.1

On a macro-level, special attention has been given to the aid-social spendinggrowth connection, where studies employ a variety of methods from crosssectional data analysis to longitudinal studies to assess aid effectiveness.

Important aspects of the macro-impact analysis relate to the question of how social sector spending improves wellbeing and the channels through which aid supports that process. In that process the quality of data and the analytical approaches identifying the returns to aid and social sector spending are critical. For instance, estimated coefficients of the relationship between education and economic growth may differ between studies mainly due to measurement errors and differences in the types of data used. For example, enrolment rates have more measurement errors than cognitive test scores or education expenditure measures.

A large number of studies have focused on the impact of social sector expenditure on particular indicators of social outcomes. The question of whether education and health spending have a positive impact on relevant wellbeing indicators has been a subject of deep examination and also contention. A vast literature finds that higher public health spending improves the health status of the poor. For example, using cross-sectional data, Anand and Ravallion (1993) showed that public health spending increases life expectancy. This was corroborated by Bidani and Ravallion (1997), which finds that health expenditure has a positive and significant impact on the poor in developing countries. In the same vein, Gupta et al. (2002) provide evidence that health expenditure reduces child mortality.

Using data from a sample of developing countries and transition economies, and relying on a covariance structural model, Baldacci et al. (2003), estimate the relationship between government spending on health care and education and selected social indicators. They find that public spending is an important determinant of social outcomes, particularly in the education sector. Similarly, using data from 38 countries over the period 1980-98, Gomanee et al. (2005a) find that higher pro-poor public expenditures improve welfare, proxied by the Human Development Index (HDI), and infant mortality. This has been confirmed by Mosley et al. (2004a), who show that higher level of pro-poor spending is associated with lower level of poverty.<sup>12</sup>

These results are not incontrovertible as another strand of the literature shows that public health spending has not necessarily yielded the expected improvements in health outcomes as theory would expect. Carrin and Politi (1995) find the effect of government health spending on health status indicators to be statistically insignificant whereas Filmer and Pritchett (2001) conclude that the effect of government health expenditure on infant mortality is very small and statistically insignificant.

Similarly, studies using cross-country regression analysis have found that public spending on education has no discernible impact on education attainment. Indeed, bigger budget allocations to education in developing countries seem to contribute relatively little to differences in outcomes vis-à-vis what is observed in industrialized countries (Mingat and Tan 1998). An important explanatory factor in explaining low education attainment is the decline in teacher salaries relative to per capita Gross National Product (GNP), which accounts for at least half of any educational advantage at all stages of economic development.

Flug et al. (1998) also find that income and employment volatility, the lack of financial markets, and income inequality are linked to a negative effect on the accumulation of human capital via secondary enrolment. The study was drawn from cross-country as well as panel regressions, and the results tested under different specifications of volatility, the inclusion of public expenditure in education, country specific effects, and different sets of regressors. Dollar and Kraay (2002) also show that many supposedly pro-poor policies, such as public expenditure on education and health, do not have any significant impact on the income of the poor. 13

The role of governance is fundamentally important—measured by e.g. the level of corruption or the quality of bureaucracy—in determining the efficacy of public spending for improving human development outcomes. Rajkumar and Swaroop (2008) have shown that the differences in the efficacy of public spending can be largely explained by the quality of governance; public health spending lowers child mortality rates more in countries with good governance. Similarly, public spending on primary education becomes more effective in increasing primary education attainment in countries with good governance. More generally, public spending has virtually no impact on health and education outcomes in poorly governed countries.

In a recent ReCom paper, employing fixed effect estimates and system GMM on a panel of 51 African countries, Chiripanhura and Niño-Zarazúa (forthcoming) identify the drivers of success and failure in aid policy, pointing in particular at corruption and the multiplicity of objectives as negative factors. They find, in line with mainstream research, that aid has a positive impact on economic growth with the existence of monetary pre-election stimulus being linked to political business cycles.

Bourguignon and Platteau (2012) have addressed the issue of aid supply on aid effectiveness. They developed a conceptual framework that explicitly incorporates a trade-off between considerations of needs and governance. The impact of aid supply is analysed in a manner in which a donor agency allocates the available money between countries differing in terms of both needs and domestic governance. They conclude that donor's 'utility function' embodies the need-governance trade-off and the associated optimization mechanism, which is useful for guiding inter-country allocation of aid resources.

When linking aid to social spending and welfare, macro-studies also indicate the importance of democratic institutions in enhancing the effectiveness of foreign aid. Based on a cross-country regression analysis, Boone (1996) shows that liberal political regimes and democracies perform better in terms of welfare dimensions than highly repressive regimes. The implication of the findings is that short-term aid targeted to support new liberal regimes may be more successful in reducing poverty than untargeted aid.

Other studies also contend that the effect of aid on poverty hinges on the institutional environment in recipient countries. Using the HDI as a proxy for quality of life, and relying on two-stage least squares (2SLS), Kosack (2003) shows that aid improves quality of life in democracies but it has no effect in autocracies. Nevertheless, using the method of Granger causality, and conditioning aid and poverty on the state of democracy, Arvin and Barillas (2002) find no significant causal relationship between aid and poverty.

Past macro-studies have largely relied on cross-country regressions, although with the improvement of data collection efforts and the advancement in econometric methods, dynamic panel approaches have been explored.

Masud and Yontcheva (2005) examine the effect of non-governmental and bilateral aid on human development indicators using longitudinal data. They find that the former is more effective than bi-lateral aid in reducing infant mortality, although the impact on illiteracy is less significant.

Mishra and Newhouse (2009), who use a large dataset covering 118 countries over the period 1973–2004 and employ dynamic panel data models with fixed effects, notably system GMM, find that an increase in health aid is associated with a statistically significant reduction in infant mortality. The estimated effect is small, relative to the 2015 target envisioned by the MDGs. It implies that achieving the MDG target through additional health aid alone would require a roughly 15-fold increase in current levels of aid.

Using dynamic panel econometric approaches, Michaelowa and Weber (2006) provide evidence of a positive effect of aid on primary enrolment and completion. Nevertheless, they point out that even the most optimistic estimates show that aid will never be able to move the world markedly closer towards the internationally agreed objective of Education for All. Universal primary education, they argue, requires increased efficiency of educational spending by donors and national governments alike. The general political and institutional background is of importance as is governance considerations.

Recent studies emphasize that the welfare-poverty effect of aid is not direct, but it goes through government spending on the social sectors. Mosley et al. (2004b), for instance, use data from 46 countries and employ three-stage least square (3SLS) and a system GMM to find that aid is associated with higher levels of pro-poor spending, which is in turn associated with lower level of poverty. Similarly, Gomanee et al. (2005a) show that aid improves welfare through higher social sector spending. Mosley and Suleiman (2007) also find that aid reduces poverty, particularly if directed toward pro-poor sectors.

Chong et al. (2009) performed cross-section and dynamic system GMM to assess the effect of aid on poverty and income inequality over the period of 1971-2002. They found no substantive evidence that aid helps to reduce poverty or improve income distribution when the quality of institutions is taken into account. The authors, however, acknowledge that the results are not robust. More recently Alvi and Senbeta (2012) performed a similar analysis and provide stronger evidence that aid does have a significant poverty-reducing impact.

Under a dynamic setting, the impact estimation of aid on welfare via social sector spending is cumbersome due to the presence of endogeneity problems arising from lagged effects and unobserved country-specific factors. The recent aid literature has extensive used the Arellano and Bond (1991) first-differenced GMM (DIF-GMM) method as well as Blundell and Bond (1998) system GMM (SYS-GMM) to circumvent the endogeneity problems.

Recent analyses of the DIF-GMM method have pointed out that the instruments for the first-differenced equations upon which the method relies are 'weak' (Blundell and Bond 1998; Bond et al. 2001). The second method by Blundell and Bond (1998), which builds on the work of Arellano and Bover (1995), has shown to be more efficient than the DIF-GMM estimator. However, more recently, it has come under the spotlight the method may equally suffer from the weak instrument problem (Bun and Windmeijer 2010). Roodman (2009) and Anderson et al. (2010) have warned that the weak instrument problem can actually lead to invalid results. The GMM estimators also suffer from large biases in situations where the time series is large and substantial unobserved heterogeneity exists (Hayakawa 2006).

The most recent developments in econometric methods have been in the area of panel limited information maximum likelihood (PLIML) recently proposed by Akashi and Kunitomo (2012). The PLIML is an extension of the traditional limited information maximum likelihood (LIML) method and is found to outperform the system GMM particularly in large time series and small sample settings (Alvarez and Arellano 2003). Recent studies (see e.g. Ali et al. forthcoming) have begun to explore these new methodologies to assess the impact of foreign on wellbeing.

Anderson et al (2006; 2010) and Alonso-Borrego and Arellano (1999) also show that the LIML estimator has better performance than system GMM. The continuously updated GMM estimator (CU-GMM) and LIML have better finite-sample performance than the two-step GMM estimators, although they provide no asymptotic efficiency gains over the latter. For a discussion on this issue, see Hahn et al (2004).

In view of the different properties of alternative estimators, it is not surprising that the impact analysis of aid on growth and welfare indicators, via social sector spending, remains cumbersome and highly controversial. However, with better data and advances in econometric methods, more robust evidence has been generated over the past years. In Section 4, the position paper presents a discussion of the most recent evidence of 'what works' in aid and social sector policy, from a macro perspective, highlighting the overall positive although modest impact of aid on social welfare.

# 3.2 A micro-level approach to research enquiry

At the micro-level, experimental studies relying on randomized control trials (RCTs) are becoming increasingly popular to evaluate aid-supported social sector policy in developing countries. RCTs offer a research design which, if implemented cleanly, yields unbiased estimates of the treatment impact of interventions on a range of outcomes of interest. In other words, they enjoy strong internal validity. The use of experimental approaches in the provision of social services is not a new practice, in fact, researchers and informed policy makers have long recognized that experimental approaches can produce reliable evidence of the efficacy of public service provision. However, their use has attracted considerable debate in recent years with some scholars promoting them as the best means of identifying 'what works' in development policy (Banerjee 2007; Glennerster and Kremer 2011), while others voice strong concerns about their growing hegemony in the field (see, e.g., Deaton 2009; Ravallion 2009b).

Research under ReCom has underlined the contribution of RCTs, and this position paper argues that experimental methods have generally been useful in studying the effects of some aid-supported and targeted policy interventions, particularly in the area of social service provision, which are expected to have rapid results. However, as discussed below in this section, their use is limited in significant ways, and therefore quasi-experimental methods remain highly relevant to test hypotheses regarding the effectiveness of specific innovations in the area of social policy (Gisselquist and Niño-Zarazúa 2013). RCTs can also involve million dollar budgets, causing some scholars to question whether they are worth the cost (Heckman and Smith 1995).

Many development concerns are actually not amendable to RCTs. This is because it is not always possible to identify the counterfactual via random assignment to treatment, where measures from randomly selected control and treatment groups are taken before and after interventions. The effect of the intervention is measured by the difference in outcomes, the 'difference-indifference' estimate. The basic idea underlying hypothesis testing (and impact evaluation using RCTs), is that in principle any difference between the treatment and control groups is not systematic at the outset of the experiment.

The RCT method arguably has a tendency to promote method-driven, rather than theory-driven, research. This has the pitfalls of encouraging research that asks questions which can be addressed with experimental settings, rather than research that begins with questions and hypotheses and then assesses whether RCTs are an appropriate method for testing them.

Banerjee and Duflo (2012), for instance, draw largely on the results of their work at the Massachusetts Institute of Technology Poverty Action Lab to propose new solutions to global poverty, highlighting the role of 'ideology, ignorance, and inertia' in explaining why aid is not always effective. In particular, many of their solutions point out that the poor lack critical information and hold incorrect beliefs, which perpetuate their poverty. They highlight findings from RCTs dealing with hunger, health, education, family planning, risk management, microfinance, and entrepreneurship. Karlan and Appel (2012) build a similar argument about solutions to global poverty, also drawing heavily on findings from RCTs. The 'seven ideas that work' which they highlight are: microsavings, reminders to save, prepaid fertilizer sales, deworming, remedial education in small groups, chlorine dispensers for clean water, and commitment devices (272–75).

A recent ReCom study outline two approaches to aggregate outcomes for school feeding interventions (Gelli et al. forthcoming). One approach involves a discreet choice experiment used to derive monetary values or utility scores combining the different outcomes into a single measure. The other focuses on the notion of quality adjusted school days as an overall measure encompassing both increased participation and learning outcomes from school feeding. The authors acknowledge that both methods are limited in that they do not account for intra-household effects and that they are likely to be context and country specific.

It is unquestionable that experimental studies have provided important insights into the underlying factors that explain policy effectiveness in the social sectors In Section 4.2, the position paper presents an exhaustive synthesis of the evidence arising from experimental (and quasi-experimental) methods. Also Gisselquist et al. (forthcoming) report the main findings from a systematic review of experimental methods in the area of government performance.

Barrientos and Villa (2013) have pointed out and documented the relevance of impact evaluation protocols in scaling up social protection programmes in Latin America and SSA. They provide two broad explanations for the incidence of impact evaluation in antipoverty policies in developing countries: the first emphasizing the advantages of a shift towards evidence-based development policy, and the second, emphasizing political factors.

In the remaining of this section, some of the drawbacks of RCTs are highlighted while alternative quasi-experimental methods used to address the question of what works (or could work) in aid to social sector policy are briefly discussed.

Compelling as RCTs can be in some contexts, their micro focus exacerbates one of the key weaknesses of experimental work: their low external validity. This is because experimental studies are applied on samples that differ substantially from the overall population. Many RCTs are small in scale, and although they may provide an accurate estimate of the partial equilibrium effect of a policy intervention, they may not be able to estimate the general equilibrium effect. If findings from RCTs are to be used to identify generalizable impacts, then experimental work must be able to say something about the broader context. The limits on the causal factors that RCTs can study also follow from the simple inability of researchers to manipulate some key variables identified in the literature, such as the level of development, national institutions, culture, or the quality of national leadership (Gisselquist and Niño-Zarazúa 2013).

Precisely because experimental research tends to adopt a micro approach to research, and eschew more high-level theorizing about what might be unique in particular contexts or influence results, experimental studies tend to lend almost no grounded leverage whether similar outcomes might be expected in other contexts. This means that the impact of a social policy on a small group may not hold if substantial changes are required to scale-up to a more general population. This is more of a norm than an exception in aid-supported pilot projects in most developing countries, which is directly connected to the questions of scalability and transferability of development policy that researchers, policy makers, and practitioners alike often aim to address.

One strategy for improving external validity in experimental research involves replicating the same type of intervention in different set of conditions. For example, the Consultative Group to Assist the Poor (CGAP) and the Ford foundation funded the replication of Bangladesh's BRAC's Challenging the Frontiers of Poverty Reduction/Targeting the Ultra Poor programme, which is designed to help ultra-poor households to get out of poverty by providing beneficiaries with a holistic set of services, These include livelihood trainings, productive asset transfers, consumption support, savings plans, and healthcare. The programme has been piloted in India, Pakistan, Honduras, Peru, Ethiopia, Yemen, and Ghana, and has been assessed using RCTs. This type of replication though is rare across developing country contexts.

There has been a rapid accumulation of evidence and with that, an increasing use of systematic review methodologies and meta-regression analyses to produce generalizations about specific policy interventions, and their effects under different socio-economic settings. This process has been supported by foreign aid through a number of organizations, such as the Cochrane Collaboration, the Campbell Collaboration, and the International Initiative for Impact Evaluation (3ie).

The duplication of experimental studies under varying conditions has allowed researchers to draw better conclusions about the external validity of particular interventions. Nevertheless, these can neither entirely solve the question of how to deal with exogenous factors that determine the scalability of policy, notably financial and political considerations, nor provide complete information on the long-term process of economic and social development (Woolcock 2009). Indeed, something that limits the use of RCTs in the study of aid effectiveness and development is their relatively short-term window of analysis. Many theories of development focus on 'non-linear' processes that evolve over decades, while RCTs rarely look at social impacts beyond the 'linear' trajectory between two points in time. Although the time horizon of RCTs could be extended, they would still not be long enough to explore many of the major development concerns (and theories).

Nevertheless, as experimentation becomes more common in development studies, opportunities are arising for researchers to use previous experimental data to study new outcomes. Researchers can collect new data on populations assigned to treatment and control groups in previously executed experiments, and then rely on the initial randomization to identify new effects. Baldwin and Bhavnani (2013) refer to this innovative technique as 'ancillary experiments'. Ancillary experiments provide many of the advantages of RCTs but at lower cost, since the intervention has already been undertaken. In addition, ancillary experiments can often address questions which are difficult to address due to ethical, budgetary, or logistical considerations.

A classic example of ancillary experiments is the study by Joshua Angrist, who took advantage of the Vietnam draft lottery to examine the effects of military service on lifetime earnings (Angrist 1990). The Vietnam draft lottery has subsequently been used by other scholars to study the effects of military service on a number of issues, including economic and health considerations, criminal behaviour, and political opinions.

As development researchers increasingly engage in experimental research, they often do so with few clear ethical guidelines. The main principles of research ethics currently employed by social scientists were developed by and for medical research that focuses on a different set of questions than those facing field experimentalists in development studies (Humphreys forthcoming). Inherent in a randomized evaluation is the condition that while one group receives support from policy (the treatment group) another does not (the control group). Withholding treatment from an individual is difficult to justify, especially when it is believed to be beneficial. Withholding treatment from some groups may be simply politically unfeasible, for example when governments introduce massive children vaccination campaigns, or in circumstances where major natural disasters threaten people's lives.

Another strategy to improve the external validity of experimental work consist in broadening theoretical propositions, including drawing on structural theory as in Martel Garcia and Wantchekon (2010; 2013). But a degree of uncertainty remains with regard to the underlying mechanisms that explain, under a theoretical framework, the distribution of policy outcomes for a particular group (treatment and control) vis-à-vis the distribution for the entire population. This constraint inevitably forces researchers to look beyond experimental methods to study what works in the social sectors.

Of particular importance is the fact that experimental research in the area of development imposes significant logistical challenges that threatens the internal validity of findings. For example, if researchers are unable to gather follow-up data from even a portion of the control or treatment groups, then comparisons of between them might not provide accurate estimates of the programme's effect. The treatment group may also 'contaminate' the control group, making it difficult to compare the two. The most obvious example of this can be found in the results of randomized deworming projects in Kenya (Miguel and Kremer 2004).

These issues often force researchers to resort to quasi-experimental regression techniques to tackle the problems that RCTs are supposed to address in the first place. Gisselquist and Niño-Zarazúa (2013) find that more than half of the studies which adopted experimental research designs had to resort to propensity score matching and instrumental variables techniques to address issues related to endogeneity, spillovers, and sample contamination.

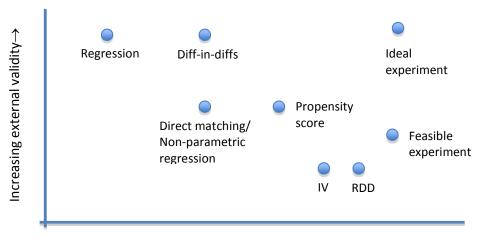
As RCTs are limited to address 'big' theories and development concerns, a pertinent question is how valid are quasi-experimental (observational) methods vis-à-vis experimental design in estimating the impact of aid-supported interventions?

As pointed out earlier, RCTs yield unbiased estimates of the impact of policy interventions. From this perspective quasi-experimental methods are subject to criticism and are often regarded unreliable in the sense of requiring strong, untestable, and often implausible assumptions. Observational studies instead use econometric methods, such as instrumental variables, regression discontinuity, direct matching, propensity score matching, linear regression and non-parametric methods, and difference-in-differences, each with its own assumptions, strengths, and weaknesses to estimate the impact of programmes by analysing data ranging from small-scale surveys to nationally representative censuses. From this perspective, observational studies have the potential that RCTs lack: They can address more easily big theories and development concerns while estimating impacts for entire populations.

In a recent ReCom study, Dehejia (2013) provided a survey of quasiexperimental methods, and assessed their internal and external validity relative both to each other and to RCTs. He concludes that instrumental variables and regression discontinuity have the highest degree of internal validity, offering quasi-experimental identification subject to the validity of their underlying assumptions. At the same time, as RCTs, these methods identify the effect of policy only for a subset of the population of interest.

In contrast, regression-based methods, such as linear regression or differencein-differences, are able to estimate the impact of programmes in the full population. While linear regression has a low degree of internal validity (with identification relying on functional form assumptions), differences-indifferences offers a more plausible alternative in many contexts (see FIGURE 8). Matching methods stake out a middle ground between these two. While these methods can be applied to large data sets, rather than make strong functional form assumptions, matching methods estimate the impact of a programme or policy by focusing on those non-treated units most comparable, statistically speaking, to those who received treatment.

FIGURE 8 Internal and external validity of experimental and quasi-experimental studies



Increasing internal validity →

Source: Dehejia (2013).

Although experimental and quasi-experimental methods are often presented as mutually exclusive, they are in fact complementary in two senses. First, they can be combined, for example using non-experimental adjustment to deal with implementation failures in RCTs or using the principles of experimental design to improve non-experimental studies. Second, replication, systematic reviews, and meta-analysis allow for a useful accretion of knowledge from studies using an array of data sources and methods. The discussion presented in Section 4 relies on an extensive and growing literature on aid and social sector policy which employ both experimental and quasi-experimental methods. These studies have been examined following systematic review methodologies and, when possible, using meta-analysis to provide a rigorous synthesis, addressing the question of 'what works' in aid to the social sectors.

#### 4 'What works' in aid to the social sectors?

What constitutes best practice and policy effectiveness is an empirical question that highlights the importance of assessing 'what works' in development policy, including the successes but also the failures. But, how can we study the impact of aid?

One way is to examine the progression of welfare outcomes that can be attributed to aid funding, however, question as to whether or not aid benefits recipient countries is methodologically confounded by endogeneity problems, including reverse causality. As pointed out earlier, the phenomenon of 'donor darlings' has been observed when certain countries receive support from a large number of donors along with large per capita development assistance. This is what Cassen (1986) has noted as the tendency for aid donors to follow well-performing countries. Although this may indicate that donor countries give preference for allocating resources to well performing countries, it also makes measuring the impact of aid difficult. It is possible, for example, to find that aid is associated with good performance, while the absence of aid associated with bad performance. The same logic would apply in opposite cases where donor agencies target the poorest countries often reporting the bad performance.

Similarly, if aid improves welfare outcomes around education, health, or economic growth, we should not expect the impact to be completely instantaneous but to have a lagged effect. This entails that longer horizons are needed whenever impact of aid is expected to be observed (Rajan and Subramanian 2005a). An important way of seeing if the potentials are met is to examine if aid affects intermediary factors of production, such as human capital in the form of health and education, as well as investment (Arndt et al. 2011). Nevertheless, a clear causal relationship between aid and the social sector outcomes has remained limited and contested for a number of reasons.

First, the literature on aid effectiveness has relied on cross-country regressions and has concentrated almost exclusively on the macroeconomic dimensions of international co-operation, namely economic growth, public investment, and pro-poor expenditure, with the last in particular emphasizing its direct effect on the poor through human capital formation, enhanced productivity, and wider spill-over effects (see e.g. Mosley et al. 2004b; Gomanee et al. 2005a; Gomanee et al. 2005b; Gyimah-Brempong and Asiedu 2008; Arndt et al. 2010).

Establishing causality at cross-country level is a complex exercise as it involves evaluating a counter factual situation, in which aid recipient households, communities, and countries are also affected by prices, incomes, and public interventions that substitute or complement the intended policy, and all this under intricate socio-economic and political interactions.

In the early literature on growth and development, which emphasized rapid capital investment and emerged in the 1950s after many LMICs gained independence, it was argued that aid would make up the shortfall in foreign reserves and domestic savings that many countries consistently faced (Chenery and Strout 1966). In that process, the geopolitical landscape of the Cold War also played a role in the distribution of aid flows (Bourguignon and Leipziger 2006; Bobba and Powell 2007).

Kosack (2003) has also reported that foreign aid is positively associated with welfare outcomes but only in democratic environments. Indeed, an important element in the discussion of aid effectiveness connects to the general view that democratic processes (and good governance) are sine qua non conditions to ensure a better aid allocation to the social sectors (Meltzer and Richard 1981; Persson and Tabellini 2000), and also the growing literature on the connection between democratic processes and growth (see e.g. Barro 1991; Wacziarg 2001).

Second, the returns to social sector aid investment are most likely to be observed in the long term. A six-year old who starts school now will not be productive for at least another 15 years. Making sure that the six-year old will start school in the first place requires addressing constraints on education, such as poor health, poor sanitation, and malnutrition, which are effects of poverty.

From a macro-analytical perspective, what constitutes 'longer run' is an empirical question to ask. Should this be a time that better captures the effect of aid-supported interventions on households and individuals in the course of a generation, or should this be a time when the current aid recipient countries started receiving aid? If we focus on the former approach, the empirical strategy may focus on the micro dimensions of aid and therefore rely on household and individual level data that in a developing country context is often absent or limited in length and scope. There are also important considerations regarding the internal and external validity of micro-impact studies of aid interventions.

If we focus on the latter approach, the empirical strategy may focus on the macro, cross-country level dimensions of aid, and look at the postindependence period of 1960 to the present day. This may be an interesting period but the purpose and mode of aid giving has dramatically changed since the 1960s. In 1960, a developing country on average received aid from two countries, while the corresponding number was 28 in 2008 (Frot and Santiso 2008). Also in this period, many of the larger recipients were given aid for political reasons, thus it is common to single out countries, such as Egypt (Rajan and Subramanian 2005a) and adjust for countries where motivations for aid may be political and not socio-economic development. This adjustment does not solve the problem of endogeneity, even in a panel data with fixed effect, as one might notice, for example, the problem of aid darlings might arise and disappear within the period of analysis.

The use of fixed country effects, structural models, or GMM with instrumentation for aid giving to isolate the exogenous element of aid giving go some ways to correct for some of these problems. A host of instrumentations have been used to find exclusion conditions which cannot be related to

economic performance (see e.g. Hansen and Tarp 2000; Rajan and Subramanian 2008).

In testing for exogeneity in time series, Juselius et al. (2011) find aid not to be usually exogenous. Most likely, the choice of the years included in the study will matter, as years since the Cold War may have had more economic interest attached to aid giving. One way of avoiding making a choice is to report on different divisions of 1960 to the present with some time effect. Another natural division is to report on impact of aid since the end of the Cold War (Lu et al. 2010). However, as pointed out by Arndt et al. (2011), a shorter period ignores the cumulative and the long-term effect of aid.

Based on the discussion presented above, the literature on aid effectiveness can be divided into two broader categories: The first group is made of studies that examine the macro, cross-country level dimensions of aid and its relationship with growth and welfare dimensions associated with social sector policy, notably education and health, largely employing macro data. The second group consists of studies that examine the micro-dimensions of aid and its impact on households and individuals in specific developing country contexts, and therefore the link between aid and welfare outcomes is established through impact analysis of aid-supported projects or programmes. These two broader approaches are discussed below, in Sections 4.1 and 4.2.

# 4.1 Macro approaches to assess 'what works' in aid to the social sectors

Few topics in the field of development economics have been as controversial as the impact of foreign aid. Rajan and Subramaniam (2005b) along with others (e.g. Doucouliagos and Paldam 2011) argue that development assistance has not resulted in higher growth in developing countries. The opposite has also been shown by Arndt et al. (2011), who show a positive impact of aid on growth through various intermediate welfare channels. Other studies have examined the effectiveness of aid at a country level, as done by Dollar and Easterly (1999) who found aid to be in general ineffective, whereas more recently, Juselius, Møller, and Tarp (2013), found strong evidence of aid effectiveness.

Since the Paris Declaration, with trends departing from project aid towards budget support and other wider financial schemes, the issue of efficient allocations of aid flows means to pay further attention to budget lines and impact as well as monitoring systems in areas where aid can act as complementary factor—rather than substitutive of domestic resources—in order to achieve the greatest impact in enhancing welfare outcomes. The shift has also attempted to tackle constraints in the factors that are impeding a better quality provision of services.

In low-income countries, in particular, where budgetary constraints are severe, a very high share of government budgets allocated to public service provision

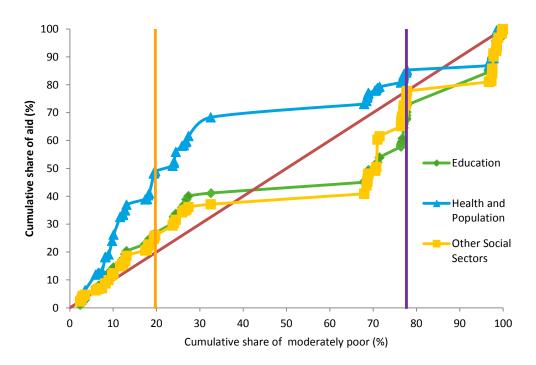
is used for recurrent expenditure to, e.g., pay teachers' and doctors' salaries. This leaves governments with very little room for introducing policy measures towards improving the quality of public services. Foreign aid can help mitigate these constraints by supporting non-recurrent spending in specific areas. Aid may also be critical for funding certain types of investment that have great social impacts, which would be inadequately funded in the absence of international solidarity. For example, the promotion of early child development programmes and advocacy systems that support education for girls are examples of the critical role that foreign aid can play in expanding people's opportunities in developing countries.

Nevertheless, a clear impact attribution of aid to welfare outcomes remains contested. Mishra and Newhouse (2007) for instance, discuss the links between donor expenditure and developmental indicators, and by estimating a system GMM for the 1975–2004 period, they show that doubling health aid decreases infant mortality by two per cent in a subsequent five-year period. This is corroborated by Burnside and Dollar (2000), who find that for countries with effective public management, aid reduces infant mortality—they find that aid equivalent to one per cent of GDP reduces child mortality by 0.9 per cent. In contrast, Wilson (2011), using data from 96 high-mortality countries, found that health aid has no effect on mortality and its effectiveness has not improved over time.

Clemens et al. (2004) indicate that in the short run aid allocated to support budget and balance of payment commitments as well as infrastructure result in rising income. They argue that aid promoting democracy, health, and education will have a long-run impact on growth. Minoiu and Reddy (2010) show that when total aid is separated into developmental and non-developmental aid, the latter does not contribute to growth, while developmental aid's contribution to growth is strong.

Nevertheless, the support to social sectors has surprisingly also been neutral in terms of targeting. At the disaggregated level there are, however, significant differences between the patterns of aid to the areas of social sectors. As shown in FIGURE 9, aid to education has been less poverty focused in a country context than the aid to health and population. This is a result of ODA being more focused on targeting health in low-income countries, whereas education is supported more in middle-income countries (Baulch and Vi An Tam 2013).

FIGURE 9 Aid concentration curves for aid to education, health and population, and other social sectors, all DAC donors 2009-11



Note: The concentration curve presents whether the aid disbursements have been progressive (above the 45 degree line) or regressive (below the 45 degree line).

Source: Baulch and Vi An Tam (2013).

More recent evidence suggests that fungibility is not as big of a problem as it used to be perceived. This is partly because of the following reasons: First, most previous studies have excluded off-budget aid data in the estimations, which still play an important part in the allocation of social sector spending in many low-income countries. When off-budget aid is included in the analysis, Van de Sijpe (2012) finds little evidence that aid is fully or even largely fungible. 4 Second donor conditionality, which as Adam et al. (1994) point out, largely depends on whether a donor is able to monitor the fiscal policy choices of a recipient government and to enforce conditionality in a credible manner. Third, in the social sectors some level of fungibility can be explained by countries trying to smooth out aid spending across different years, a practice actually recommended by the IMF. However, even when this is not the case and the aid is used as a substitute for other spending or is reallocated to other sectors, it is not clear that fungibility has major consequences, and may simply reflect donors and recipients having different preferences.

While the literature on the impact of aid on growth is significant, fewer studies have looked closely at the direct relationship between aid and social sector outcomes. Indeed, assessing the impact of aid on a wide range of outcomes, such as access to basic healthcare, primary education, improvement on life expectancy, and poverty reduction, requires going beyond examining aid impact from merely a growth perspective, which has been a central focus of many studies in the past. Clemens et al. (2004), on the one hand, employ aid commitments to construct aggregate categories of aid interventions: 1) emergency and humanitarian aid; 2) shorter-term aid flows to budget support in infrastructure, banking, agriculture, and industry; and 3) longer-term aid flows committed over four year or more for technical assistance, democracy, environment, health, education, which are assumed to have long-lasting effects on development. Their findings show positive and significant effects on growth arising from shorter-term aid flows. Rajan and Subramanian (2005a), in contrast, report insignificant effects of both shorter-term and longer-term aid commitments on growth.

A limitation of several studies is in that they employ data on aid commitments rather than disbursements. Evidence shows that there is a gap between aid commitments and aid disbursements over a given period. For example, the average gap between aid commitments and aid disbursement in the period 1995-2009 was US\$14.5 million a year.

Furthermore, as aid flows to the social sectors are aggregated within a pull of resources with longer-term purposes, it is difficult to attribute any specific contribution of the overall effect of each social sector. More recently, Asiedu and Nandwa (2007) employ data on aid disbursement and focus specifically on education. They find that the effect of aid depends on the level of development of the recipient country being low- or middle-income country as well as the level of education at which aid is being targeted, i.e., primary, secondary, or higher. Asiedu and Nandwa show that aid to primary education enhances growth in low-income countries whereas aid flows to higher education enhances economic growth in middle-income countries. Their findings coincide with the results reported in Petrakis and Stamatakis (2002), which show that primary and secondary education are more relevant for growth in less developed countries. The findings also support early studies that highlight the importance of investing in primary education in poor countries to support economic growth (Schultz 1967; Schultz 1981; Psacharopoulos 1983; Psacharopoulos and Patrinos 2004).

Recent evidence shows that there are important interactions and complementarities between different sub-categories of education policy so funding one sub-category may have important spillover effects in others. For example, Birchler and Michaelowa (2013) find evidence that donors' increase in funding has substantially contributed to the successful increase in enrolment over the last 15 years. Most importantly, they find complementarities between aid for primary and secondary education. Their analysis of education quality highlights the relevance of a balanced mix of educational expenditures.

In the area of health aid, in the context of Tanzania, Masanja et al. (2008) find a link in the drop of 24 per cent of child mortality with doubling expenditure on health, decentralization policies, the SWAp, and vertical programmes to prevent malaria and improve nutrition.

A recent ReCom study (Arndt et al. 2011) looks at aid effectiveness from a long-term perspective, arguing that the impact of aid is cumulative and its impact can be realised only in the long run. After empirically analysing data from a sample of 78 developing countries from the period 1970-2007, the evidence suggests that foreign aid does have a positive impact on economic growth. The results are generally consistent with evidence from a large body of studies (see Mekasha and Tarp 2013 for a systematic review of the literature).

Findings from Arndt et al. (2011) confirm that foreign aid has promoted structural change, reduced poverty, and stimulated growth. Foreign aid has also supported proximate growth determinants by building human capital. An annual inflow of aid equivalent to five per cent of GDP is expected to increase average rate of economic growth by around 1.5 percentage points; reduce poverty by around nine percentage points; augment average schooling by 1.4 years; boost life expectancy at birth by four years; and reduce infant mortality 20 in every 1,000 births. The study has also identified investment both in physical and human capital as key causal links through which aid transmits economic growth.

The evidence also dispels a growing scepticism that aid might harm recipient economies by discouraging the mobilization of domestic revenues. In fact, there is no evidence to suggest that foreign aid has had any detrimental effects over the last 40 years. 15 Nevertheless, there is a need to sound a word of caution that even though foreign aid has produced positive outcomes in terms of accomplishment of development goals, it should not be looked upon as a panacea. The impact of aid on growth and the social sectors is important but moderate and does not work well at all times and in all places.

Indeed, the 2005 Paris Declaration on aid effectiveness laid down an outline for donors and partner countries to reform the way aid is delivered and managed. The principles of ownership, alignment, and harmonization are particularly relevant to donors involved in the health sector. Ownership is achieved when recipient countries are allowed to develop their own national strategies according to their priorities, and take control and leadership of any plans. Alignment occurs when donors adapt their aid programmes to fit with national development objectives, and when they deliver aid through in-country systems. This helps to give flexibility to the needs and priorities of recipient countries, and to develop the capacities necessary for recipient countries to sustainably lead and manage development going forward.

Nevertheless, there are many instances where donors have moved way from schemes that engage with the recipient governments because they can be hard to realize and monitor in the poorest countries. Instead much focus has been on providing funding for single issues, such as vaccination programmes or anti-malarial campaigns, which is often provided to private actors working outside government systems. Such schemes can achieve impressive results, but to achieve the MDGs on maternal and child health it is clear that low-income countries will still need well-organized country health systems. Single issue initiatives could feasibly help to reinforce progress towards vital development objectives, but to do so in a sustainable manner they need to be better aligned with recipient countries' own national health strategies.

A lack of effective harmonization between donors can also create unnecessary problems. Local health officials sometimes find that meeting different donors' demands takes up time that they could better use to deal directly with vital health issues. In Tanzania, for instance, health workers in some regions may spend more than 20 days per quarter writing reports for a plethora of different donors. The practical consequences of this kind of aid fragmentation put a heavy burden on the fragile capacities of developing countries' health systems. To avoid such problems, better co-ordination between donors and recipient countries remains a challenge. But there are some good examples that have the potential to be emulated in other latitudes. For example, the MDGs on maternal and children's health could be tantalizingly within reach if new aid initiatives would effectively replicate successful schemes from around the world (see Box 3).

#### Box 3: Successful initiatives on maternal and child healthcare

Sri Lanka has reached MDG targets well ahead of schedule thanks to the strategic expansion of a nationwide network of health centres, teaching hospitals, pre-natal clinics, maternity homes, and rural hospitals. Traditional birth attendants have been replaced by trained midwives, and nearly 98 per cent of births today occur in institutions. Importantly, international organizations supported healthcare improvements in Sri Lanka by channelling aid through the government's existing foundations.

In Niger the under-five mortality rate (U5MR) declined rapidly from 226 deaths per 1,000 live births in 1998 to 128 deaths per 1,000 births in 2009. A national public healthcare programme has targeted childhood illnesses including diarrhoea, pneumonia, and malaria. Many rural regions gained community health posts staffed by trained health workers and supplied with essential drugs. Family planning campaigns, a massive measles vaccination campaign, and increased attention to nutrition have also helped. These programmes were supported by both UNICEF and the Ministry of Health, who provided access to the drugs and commodities essential to making the health posts functional.

Ghana's U5MR has also declined greatly since 2000. Key actions have included the wider use of insecticide-treated nets (ITNs) over young children's beds, and family planning campaigns that have increased the interval between births.

Mexico has introduced cost-effective large-scale interventions to increase vaccination coverage and combat diarrhoea through better treatment and sanitation. A CCT programme called Progresa introduced in 1997, and then renamed Oportunidades in 2000, provides financial support to families in exchange of regular health clinic visits and nutritional support, especially among mothers and pregnant women. Midwife training has also been enhanced. This led to a reduction in U5MR from 64 per 1,000 live births to 23.

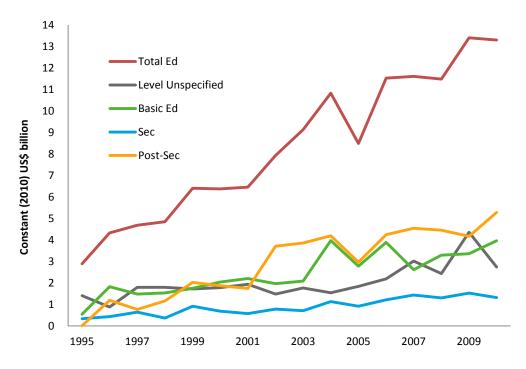
In each of these countries impressive improvements have been made thanks to wellplanned domestic health policies. In each of these cases effective support in the shape of carefully channelled external financial and technical assistance has played a vital role

In each of these countries impressive improvements have been made thanks to wellplanned domestic health policies. In each of these cases effective support in the shape of carefully channelled external financial and technical assistance has played a vital role.

Source: Bhuttaand Aleem (2013).

In the education sector, despite the fact that the MDG 2 focuses on primary education, the support to higher education has increased over the past decade (see FIGURE 10). This has resulted in the support to education being regressive instead of focusing on the countries with the lowest primary education rates (see Baulch and Vi An Tam 2013).

FIGURE 10 Total and sub-sectorial ODA to education 1995–2010



Source: Riddell (2012).

The results by Riddell (2012) show that the aid to the educational sector has continued to be specific project related. As donors want short-term results and the ability to track the effect of their donations, the local authorities in general have low ownership of the projects and the capacity building dies out when the donors have achieved their short-term goal. The aid disbursements to the educational sector thus seem to be challenged in achieving the expected longterm results. A key result in the paper on education by Riddell (2012) and on health by Martine Alvarez and Achary (2012) as well as Blanchet et al. (forthcoming) is that bi-lateral donor support to the social sectors continues to be mainly targeted at specific projects. This is problematic in the sense that it does not feed into the Paris Declaration, and further, the short-term horizon of the projects makes the local ownership of the projects limited.

Limited information on capital and recurrent social expenditure in developing countries also makes it challenging to carry out a more precise analysis of the impact of aid on the sectors below the national aggregate levels. The extent to which bi- and multi-laterals continue to rely on project aid approaches to development assistance, expenditure of which is not always consolidated in the countries' budget, cause an underestimation of the full effect of foreign aid and limits the ability of carrying out a more precise estimation of its impact on the social sectors, welfare outcomes, and poverty. In fact, most studies that examine the micro-level impacts of foreign aid have focused on small-scale (often pilot) projects. These studies concentrate on the *indirect* linkages between aid and the social sectors, via impact analysis of aid-supported projects and programmes. The evidence arising from these studies is discussed in the next section.

# 4.2 Micro-level impacts of aid on the social sectors: What works (and does not work)?

A number of experimental and quasi-experimental studies have evaluated the effects of aid projects in the social sectors. In this section, a brief review of the existing evidence of 'what works' in the areas of health, water and sanitation, education, and social protection is presented, with a discussion on how aidsupported policy innovations impact welfare.

The analysis of 'what works' in aid to health aid policy is divided into clinical and non-clinical interventions, which in turn are classified into policies designed to preventive diseases, and policies introduced to treat diseases.

#### 4.2.1 Poverty-related diseases: HIV/AIDS, Tuberculosis, and Malaria

Poverty-related diseases, notably the human immunodeficiency virus (HIV), which causes AIDS, as well as malaria and TB are major causes and consequences of poverty in developing countries. The burden of disease, especially in the poorest countries is a major concern. The 'three big killers' along are the cause of more than five million deaths every year, 95 per cent of which occur in developing countries.

The effect of HIV in some countries in southern African is so severe that nearly 40 per cent of the entire population is infected with the virus. Guo et al. (2012) also find educational disadvantages among children affected by HIV compared to other children in various measures of educational outcomes, including school enrolment and attendance, school performance and behaviour, school completion, and educational attainment.

No clinical health innovation or vaccine is able to stop the scale of AIDS epidemic, however, some public health policies have been introduced to avoid infection and improve the living conditions of those already infected. Given the focus on aid recipient countries and the geographical dispersion of these diseases in SSA, it comes as no surprise that nearly two thirds of the studies focus on a handful of countries (Malawi, South Africa, Botswana, Kenya, Nigeria, Zimbabwe, Madagascar, and Ghana).

In some LMICs, separate vertical programmes deliver specific life-saving interventions but these are often fragmented. Strategies to integrate these services at the point of delivery—sometimes termed 'linkages', have aimed to bring together inputs, organisation, and delivery of particular functions to increase the efficiency of, and access to, health services against illnesses, such as TB and HIV/AIDS as well as sexually transmitted infections (STI). In fact, TB is a significant cause of morbidity and mortality in people with HIV, and about a quarter of all HIV-related deaths are attributed to it. Integrated HIV and TB treatment services have in this perspective the potential of improving the effectiveness and efficiency of health strategies against these diseases.

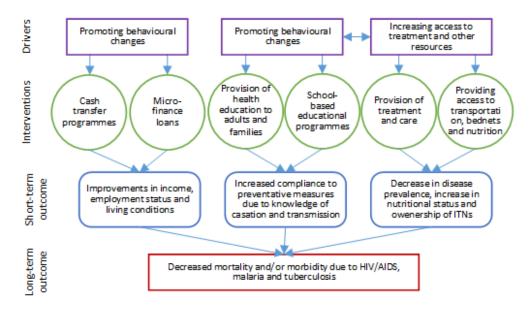
For now, most clinical evidence comes from pilot projects with limited scope and reach, although there is clear potential of scalability. For instance, the incorporation of measures to handle the risk of HIV affected healthcare personnel to be infected by TB is critical, although there is no clear evidence to guide policy. Implementing co-trimoxazole preventive therapy (CPT) for TB-HIV co-infected patients during routine TB care consistently reduced the risk of death and improved survival. Randomized controlled trials (RCTs) have shown the benefits of isoniazid to reduce active TB in HIV-positive patients, although evidence on the effectiveness of isoniazid preventive therapy (IPT) integration into routine HIV care remains limited. Integration of antiretroviral therapy (ART) into TB care has showed promising results for reducing TB incidence and improving patient health outcomes, although the scant number of studies does not provide sufficient evidence to make conclusive claims (Uyei et al. 2011).

A few studies have compared integrated services with single, special services. They show that integrating STI policies alongside family planning, and maternal as well as child health services, as opposed to special or vertical services, may actually decrease utilization, patient knowledge, and satisfaction with health services, and may not necessarily result in any difference in improved health outcomes, such as child survival. Integrating HIV prevention and control at facility and community level improved the effectiveness of certain services (STI treatment for males) but resulted in no difference in health seeking behaviour, STI incidence, or HIV incidence in the population (Dudley and Garner 2011). There is an important gender dimension worth pointing out here. Improved knowledge of HIV/AIDS among men does not appear to translate into positive behaviour changes, nor to a reduced HIV and STI incidence.

A recent ReCom study conducted on non-clinical interventions (Amaya and Niño-Zarazúa forthcoming) found that overall three approaches have largely been explored and supported by foreign aid to tackle HIV/AIDS, TB, and malaria with a degree of success: the first focuses on increasing financial resources; the second on promoting behavioural changes; and the third on improving the accessibility to ART and other resources (see FIGURE 11).

These three main areas frequently interact, however, resulting in mixedinterventions. The most common secondary component of an intervention is the inclusion of an educational component, which responds to numerous studies describing the importance of behavioural change to achieve long-term effects (Galavotti et al. 2001; Green et al. 2006; Schwartländer et al. 2011).

FIGURE 11 Non-clinical interventions supported by foreign aid to tackle HIV/AIDS, TB, and Malaria



Source: Amaya and Niño-Zarazúa (forthcoming).

#### Increasing financial resources

Interventions aimed at increasing financial resources for patients and/or their families focus on providing the resources needed to access treatment and care, prevent transmission, and improve overall health. These types of interventions can be sub-divided into cash transfer programmes and micro-finance loans.

On the one hand, cash transfer interventions for HIV/AIDS, malaria, and TB provide incentives to promote various positive actions. Incentives for school attendance are made on the premise that increased school attendance will translate into lower risk sexual behaviour. In the case of the Baird et al. (2012) study, HIV treatment was one of the outcomes, as well as treatment for herpes simplex virus 2 (HSV2). UCTs may also be used by governments to pilot social protection programmes in areas with high HIV rates. This was the case of the Strobbe and Miller (2011) study in Malawi, which looked at how the Mchinji Social Cash Transfer Pilot Scheme had an effect on alleviating poverty, reducing malnutrition, and improving school enrolment.

Micro-finance loans, on the other hand, look to have patients or people at risk of infection to invest in projects to improve their economic wellbeing. These loans can be used for a range of practices, whether it is to develop irrigation pumps (Pandit et al. 2010); selling second-hand clothing, keeping poultry, and providing other services (Mutenje et al. 2007); or they can choose what to invest in (Sherer et al. 2004; Rocha et al. 2011). Material incentives were also studied in relation to TB in a study conducted by Lutge et al. (2012), in which they looked at the feasibility of these programmes in reducing TB's prevalence and adherence to treatment; as well with regards to malaria in a study by Krezanoski et al. (2010), where they studied the effect of incentives on ITNs use in SSA.

In fact, ITNs have proved to be highly effective in reducing childhood mortality and morbidity from malaria. With a high coverage of treated nets over two-year period, the benefit of ITNs in terms of lives saved per unit of investment has been estimated using an approximate extrapolation to the current population of children under-five years of age at risk for malaria in SSA (14 percentage of approximately 480 million population at risk, or 67 million children) (Lengeler 2009). Results indicate that approximately 370,000 child deaths could be avoided if every child could be protected by an ITN. A costeffectiveness assessment has shown that ITN programmes compare well in terms of cost-effectiveness with other child survival interventions, such as the EPI.

The impact of ITNs on uncomplicated episodes of malaria is also marked with a halving of episodes under most transmission conditions including stable and unstable malaria. If these results are sustained in large-scale implementation, ITN programmes could potentially lead to substantial savings both at the healthcare level and at the household level, where the cost of disease episodes is considerable. This is an important consideration in favour of supporting, with foreign aid, the scalability of ITNs in developing countries.

It is important to underline here the fact that most of the existing evidence of ITNs comes from RCTs where the intervention is deployed under highly controlled conditions, leading to high coverage and use rates. Therefore, the bulk of knowledge describes project effects in terms of efficacy rather than in terms of effectiveness associated with large-scale programme conditions. While the difference between efficacy and effectiveness is likely to be small for certain clinical interventions, such as vaccination or surgery, it can potentially be large for preventive interventions, such as ITNs.

A related aspect is the question of how impact varies with the coverage rate. Especially under high transmission conditions, maximum impact might well be obtained only if a certain level of coverage is achieved and if a substantial part of the mosquito population is killed as a result. Such a 'mass effect' has been detected in some studies and not in others, but it is likely that if it is present the impact of ITNs will be enhanced. Since the effect is very likely to occur before 100 per cent coverage is achieved, this has potentially important consequences for equity: Poorer segments of the population unable to afford an ITN might well benefit from the ITNs used by better off neighbours (Lengeler 2009).

Widespread access to ITNs is currently being advocated by various organisations (e.g. Roll Back Malaria) with the support of foreign aid, but universal deployment will require major financial, technical, and operational inputs and commitments from donors, governments, and NGOs working in the field.

# Promoting behavioural changes

Studies have found that interventions addressing behavioural change most often result in long-term positive effects to appropriately address a disease or avoid health risks (Schwartlander et al. 2011). Indeed, as previously explained, most interventions carry a behavioural change component. Education has an impact on avoiding health risks which lead to disease, but is also affected by disease due to students not being able to attend school or having poor performance resulting from illness (Guo et al. 2012). The context of these educational initiatives is most often in school settings, targeting children, or in community settings, educating adults on health risks and preventative measures.

School-based interventions seek to educate on preventative strategies to avoid disease and can also be used as an opportunity to screen disease as well as provide treatment. Frequently teachers are also trained to identify signs of disease and to continue the educational efforts once the intervention has ended (Brooker et al. 2010).

Interventions targeting adults, however, are usually associated with microfinance loans or other material incentives, though there are some cases where cash transfer programmes target schooling of children (Baird et al. 2012). Interventions addressing adults work by educating them on preventative measures as one of the requirements of receiving the loans. These types of mechanisms can be organized as providing loans to groups or individuals who organize into committees (Sherer et al. 2004), or individuals (De La Cruz et al. 2009; Biswas et al. 2010).

A separate review study on the impact of girls' education on HIV and sexual behaviour (Hargreaves and Boler 2006) found that before 1995, more education was paradoxically related to higher HIV vulnerability. However, after 1995, more education was either not related to HIV vulnerability or was indicative of lower HIV vulnerability. That is, it seemed that as the epidemic evolved, education shifted from being a negative asset to a positive asset, either because the uneducated have higher risks in comparison or because education decreases vulnerability in the longer run. The mechanism seems to operate through an increased condom use when women have higher education. This implies that higher education may give women a higher bargaining power in terms of safe sex or that in the social class of higher education it is more common to use condoms.

#### Increasing access to treatment and other resources

Treatment for HIV/AIDS and TB is both costly and complex due to the need to take medications for long periods of time or, in the case of HIV, permanently, and the issues that result from resistance to treatment due to lack of adherence. In the case of malaria, the preventative measures required, primarily the use of ITNs, are difficult to implement and maintain. For these reasons, a large number of interventions seek to provide free or cheap treatment for the diseases and the provision of other resources, such as ITNs, transportation for doctor's visits, and nutritional programmes.

Given that HIV attacks the immune system, good quality and timely ART has been proven to have a drastic impact in the quality of life of patients. Several interventions have sought to seek the effects of ART on employment status of working-age individuals (Larson et al. 2009; Thirumurthy et al. 2011; Bor et al. 2012); economic and quality of life outcomes (Sadoh and Oviawe 2007; Beard et al. 2009); and effects on catastrophic costs and benefit incidence (Onwujekwe et al. 2009).

Moreover, the long-term treatment cycle of TB medications and requirement of taking it in the presence of a health professional brings a range of other costs with it. A few studies have addressed these 'hidden costs' by looking at household and transportation costs (Habib and Baig 2006; Kemp et al. 2007; Yao et al. 2008; Lutge et al. 2012); financial protection (Lönnroth et al. 2007); and the economic burden of families due to HIV-TB co-infection (Sadoh and Oviawe 2007). The affordability and accessibility of anti-malarial treatment has also been studied in rural areas (Smith et al. 2011) given the distances and costs involved with purchasing the drugs. Similar to treatment, nutritional programmes seek to support patients who are immune compromised due to these diseases by providing food through nutritional rehabilitation programmes and advising on diet changes for HIV-exposed infants (Buonomo et al. 2012) as well as ensuring food security by promoting village poultry programmes (Moreki et al. 2011). In the next sub-section we focus on treatable childhood diseases.

# 4.2.2 Treatable childhood and maternal diseases

Treatable childhood diseases kill millions of children every year in LMICs. Pneumonia and diarrhoea alone lead to 1.6 and 1.3 million child deaths per year respectively, amounting to almost three million deaths in total (Black et al. 2010). Almost half of deaths globally among young children occur in one of the five following countries: India, Nigeria, DRC, Pakistan, and China (Black et al. 2010). Much research has focused on clinical interventions for treatable childhood diseases, such as vaccines and antibiotics, while the impact of various non-clinical policy interventions remains largely unexplored.

Maternal mortality, which means the death of a woman during pregnancy, labour, or in the immediate postpartum period, is a global challenge. Worldwide, the total number of maternal deaths decreased from 543 000 in 1990 to 287 000 in 2010—an approximate 47 per cent decrease. South Asia (29 per cent) and SSA (56 per cent) accounted for 85 per cent (245 000) of maternal deaths; a third of the global maternal deaths occurred in India (19 per cent) and Nigeria (14 per cent). All regions experienced a decrease in the maternal mortality rate (MMR); in developing regions the MMR was approximately 15 times higher than that in developed regions. Amongst developing regions, Eastern Asia had the lowest MMR at 37 deaths per 100,000 live births, whereas SSA had the highest, at 500 deaths per 100,000 live births (WHO et al. 2012). A recent study by the WHO shows that hypertensive disorders, haemorrhage, and sepsis/infections were the prominent causes (Khan et al. 2006). Other estimates suggest that severe bleeding and hypertension together account for more than half of all maternal deaths, while sepsis and unsafe abortion practices were responsible for 17 per cent of deaths. 16

# Health policies to improve maternal health outcomes

The close link between maternal and newborn health and survival is well established. Between 2005 and 2010, 15 per cent of all children born globally were estimated to be low-birth weight babies (WHO 2012). Low-birth weight can be due to in-utero growth restriction, preterm birth or both. Neo-natal outcomes are affected by the health of the mother throughout her life, beginning from her childhood up until pregnancy (Bacci et al. 1993; ACC/SCN 2000). Complications during labour are associated with an increased risk of newborn death. Obstructed labour and mal-presentations carry the highest risk. The death of the mother especially carries a heightened risk for the death of her newborn baby (Lawn et al. 2005).

The quality of child care by the mother is associated with family size. Larger families impose time and financial constraints to the appropriate care of children. In that context, education for contraceptive use by woman after childbirth becomes important. In a recent study, Lopez, Hiller, and Grims (2010) found encouraging results from education for contraceptive use. It seems to lead to more effective contraceptive use, fewer repeated pregnancies, and self-reported births among teenagers. Education for contraceptive use was also reported to have a lower cost than traditional baby wellcare policies.

Multiple strategies have been implemented in the area of human resources with the specific objective of improving maternal health outcomes in developing countries. This is due to the fact that an increasing availability of skilled healthcare professionals is associated with decreases in fatality rate significantly. Most maternal deaths can be prevented by having access to skilled attendants at birth and immediately after, thus it works to institute skilled attendants for home based deliveries. Evidence suggests that policies that most successfully reduced maternal mortality and emergency obstetric care indicators had established functioning maternal healthcare systems with access to skilled birth attendants equipped with appropriate drugs, supplies, and equipment as well as systems of referral to higher levels of care in the event of obstetric complications. Such successes can be explained by the fact that most maternal deaths occur during the period around giving birth, and that most life-

threatening obstetric complications arise suddenly without warning signs and hence, require appropriate and timely management (Nyamtema et al. 2011).

Indeed, many pregnancy complications are unpredictable—in the poorest countries where two thirds of women deliver at home far from emergency services or without access to a health professional, referral interventions can be lifesaving. Recent analysis of referral systems has found evidence of a reduction in neo-natal deaths and an increase in utilization of health facilities from community-based referral systems (Hussein et al. 2011). However the small scale of most studies limits the possibility of drawing a conclusive statement about the effectiveness of referral systems in reducing maternal mortality.

In a recent study, Bhutta et al. (2010) find that important factors which support the work of skilled healthcare professionals include supportive policy and regulatory frameworks; adequate supplies, appropriate equipment, and infrastructure; as well as an efficient and effective system of communication, referral, and transport. More specifically, the study identifies a number of 'drivers' that could potentially improve maternal health outcomes in developing countries:

First, having a prompt recognition of complications and strong referral systems. The most crucial component to prevent maternal deaths is a prompt recognition of complications during and after birth delivery and referring such mothers to higher healthcare facilities. When a professional, being doctor or midwife, is linked up with a strong referral system, maternal mortality is found to decrease significantly, irrespective of whether the birth took place at home or in a health facility.

Second, combining maternal health and family planning. The integration of maternal health and family planning can potentially decrease maternal mortality significantly. This is supported by studies that have shown that decline in fertility has contributed to decline in maternal mortality.

Third, promoting women's education and empowerment. Educating women about their health and complications during pregnancy is found to have an effect on declining maternal mortality. Well-informed women use maternal health services more actively and if faced with birth complications, they are more likely and prone to seek help from skilled attendants.

Fourth, addressing poverty and gender inequality. Poverty is one of the main factors affecting the access to maternal healthcare in rural areas. The gap between the rich and poor in terms of accessibility to maternal healthcare is highest in the public sector. Studies show that it is necessary to address gender inequalities in order to improve maternal mortality.

Fifth, having skilled birth attendants is critical to improve child survival and reduce maternal mortality. At the moment, unskilled birth attendants are the main providers of care for millions of deliveries in developing countries, despite the fact that they are not capable of recognizing and treating complications. In countries where available health personnel to perform emergency obstetric procedures is scarce, new approaches have been implemented with relative success. Surgical technicians and assistant medical officers (AMOs) with prior surgical experience have been trained and allowed to perform surgeries where there is shortage of obstetricians. Studies have shown that there is no difference in the outcome of the surgeries performed by the two groups.

Besides the drivers described above, other political factors and policy choices also seem to facilitate the effectiveness of maternal health policies, particularly in resource limited countries. These include strong political commitment, good leadership, and the presence of enabling policies as well as sufficient funding for drugs, qualified human resources, health facilities, and referral systems (Nyamtema et al. 2011). Low socio-economic status and under nutrition are clearly identified as obstacles for the effectiveness maternal health interventions.

# Health policies against diarrhoeal diseases

Regarding child wellbeing, diarrhoea remains a leading cause of morbidity and mortality globally for children in LMICs (Lamberti et al. 2012). Those less than one year old experience the highest incidence rates out of all groups, at an estimated 4.5 episodes per child per year in LMICs in 2010 (Fischer Walker et al. 2012). Moderate and severe diarrhoeal episodes account for over a third of all episodes of diarrhoea among children. Older children and adults are at less risk of experiencing moderate and severe episodes, which account for only five per cent of all cases (Lamberti et al. 2012). Young children are particularly vulnerable to the negative health implications due to diarrhoea, such as poor nutritional absorption, dehydration, and susceptibility to infection. Moreover, prolonged periods of diarrhoea can impair growth and development of children (World Health Organization 2003; EHP et al. 2004).

There is evidence of a decline in incidence rates of diarrhoea among young children in LMICs, from 3.4 episodes per child per year in 1990 to 2.9 episodes per child and year in 2010 (Fischer Walker et al. 2012). Mortality of children under the age of five due to diarrhoea has also been reduced, from 4.6 million deaths in 1980 to less than two million in 2000 (EHP et al. 2004).

There have been recent advancements in the development of rotavirus vaccines and implementation of vaccination programmes, which may lead to a further decrease (Desai et al. 2011). As it is estimated that rotavirus is responsible for more than half a million deaths among children under the age of five worldwide each year, rotavirus vaccines have the potential to significantly decrease the overall mortality rate for young children (Todd et al. 2010). The introduction of Hib and pneumococcal conjugate vaccines may also lead to a reduction in bacterial pneumonia in LMICs (Gilani et al. 2012).

In fact, within the modality of project aid, the share of development assistance that explicitly targeted interventions for maternal and child health increased from US\$2,120 million in 2009 to US\$2,251 million in 2010. The increase was propelled by disbursements associated with vaccinations (Hsu et al. 2012).

Nevertheless, the introduction of vaccines will have limited effects on the burden of disease, since respiratory infections can be caused by over 200 different organisms (Rabie and Curtis 2006).

Beyond vaccines, other clinical interventions for diarrhoea and respiratory infections include: antibiotics, probiotics, and zinc (Das et al. 2010; Soares-Weiser et al. 2010; Theodoratou et al. 2010; Traa et al. 2010; Lazzerini and Ronfani 2011; Das et al. 2012; Dennehy 2012; Dinleyici et al. 2012). The impact of nutritional status of mothers and breastfeeding has also been assessed (WHO 2000; Ramakrishnan et al. 2011). Maternal zinc, iron, and folic acid supplementation not only prevent deficiency outcomes in the mothers but also benefit the newborn's health. Micronutrient fortification is particularly important for children, as are handwashing and hygiene interventions, as discussed in Bhutta et al. (2008), ReCom's paper by Bhutta and Aleem (2013a), as well as in the section below.

The effectiveness of interventions characterized by education and training programmes, and/or improved sanitation, water supply, water quality, and hospital equipment is comparatively under-studied. For instance, a recent review of training programmes for health professionals to improve care of seriously ill newborns in LMICs identified only two studies for inclusion (Opiyo and English 2010).

Several studies on maternal survival and neo-natal survival have presented detailed descriptions of 'what works' to improve MNCH. According to these reviews, both maternal and neo-natal mortality can be reduced by strategies revolving around intra-partum care, skilled birth attendants or community health workers present during home deliveries, an immediately available supply of emergency care, ante-natal care, post-partum care, family planning, and safe abortion services (Darmstadt et al. 2005; Campbell and Graham 2006).

Evidence shows that the safest and most effective intra-partum care strategies are those where women give birth in a health facility with a team of skilled midwives and other attendants. However, essential to this strategy is the surveillance of labour as well as the recognition and management of lifethreatening complications, such as mal-presentations or other complications. Treatment should include all emergent obstetric procedures, and if necessary surgery at a referral level care facility (Nirupam and Yuster 1995). Skilled birth attendants, with appropriate training and materials for safe childbirth, present during normal routine deliveries at home have contributed to the low MMRs seen in developing countries (Koblinsky et al. 1999).

Despite of the existing evidence, further research in identifying and implementing effective non-clinical interventions against child mortality and morbidity beyond vaccines remains a necessity. Existing reviews on the effectiveness of non-clinical interventions against diseases in LMICs tend to focus on all age groups, rather than on children specifically (Esrey et al. 1985; Esrey et al. 1991; Fewtrell et al. 2005). Other reviews have focused on general populations, rather than those residing in LMICs (Rabie and Curtis 2006). More recently, a systematic review analysed policy interventions aimed at addressing diarrhoeal diseases and acute respiratory infections (Seguin and Niño-Zarazúa 2013). While focusing on policies that address hygiene and sanitation, water supply, water quality, and multiple interventions, they find the following.

# Hygiene and sanitation interventions

Sanitation interventions were those that provided some means of excreta disposal, usually latrines. For instance, Daniels et al. (1990) assessed the impact of latrine ownership on diarrhoeal morbidity. Hygiene interventions were those that included hygiene and health education as well as the encouragement of behaviours, such as handwashing. For instance, Ahmed et al. (1993) evaluate a community-based behavioural change intervention consisting of educational messages and household surveillance to improve hygiene practices in order to reduce childhood diarrhoea.

Other articles assess more extensive interventions. Sircar et al. (1987) evaluated the impact of a project which combined handwashing promotion and hygiene education along with the provision of soap (Sircar et al. 1987), while an intervention assessed by Han and Hlaing (1989) included the provision of soap and instructions for mothers and children to wash their hands after defecation, as well as before preparing and eating their three main meals per day. Similarly, Shahid et al. (1996) and Luby et al. (2004) assessed the impact of a handwashing initiative consisting of the provision of soap, along with regular surveillance and reinforcement of health messages of the benefits of handwashing.

Several studies combined handwashing promotion along with instructions regarding animal and child faeces. For instance, Haggerty et al. (1994) assessed an intervention in Zaire consisting of educational messages instructing the disposal of animal faeces, handwashing after defecation and before meal preparation, and disposal of children's faeces. A follow-up survey revealed an 11 per cent reduction in reported diarrhoea among children in the intervention group, compared to controls (Haggerty et al. 1994). Similarly, Stanton and Clemens (1987) observed a significant difference between control and intervention groups after implementation of a hygiene education programme. The rate of diarrhoea in children under the age of five was 4.3 versus 5.8 per 100 in the intervention group and control groups respectively, vielding a protective efficacy of 26 per cent.

#### Water supply interventions

Water supply interventions included the provision of a new or improved water supply, or improved distribution. Improved distribution included the installation of a hand pump or household connection to municipal water sources. One study assessed the impact of peri-urban access to a metropolitan sewerage system (Kolahi et al. 2009), while another described a water improvement intervention involving the installation of a piped water network (Tonglet et al. 1992).

Semenza et al. (1998) compared diarrhoeal incidence between a group who had access to a piped municipal water system to a group without access, further dividing the latter into a control and intervention group (Semenza et al. 1998). The intervention group received chlorination and safe water equipment. The diarrhoeal rates for children were as follows: 84.4 per 1,000 per month for those in households with piped water, 127.7 per 1,000 children per month in households without piped water and the intervention, and 42.2 per 1,000 children per month in children without piped water but received the intervention.

#### Water quality interventions

Water quality interventions were related to the provision of water treatment for the removal of microbial contaminants, either at the source or at the household level. Such interventions were frequently paired with the provision of improved water storage vessels. For instance, Graf et al. assessed an intervention aimed to improve water quality through solar disinfection (Graf et al. 2010), while others focused on the provision of safe water storage containers (Roberts et al. 2001), ceramic water filters and chlorine or other water disinfectants (Semenza et al. 1998; Reller et al. 2003; Sobsey et al. 2003; Clasen et al. 2004).

In particular, treating water with dilute chlorine solutions, based on either sodium or calcium hypochlorite, has been used as a method to improve the microbiologic quality of drinking water. Both compounds are inexpensive, easy to distribute and use, and effective against most bacterial and viral pathogens. When added to water in tightly covered containers, volatilization is minimal, and chlorine disinfectants provide residual protection for many hours to days. Indeed, evidence shows that the effect of point-of-use chlorine treatment on a reduction in the risk of child diarrhea is in the order of 30 per cent vis-à-vis other traditional practices (Arnold and Colford JR. 2007). However, it is important to point out that the large difference found between the impact of chlorine solutions on water quality (and child diarrhoea, reflects the much more complex and challenging task of addressing diarrhoeal diseases and underlining the fact that water quality is an insufficient surrogate for child health improvements in developing country contexts. Froozani et al. (1999) assessed an educational programme promoting breastfeeding among new mothers in Iran as a method of lessening the risk of infant ingestion of contaminated water. The mean number of days of diarrhoea among infants in the intervention group was significantly lower than in the control group (Froozani et al. 1999).

A recent systematic review found that interventions aimed to improve the microbial quality of drinking water were effective in reducing the occurrence of diarrhoea in children and also adults. Although substantial heterogeneity was found in the magnitude of the effects, the evidence for the effectiveness of water quality interventions was compelling. In fact, water quality interventions were effective in reducing diarrhoea even in the absence of improved water supplies and sanitation. In that perspective, household-based interventions seemed to be more effective than water source based interventions.

Surprisingly, the effectiveness of water quality was not found to be enhanced by combining the intervention with other common strategies for preventing diarrhoea.

#### Multiple interventions

Multiple interventions are those which introduced water supply, water quality, sanitation, and/or hygiene education elements to the study population (Azurin and Alvero 1974; Khan 1982; Aziz et al. 1990; Hoque et al. 1996; Quick et al. 1999; Nanan et al. 2003; Garrett et al. 2008). For instance, a Kenyan intervention assessed by Garrett et al. included chlorination, water storage vessels, sanitation education, and information on rainwater harvesting (Garrett et al. 2008). An intervention consisting of the provision of additional hand pumps, latrines, and hygiene education is assessed by Aziz et al. (1990) and followed-up by Hoque et al. (1996).

Rana (2009) assesses a combined sanitation, hygiene, education, and water supply intervention in Bangladesh. The intervention package included promotional activities for installation of sanitary latrines and tube wells, along with health education. The education component was particularly extensive, promoting the following behaviours: washing hands with soap, ash, or soil after defecation, washing hands with soap before eating and before serving food to the household members and children, using safe water for cooking, washing and bathing, keeping the surroundings of the households as well as kitchen, tube wells, and latrines tidy, constructing a platform for tube wells with solid materials, disposing of domestic waste, excreta of poultry and livestock in fixed place, and disposal of children faeces in sanitary latrine, and preserving foods with appropriate cover. A significant reduction in point prevalence of waterborne diseases (including diarrhoea, dysentery, jaundice, worm infections, and typhoid fever) among children under-five was observed following the intervention, from 22 to 13 per cent.

An intervention assessed by Quick et al. (1999) was almost as extensive, encompassing three elements: Point-of-use treatment of contaminated source water with disinfectant produced locally using appropriate technology, safe storage of treated water, and community education. Similarly, Luby et al. (2006) evaluated an intervention which consisted of four groups and a control. Households received diluted bleach and a water vessel; soap and handwashing promotion messages; flocculent-disinfectant water treatment and a water vessel; flocculent-disinfectant water treatment and soap as well as handwashing promotion; or no intervention. Overall, persons living in neighbourhoods that received any of the interventions had markedly less diarrhoea compared to persons living in control neighbourhoods.

Diarrhoea prevalence was consistently lower among infants and children aged from one to two years who lived in intervention neighbourhoods compared to control neighbourhoods. However, the magnitude of the reductions was less than the overall reduction and many of the individual age and intervention specific reductions were not statistically significant. Infants less than one year old in the 'bleach water treatment' experienced a diarrhoea prevalence of 8.3

per cent (20 per cent less than control); 'soap and handwashing promotion' a prevalence of 7.86 per cent (24 per cent less than control); 'flocculentdisinfectant water treatment' a prevalence of 6.20 per cent (40 per cent less than control); and 'flocculent-disinfectant plus soap' 6.48 per cent (38 per cent less than control). However, none of these differences are statistically significant and yield extremely large confidence intervals.

Alam et al. (1989) assessed the impact of a programme which introduced an augmented water supply through hand pumps, as well as health education for mothers to an intervention group. Results show that, in both areas, use of hand pump water for drinking and washing, removal of child's faeces from the yard, and maternal handwashing before handling food and after defecation of self and child, observed together, decreased yearly diarrhoea incidence in children by more than 40 per cent compared to children living in households where none or only one of these practices was observed.

Particularly extensive evaluations are provided by Bateman et al. (1995) and Lockwood et al. (2001). Bateman et al. (1995) measured the impact of two intervention models: First model was a more conventional model based on courtvard education sessions with the tube well caretakers, their spouses, and tube well users. The second—more innovative—model adds additional outreach activities: school programmes, child to child activities, and activities with key influencers in the community. Outreach methodologies varied by target group, but included group discussions, demonstrations, participatory action learning exercises, flash card displays, folk songs, role playing, a comic story session, and games.

Lockwood et al. (2001) evaluate the impact of the Nicaragua Rural Water Supply, Sanitation, and Environmental Health Programme. The programme took an integrated approach to improving health and addressed three key areas: 1) water supply and sanitation infrastructure: improving people's access to safe sources of drinking water (either community-based systems or household wells) and excreta disposal facilities (generally speaking, household latrines); 2) hygiene promotion: Promoting knowledge about hygiene and achieving sustainable changes in key high-risk behaviours to reduce the incidence of diarrhoea among the beneficiary population; and 3) enabling environment: Conducting capacity-building interventions to support project sustainability at community, institutional, and national levels.

# Do these policies work?

Overall, many interventions aimed at a reduction in diarrhoeal incidence among children aged approximately five and under demonstrated a reduced incidence of childhood diarrhoea (Khan 1982; Stanton and Clemens 1987; Daniels et al. 1990; Haggerty et al. 1994; Bateman et al. 1995; Shahid et al. 1996; Quick et al. 1999; Lockwood et al. 2001; Roberts et al. 2001; Nanan et al. 2003; Luby et al. 2004; Luby et al. 2006; Kolahi et al. 2009; Graf et al. 2010), ranging from 18.3 per cent (Graf et al. 2010) to 61 per cent (Shahid et al. 1996) and among children of various age categories in intervention compared to control groups. Luby et al. (2004) found that infants living in households that received handwashing promotion and plain soap had 39 per cent fewer days with diarrhoea versus infants living in control neighbourhoods. Severely malnourished children under-five years living in households that received handwashing promotion and plain soap had 42 per cent fewer days with diarrhoea versus severely malnourished children in the control group. Similar reductions in diarrhoea were observed among children living in households receiving anti-bacterial soap.

Studies which explored differences within their intervention groups or contained two intervention groups, add nuance to these findings (Azurin and Alvero 1974; Aziz et al. 1990; Bateman et al. 1995; Nanan et al. 2003). For instance, Azurin and Alvero found that the rate of incidence (measured by rate per 1,000) was markedly less in the intervention group which received both improved waste disposal and improved water supply (193 per 1,000) than intervention groups which received only improved water supply or only improved waste disposal (213.7 and 321.1 per 1,000, respectively), and a control group which received neither provision (542.2 per 1,000) (Azurin and Alvero 1974).

Within their intervention group, Nanan et al. found that boys had 25 per cent lower odds of having diarrhoea than girls. Further, a 2.6 per cent decrease was found in the odds of diarrhoea for every yearly increase in the mother's age and a 1.4 per cent decrease for every monthly increase in the child's age (Nanan et al. 2003). Daniels et al. (1990) found that children from households with a latrine may experience 24 per cent fewer episodes of diarrhoea than children from households without a latrine, and the impact of latrines was greater in households that used more water, practiced better personal hygiene, and where mothers had a higher level of education or worked outside the home.

Finally, Bateman et al. (1995) found that while caretaker sessions alone (Model 1) are worthwhile and have important benefits, Model 2 (with multiple channels of communication) was a better intervention. The dramatic differences between intervention and control areas, together with the smaller differences between the two intervention areas, suggest that the key elements of a successful hygiene behaviour change programme may be those that are similar in both models. The programme resulted in a two-third reduction of diarrhoea in the intervention areas versus control.

Aziz et al. (1990) found that the incidence rates within their intervention area were impacted by age and household proximity to shared community water hand pumps. Within the intervention area, rates of diarrhoea were reduced among all age groups except for the 0-5 months group, and diarrhoea incidence increased as distance from the household to the hand pump increased. A follow-up study approximately six years after the original revealed the point prevalence of diarrhoeal morbidity (diarrhoeal attacks in the previous 24 hours) was significantly lower among the population in the intervention area than that in the control area (Hoque et al. 1996). Children under the age of five living in the control area had a relative risk of diarrhoea of 2.25 compared to

those in the intervention area, but the difference was not statistically significant.

Tonglet et al. (1992) obtained a similar finding to Aziz et al. (1990) regarding diarrhoea incidence and hand pump proximity. Though children living in villages with a piped water source experienced a significantly reduced incidence of diarrhoea compared to children in a control village, children in intervention villages who lived less than a five minute walk from the water source, and those in households which used more than 50 litres of water per day, experienced half the incidence of diarrhoea than that experienced by other children in the intervention village (Tonglet et al. 1992). These findings demonstrate the impact of relative accessibility within communities with improved water supply facilities.

A number of studies found no evidence of improved outcomes resulting from an intervention. For instance, Jensen et al. (2003) found that the incidence of diarrhoea among children in their intervention village (which received water through a chlorinated water supply scheme) did not differ statistically from a neighbouring village where most children used water from a non-chlorinated water supply. Though children in intervention areas experienced a reduced incidence of diarrhoea than those in the control area, this difference was not statistically significant in Luby et al. (2006). In their intervention which corralled free-range chickens, Oberhelman et al. (2006) found a higher rate of diarrhoea in children in their intervention than control group.

Mixed findings were obtained by Reller et al. (2003), who found that their intervention group which received a disinfectant for drinking water plus a storage vessel was the only group to experience a significant decline in diarrhoeal episodes among children aged one or younger. Other intervention groups, including those who received water disinfectant only, bleach only, or bleach plus a storage vessel did not experience a significant reduction of diarrhoeal episodes among children compared to the control group (Reller et al. 2003). However, these findings are of questionable validity due to low compliance among the intervention groups. The evaluation of a hygiene education intervention also yielded ambiguous results regarding incidence of diarrhoea (Ahmed et al. 1993). Despite children in the intervention group experienced fewer episodes of diarrhoea than their control-group counterparts during the wet season in Bangladesh, rates were similar before and after the wet season. Moreover, significant differences between the control and intervention areas at baseline, along with a lack of significance testing, weaken the validity of these results.

Several studies obtained divergent findings based on age. In their assessment of a multi-faceted intervention, Quick et al. (1999) found that infants aged less than one year experienced a 53 per cent reduction in diarrhoeal episodes than their control group counterparts, yet no significant effect was observed for children aged one through four years (Quick et al. 1999). Diarrhoea incidence was reduced 61 per cent among those aged 0-11 months, 47 per cent among those aged 12-23 months, and 56 per cent among those aged 24-59 months in

an intervention involving handwashing promotion and education assessed by Shahid et al. (1996).

Other studies found protective effects for older children, yet not for younger children. In their evaluation of an intervention which promoted handwashing through the provision of soap and education, Sircar et al. (1987) observed no difference in the rates of diarrhoea or dysentery among those younger than five-years of age. However, rates of dysentery were lower in the intervention group among those aged five and older. Han and Hlaing (1989) found that their intervention (which instructed mothers and children to wash their hands after defecation and before handling and eating their three main meals per day) had differing impacts according to age and diarrhoea type. The intervention resulted in a 40 per cent reduction in dysentery among children younger than two years old. However, there was no impact on dysentery rates among older children. The intervention had a more consistent impact in reducing diarrhoeal rates, yielding a 30 per cent reduction of diarrhoeal incidence among 0-4 year olds, 31 per cent among those younger than two, and 33 per cent among those aged two or older. Disparate findings were also obtained by Luby et al. (2006), who found that their multi-faceted intervention had a much greater impact among the 5-15 year-old age group than among young children and infants.

# Acute respiratory infections

Interventions featured in the studies primary focused on the effectiveness of education and training programmes, with the exception of one study which assessed the outcome of the implementation of hospital equipment.

The first set of studies assessed the impact of training and educational programmes on childhood respiratory infections. Three of these focused on the impact of training programmes for health workers on childhood mortality due to pneumonia. Bang et al. (1994) observed a 44 per cent decline in the neo-natal mortality rate due to pneumonia following the implementation of a training programme for paramedical workers, village health workers, and traditional birth attendants. Similarly, a training programme implemented by Pandey et al. (1991) led to a 28 per cent reduction in the risk of death from all causes by the third year of implementation. Reductions were observed not only in deaths due to pneumonia, but also in diarrhoea and measles.

Lye et al. (1996) implemented a training programme targeting mothers of children under the age of five in addition to health staff. The reduction in the incidence of severe acute respiratory infection cases over a 62 week period in the intervention area was significantly greater than in the control area. In a similar vein, Mtango and Neuvians (1986) implemented a health service outreach programme featuring regular home visits by health workers aimed at educating mothers and providing treatment to sick children. Within a two-year period the total under-five mortality was reduced by 27.2 per cent from 40.1 to 29.2 per 1,000 children. The disease-specific mortality rate for pneumonia was reduced by 30.1 per cent from 14.3 to 10.0 per 1,000 children per year, contributing 40 per cent to the overall mortality reduction.

Similar to Lye (1996), an intervention evaluated by Khan et al. (1990) contained maternal education and health worker training components. The latter intervention consisted of active case-finding and maternal health education. Specifically, community-based health workers were trained to recognize signs, such as increased respiratory rate and the presence of chest retractions, to detect pneumonia requiring treatment with antibiotics at home or referral to hospital. The programme also included efforts to educate mothers to recognize pneumonia and to provide appropriate supportive measures, and emphasized the importance of timely immunization and good nutrition. After the programme was implemented, the Acute Lower Respiratory Infection (ALRI)-specific mortality rate among children under-five years old in 31 intervention villages was 6.3 deaths per 1,000 children per year, compared with 14.4 in seven control villages, a difference of 56 per cent. Within one year of the interventions being extended to the control villages, the ALRI specific mortality rate in these villages dropped by 55 per cent to 6.5 per 1,000 children per year (Khan et al. 1990).

Fauveau et al. (1992) report on the impact of two successive interventions, the first consisting of a community-based family planning and health services project, and the second consisting of case detection and management by community health workers, backed by medical support. During the first phase (1986-87), the ALRI U5MR was 28 per cent lower in the intervention than in the comparison area. During the second phase (1988-89), the ALRI-specific mortality rate among under-five year olds was 48 per cent lower in the intervention than in the comparison area. The ALRI-mortality rate was 32 per cent lower in the intervention area than during the preceding phase, while there was no significant difference for the comparison area.

Duke et al. (2008) measured the impact of the introduction of oxygen concentrators and pulse oximeters in hospitals on morbidity of children with pneumonia. The case fatality rate of the pre-intervention group was 4.97 per cent compared to the post-intervention group rate of 3.22 per cent. The risk of death for a child with pneumonia was 35 per cent lower than was before the equipment was implemented. Assessment of programmes aimed to reduce respiratory infections reveals the value of training programmes for health staff and mothers. The provision of necessary hospital equipment to treat pneumonia is also shown to be effective in reducing child deaths due to pneumonia (for a synthesis of policies, see TABLES A4.4 and A4.6 in Appendix 4).

Besides these supply-side considerations, concerns about the quality of services of drug shops are widespread across developing countries. Policies designed to improve the quality of these services have been analysed in the SSA context (Wafula and Goodman 2010). Evidence suggests that knowledge and practices of drug shops staff can be improved through education to provide counseling and advisory of patients. There were observed problems with task shifting in for example Uganda, where education improved attendants' choice of treatment for severe acute respiratory infections in Ugandan children, but

inadvertently resulted in more shops opting to treat rather than refer the severely ill children.

# 4.2.3 What works to improve the quality and efficacy of health systems?

Attracting and keeping well-trained health workers, particularly in remote and rural areas where good quality health services are often desperately needed, remains a challenge. Evaluating policy strategies to increase attraction and retention of health workers is in that context critical. In a recent review study, Dolea, Stormonta, and Braicheta (2010) found that certain competencies of health workers improved as a result of retention policies while improved job satisfaction was reported in five evaluations of retention strategies. The effects of rural retention policies on service delivery and communities, in terms of improved quality of care, reduced referrals and reduced waiting times was important. Most of the interventions had multiple effects on the continuum from attraction through to recruitment, retention and, finally, health workforce or health systems performance.

Developing countries, often with support of donors, have tried to implement numerous types of policy strategies to improve the quality of health services. Contracting out primary healthcare services has been one this policy strategies. While national governments are usually the purchasers of services, the service providers can vary from national NGOs, international NGOs (like in the case of Cambodia with support of foreign aid), or individual private providers (like in the case of South Africa). The scales of operations vary widely in terms of the targeted population, ranging from e.g. 15 million individuals in the case of the rural Bangladesh Integrated Nutrition Project (BINP) to 54,000 individuals in the case of India's Child Treatment Programme.

Liu et al. (2008) examined the effectiveness of contracting out of primary healthcare services and its impact on both programme and health systems performance in LMICs. They found that contracting out projects are more likely to improve quality of care if the following considerations are met: first, that quality is operationally defined and indicators associated with quality are well developed; second, that quality indicators are linked to the payment to providers; and third, that the quality indicators (e.g. health outcomes) have an established association with utilization of contracted services.

However, the study finds it difficult to ascertain whether contracting out improves quality of care compared with direct public provision, as quality has been either undefined or inconsistently defined across different contracting out projects, and because most evaluations do not include control groups. For the few studies with a control group, the number of cases (or providers) was too small to produce reliable results. Another study (Bloom et al. 2006) found that contracting out did not significantly affect the utilization of non-targeted healthcare services, after controlling for other factors, which appear to be an indication that contracting out does not harm health systems' performance with respect to access to non-focal services.

Similarly, Lagarde and Palmer (2009) examine the impact of contracting out on health outcomes and use of health services in LMICs. They concluded that contracting out services may increase access and utilization of health services in underserved areas for poorer population groups, although the evidence base was too weak. It was unclear what particular action(s) implemented by NGOs may have led to this effect. Overall, the literature supports the proposition that contracting out can improve access to health services, particularly where the public sector is absent or too weak, as in the case of post-conflict environments.

On a related issue, Berendes et al. (2011) examined 80 studies in LMICs to address the question of how the private health service providers perform vis-àvis the public health sector. They found that in general, private health sector performed better on several aspects of service delivery. Clinical practice performed much better in the for-profit sector than the non-profit, although most of the evidence arrived from a few for-profit cases.

Health voucher programmes have been used with the aim of increasing the utilization and quality of health services among underserved and high risk population sub-groups in developing countries. In analysing the impact of these policy instruments, Meyer et al. (2011) find a modest evidence that voucher programmes effectively target he targeted populations, and that they improve the quality of health services. They also find insufficient evidence to determine whether voucher programmes deliver health goods and services more efficiently than competing health financing strategies, although based on 13 programmes, they do find robust evidence of an increase in the utilization of health services. Most of these conclusions are, needless to say, inconclusive given the limited number of voucher programmes that have been analysed in a developing country context (see TABLE 3).

Do health voucher programs work?

Outcome Category	# of Programmes	# of Studies	# of Outcomes	% with Effect	% Effect Positive	Impact evidence
Targeting	4	6	9	88	87	Modest
Efficiency	1	1	1	100	100	Insufficient
Utilization	13	16	30	83	96	Robust
Quality	3	6	13	62	100	Modest
Health impact	6	6	11	45	100	no effect

Source: Meyer et al. (2011).

From a policy perspective, several factors were found to be undermining the quality of public sector health services including resource constraints; low salaries; high workload; poor incentives and conditions of service; the lack of a family and general practice system that could enable patients to return to the doctor(s) of their choice and develop relationships of trust over longer periods of time; public sector drugs being sold privately; staff favouring particular patients; and clients lacking sufficient information about the appropriate use of drugs, resistance to antibiotics, costs, and their rights to challenge poor service.

Nevertheless, not everything did work better in the private sector. In fact, technical quality was equally bad at the private as well as the public health clinics. Indeed, a number of policy innovations have been developed to address these technical failures although the information available is limited on the extent to which these interventions have successfully expanded access to quality health services for poor and disadvantaged groups (see Box 4).

The efficacy of health systems in developing country contexts is partly contingent on the extent of integration of targeted health programmes to the poor and vulnerable into critical health system functions. Clearly, contextual factors play a critical role in that process. Recent studies (e.g. Atun et al. 2010) find that the degree of integration varies significantly across interventions and health dimensions. For instance, five out of the 23 reviewed policies were fully integrated in terms of stewardship and governance, four in terms of service delivery, three interventions were fully integrated in terms of financing and monitoring and evaluation (M&E), whereas only two in terms of planning. The study also shows that integration in one dimension is associated with integration in other dimensions, although the degree of integration is highly heterogeneous. Cameroon provides a good example of well integrated policies against schistosomiasis whereas Sri Lanka and India provide good examples of well integrated policies against leprosy. In contrast, Sierra Leone, India, and Macedonia provide examples of very poorly integrated health policies in the area of immunization. Evidence suggests that changes in the nature of the problem (e.g. the epidemiology), and context (e.g. socio-economic development and government commitment) influence the extent of integration.

Other policy actions have aimed, and been experimented, to address barriers to change ineffective professional practices under various socio-economic and political environments. Such barriers seem to vary depending on healthcare settings, groups of healthcare professionals or clinical tasks. Baker et al (2010) examined 26 policies designed to overcome identified barriers to change. They found that tailored interventions can indeed change professional practice, although their effect is modest and highly heterogeneous. The study does not reveal whether tailored interventions are more effective than other more conventional approaches that have proved to be effective, such as audit with feedback or educational outreach. Therefore, it may be reasonable to employ low-cost tailored interventions, although a cost-effectiveness analysis of alternative methods of tailoring would be required before implementing tailored approaches.

# Box 4: Does the quality of health services to the poor actually improve with private sector providers?

Among 14 interventions in the area of social marketing, vouchers, and pre-packaging of drugs, only one (the distribution of ITNs in Tanzania) reported to have reached out to the poor.

One intervention in the area of training of private health practitioners in Pakistan did evaluate its outreach among the poor.

The effectiveness of franchising has been analysed in the context of Pakistan, Ethiopia, and Bihar. The 'Green Star' and 'Green Key' franchises implemented in Pakistan were jointly evaluated. Results found that clients attending franchised private services were significantly more likely to report that they would return than those attending nonfranchised services in Pakistan and significantly less likely in Ethiopia, with no statistically significant difference in Bihar. In all three settings, there was no statistically significant difference between the franchise status of the clinic and perceptions of quality. In the particular case of Pakistan, the poor appeared not to have benefited from franchising, whereas the evidence from the two countries was mixed.

Client satisfaction with quality of care was examined in the context private providers in Nepal. Evidence showed an increase in clients' satisfaction from 37-65 per cent with respect to cleanliness; 35-62 per cent with respect to the availability of essential equipment; 40-71 per cent with respect to the range of services offered in intervention clinics, and 38-72 per cent with respect to privacy.

Contracting out of district hospitals to private-for-profit management has been assessed in the context of rural South Africa. The quality of care provided by three contracted hospitals was compared with that of three, paired public hospitals. In this particular case, public hospitals had better structural quality of care although contracted private hospitals had better quality of nursing care in maternity and medical as well as surgical wards than public hospitals, similar nursing management quality, and overall, higher total nursing quality. No statistically significant differences in perinatal and maternal mortality rates were found between contracted and public hospitals.

In fact, general practitioners have for long been contracted on a part-time basis to provide primary care in rural towns in South Africa. An analysis of the quality of care showed that patients with hypertension were less likely to have their blood pressure recorded when they sought care at contracted private practices than at public health facilities. Primary care services, drugs, laboratory tests, and X-rays were provided in Lesotho to workers of a construction company and to local communities through a contract with a commercial medical company. Overall, structural quality was similar between contracted and public providers. However, 37 per cent of cases of STIs were treated correctly by contracted providers compared with 59 and 96 per cent of cases treated in 'large' and 'small' public health facilities, respectively.

Source: Patouillard et al. (2007).

From a more political perspective, some policy incentives, such as performance-based payments (PBPs), have recently proposed with the aim of solving the principal-agent problem under certain conditions, <sup>17</sup> while potentially achieving specific health targets in low-income countries and fragile states. These policy incentives appear to work best when adequate M&E systems of service delivery are in place (Eldridge and Palmer 2009). However, many developing countries do not have the capacity to perform such tasks, and donors may have to resort to extra layers of bureaucracy to ensure that PBPs are properly implemented. Furthermore, there have been concerns that the use of PBPs in areas where it is inappropriate could discourage social sector providers from working in the most deprived areas. The focus on specific performance targets encouraged by PBPs may actually have unintended consequences, as more easily quantifiable measures of performance may often dominate over measures of quality of performance.

Demand considerations tend to drive public health policy choices and therefore there are areas which have been consequently received much less attention. This is the case of neglected tropical diseases (NTDs), which are a diverse group of 17 diseases that affect more than one billion people worldwide, especially among populations living in tropical and subtropical climates, often in remote and marginalized communities of LLMICs. They cause life-long disability, suffering, poverty and exclusion. NTDs are medically diverse, but they share features that make them persist in conditions of poverty, where they frequently overlap and cluster geographically. In a ReCom study, Quattri and Niño-Zarazúa (forthcoming) examine clinical and nonclinical interventions to tackle NTDs. They underline the importance of integrating clinical and non-clinical interventions, promoting community-based environmental management, especially involving women, and co-ordinating the actions of central and local governments and donor and non-governmental partners to create awareness on availability of quality care and prevention methods. The study highlights the importance of tailoring policy design to specific rural and urban settings, as the availability of infrastructure is as much important as health education campaigns, in order to achieve and sustain desirable levels of environmental hygiene.

In the following section, aid-supported policy strategies for improving the quality of education in developing countries are discussed, with a view of examining three channels through which quality objectives are promoted. These involve, respectively, supply-side capability interventions; behavioural incentives; and participation-related policies.

#### 4.2.4 What has worked in education aid?

In the area of education, donor agencies worked on various policy strategies aimed at improving the accessibility to and quality of service delivery. Education policy has long been recognized for its intrinsic values and instrumental qualities. In this section, special attention is paid to policy innovations aimed to improve the quality of education policy.

Policies subject to analysis and debate in the area of aid to education include school and class size, school choice, school privatization, tracking, teacher education and certification, teacher pay, teaching methods, curricular content, graduation requirements, school infrastructure investment, etc. There are a variety of interlinked factors or channels through which aid policy impact educational outcomes. It is therefore important to disentangle the short-term from the medium- and long-term objectives in a stepwise manner. Such factor breakdown allows improved targeting and evaluation of policy interventions.

A recent study (Petrosino et al. 2012) analysed five different types of policies aimed to improve primary and secondary school enrolment in developing countries: 1) economic; 2) educational programmes and practices; 3) healthcare and nutrition; 4) new schools and infrastructure; and 5) provision of information and training. The largest effects were found for new schools and infrastructure and the smallest for the provision of information and training as well as educational programmes and practices. Based on the results, supply related policies appear to be the most effective ones to increase enrolment in primary and secondary education. Nevertheless, it is important to point out here that an increasing enrolment does not guarantee in any way improvements in education quality.

In a recent ReCom study, Masino and Niño-Zarazúa (forthcoming-b) identified three main channels in the context of developing countries' education policies which target education achievement and quality. These involve, respectively, supply-side capability interventions, demand-side factors, and participation-related factors (see FIGURE 12).

Intervention Short-term outcome Long-term outcome Drivers of change Learning schemes and teacher-pupil Improvements ratio Creation of in education supply-side quality and capabilities learning Schooling material effectiveness and infrastructure Teacher incentives Opportunity (supply side) cost reduction Creation of and creation Higher student be havioural of demand for Student or local achievement and test incent ive (improved) score gains community education incentives (demand side) Awareness creation Community and increased Stimulation involve ment participation of and improved education community participation Improved. management management practices

FIGURE 12 Channels through which aid policy impact educational outcomes

Source: Masino and Niño-Zarazúa (forthcoming-b).

#### Supply-side capability interventions

Supply-side capability interventions attempt to raise student achievement via resource provision, thus effectively targeting infrastructural or organizational deficiencies. A number of policies aim at providing and/or integrating schooling and teaching resources in an attempt to improve educational quality. Outcomes vary from more to less successful ones, but, overall, the evidence suggests that it is not sufficient to limit the policy scope to the provision of supply-side capabilities. It appears that the absence of key demand-side inputs often undermines the effectiveness of supply-side interventions. In particular, this is the case for interventions providing material inputs while overlooking contextual and social elements of the local background.

In fact, some of these interventions resulted in exclusion errors, typically of the weakest students (e.g. Paqueo and Lopez-Acevedo 2003; and Glewwe et al. 2009). More specifically, the Mexican compensatory programme (PARE) analysed by Paqueo and Lopez-Acevedo (2003) aimed to reduce inequality in the schools of the four poorest Mexican states by providing them with financial resources. However, the top down targeting mechanism failed to reach the poorest students. Similarly, the textbook distribution intervention reported in Glewwe et al. (2009) only increased the performance of the strongest students due to the fact that the weaker students could not properly understand books written in English.

Other interventions failed to produce significant gains in students' achievement because other key complementary education resources were needed before the inputs, such as flip-charts, could result in a relevant improvement of exam performance (Glewwe et al. 2004). Another example is the study by Asadullah (2005), who found secondary school test scores not to be affected by smaller class size in Bangladesh. The author attributed such result to the lack of complementary infrastructure and teaching quality improvements. Along the same lines, Muralidharan and Sundararaman (2010) reported that a teacher-aid tool, such as exam performance diagnostics, started producing positive effects only after it was complemented by a pay-incentive scheme, which tied teachers' rewards to improved students' scores.

Nonetheless, a group of policies did succeed in raisin exam scores. For example, a governmental programme (PACES) implemented in 1999 by the city of Bogota, Colombia, involved the allocation of public funds to private schools in order to allow low-income students to receive better quality education in these institutions. The programme is reported to have achieved improved students' exam performance (Barrera-Osorio 2007). However, a different evaluation suffered from implementation shortcomings (Barrera-Osorio and Linden 2009). In fact, the intervention aimed to integrate computers in language teaching, but the actual average test score gains were very small because the computers were only successfully integrated in IT training classes.

The PACE-A intervention, involving the construction of village-based community schools in rural north-western Afghanistan, also produced a very remarkable and sizable effect on both boys' and girls' test scores (Burde and Linden 2012). The main channel via which this effect is thought to take place is by reducing distance and travelling times to the traditional public schools, which are usually located further away and cater for a much bigger community. Some additional encouraging evidence comes from Kenya, where school meals and uniforms provision both increased students' exam performance (Vermeersch and Kremer 2004).

Vermeersch and Kremer (2004) specify, however, that the gains brought about by school meals provision in pre-primary schools is mainly due to increased attendance rather than as a result of cognitive abilities improvement due to nutritional intake. Another recent study found that extra contract teachers increased test scores only for those students that were assigned to the new teachers (Duflo et al. 2012b). The authors explain that contract teachers often put more effort in their teaching than permanent teachers in order to get their contract confirmed. Nevertheless, the reduced class size that followed the hiring of extra teachers did not have any additional effect on exam performance per se. This result complements that of Asadullah (2005), mentioned above.

Substantial research has actually considered the impact of cutting class sizes on skills acquisition. Considerably less attention has been given to the extent to which peer effects, which refer to class composition, also may affect outcomes. Jones (2013) uses new score data from East Africa for over 250,000 children, to look at these concerns. His results indicate a considerable negative effect on learning due to larger class sizes and larger numbers of overage-for-grade peers. The latter is found to be driven by the highly prevalent practices of grade repetition and academic redshirting, which could be considered as an important target for education policy reforms.

A number of studies have recently been conducted to assess whether teaching quality could be enhanced through compensatory or 'remedial' education, or through new teaching methods, such as flashcard and computer assisted learning. The outcome of such programmes is generally positive, with gains in both math and language test scores. Something which emerged in more than one study is that, when the intervention substitutes for teachers, its efficacy is lower than when it complements teachers' input (Linden 2008; He et al. 2009). Moreover, both Banerjee et al. (2007) and He et al. (2008), find that teacher-delivered interventions generate gains even in the weakest students. Instead, the self-paced computer assisted learning in He et al. (2008) helped strongest students the most. Another study (Muralidharan and Sundararaman 2011) finds that, although providing schooling material is successful at raising student performance, extra teachers' support proves to be more effective in it.

#### Behavioural incentive innovations

Policies aimed at altering household- and individual-level behaviours have been extensively implemented in secondary school settings. This reflects the different targeting mechanism that aims to induce a shift in individual or household behaviour and preferences. Policy innovations, such as UCTs or

CCTs, school vouchers, scholarships and grants, have shown to reduce the opportunity cost faced by low-income students, thereby raising their set of education-related incentives. From a supply-side perspective, teacher payincentives or non-monetary rewards can induce them adjust their behaviour by discouraging absenteeism and rewarding increased teaching effort and effectiveness.

Much attention has been recently paid to the issue of conditionalities in the delivery of cash, conditional or unconditional, as an incentive to improve school outcomes. In a recent systematic review on how effective CCTs are to improve schooling outcomes vis-à-vis UCTs, Baird et al. (2013) find that CCTs increase the probability of a child being enrolled in school by 41 per cent whereas UCTs increase the odds by 23 per cent (see TABLE 4). So, while interventions with no conditions or conditions that are monitored have some effects on enrolment rates, programmes that are explicitly conditional, monitor compliance, and penalize non-compliance have substantively larger effects. The study found no significant differences between boys and girls in the effect on enrolment rates.

Unlike enrolment and attendance, the effect of CCTs on test scores was found to be small at best. There was, nonetheless a weak dominance in favour of CCTs vis-à-vis UCTs. When CCTs were controlled for the intensity in the conditionality, no effects were found in other design elements, such as transfer size, whether the transfer is given to a woman, whether it is given on a monthly, bi-monthly, quarterly, or annual basis.

Unobserved variation in other aspects in the design of these programmes account for the considerable variation in effect sizes. Nonetheless, the evidence suggests that both CCTs and UCTs are effective in improving school participation. A critical point arising from the study is that without complementing interventions, cash transfers are unlikely to improve learning substantively.

TABLE 4 Conditionality versus unconditionality in giving cash to improve schooling

	Impact	s on enrolmen	Impacts on Test scores			
	Odds of child being enrolled in school:	Statistically Significant?	# Effect Sizes*	SD Increase in Test Scores	Statistically Significant?	# Effect Sizes*
CCT vs. UCT						
Overall (vs. Control)	36% higher	Yes	35	0.06	Yes	8
UCT (vs. Control)	23% higher	Yes	8	0.04	No	3
CCT (vs. Control)	41% higher	Yes	27	0.08	No	5
CCT (vs. UCT)	15% higher	No	35	0.05	No	8

	Impacts on enrolment			Impacts on Test scores		
	Odds of child being enrolled in school:	Statistically Significant?	# Effect Sizes*	SD Increase in Test Scores	Statistically Significant?	# Effect Sizes*
Condition enforcement						
No Schooling Condition (vs. Control)	18% higher	Yes	6			
Some Schooling Condition (vs. Control)	25% higher	Yes	14			
Explicit Conditions (vs. Control)	60% higher	Yes	15			
Intensity of Condition	Increases by 7% for each unit increase in intensity of condition	Yes	35	Increase of 0.02 SD for each unit increase in intensity of conditions	No	8

Notes: Studies are considered to be statistically significant at the 95 per cent level or higher.

Source: Baird et al. (2013).

#### **Cross-over interventions**

There is a general consensus that the single most effective way to stem the flow of school-aged children into work is to extend and improve schooling quality, so that families have the incentives to invest in their children's education as the returns to schooling make it worthwhile for them to do so. This in return requires policies aimed at reducing the direct and indirect costs of schooling, expanding school access and improving school quality. Investment in early childhood and adult education is also relevant in this context.

In a review on the topic, Paruzzolo (2009) finds that the availability of basic services can affect the value of children's time and, consequently, household decisions concerning how this time is allocated between school and work. A lack of access to water networks, for example, can raise the value of children's time in non-schooling activities, as children are needed to undertake responsibility for water collection, or help cover the cost of purchasing water. In addition to its health and other social benefits, therefore, expanding access to basic services is an important strategy for getting children, particularly girls, into school and out of work.

Returns to education are an important determinant of human capital investment decisions. The decision to enter and to remain in school depends on the expected benefits. If chances of employment after graduation are low or transition from school to work is difficult and lengthy, it is likely that children, especially from poor households, will decide to leave school early and begin to work. Policies aimed at improving youth employment outcomes are likely to

reduce child labour and early drop out, although rigorous evaluations of these programmes remain scant to draw definitive conclusions.

Policies aiming at favouring household access to credit and financial markets and/or to relax the current budget constraint may also be relevant for that purpose. CCTs are relevant interventions as they ease the resource constraint of households and change the relative prices. CCTs have proved effective in increasing school attendance although further evidence on their effects on child labour is limited. Other policies in this area include loan schemes, microcredit, community based saving groups, improving accessibility of banking or other financial institutions.

Evidence also suggests that there are successful policies tools that cross over the supply-side capability of institutions, while providing incentives to change behaviours. Examples of this are the provision of public vouchers to lowincome students wishing to attend private education, which has been extensively implemented in a number of Latin American countries. The public voucher system works, on one hand, by providing the poorest students incentives and with the possibility to attend better quality education, and, on the other hand, by providing schools with the resources necessary to cover increased student enrolment.

Angrist et al. (2001) and Angrist et al. (2006) report a positive impact of the Colombian school voucher programme (PACES) implemented in secondary schools. The renewal of these grants is conditional upon students' satisfactory performance. Evidence suggests that the programme raised test scores both in the short term (Angrist et al. 2001) and in the longer term (Angrist et al. 2006). In Chile, a similar voucher programme was analysed by Contreras (2001); Hsieh and Urquiola (2003); and Anand et al. (2009). The evidence is controversial: While Contreras (2001) finds a positive impact of the scheme, Hsieh and Urquiola (2003) report a decrease in math test scores. Following the decision of some Chilean private schools to charge a fee on top of the government voucher, Anand et al. (2009) analysed the test score impact of granting low-income students scholarships to attend those schools. They found that, while students awarded with scholarships performed better than the ones in public schools, no difference existed between the performance of scholarship-funded students and that of students attending free private voucher schools.

#### School incentives to students

School incentives have proved to be successful in SSA, although with some caveats. On the one hand, the Kenyan merit-based scholarship programme, which awarded primary school girls with funds to progress to secondary school, was an all-round success and even generated spillover gains among boys (Kremer et al. 2009). On the other hand, a number of evaluations exposed some complexities that deserve further attention. For example, Nguyen (2008) found that a cheap and effective way of increasing test scores in Madagascar was to provide students and their parents with statistics on education returns. Provision of role models was, instead, only effective at

raising poor students' performance when the role model was herself from a poor background. Das et al. (2004) found in Zambia that test score gains were only produced by cash transfers which were unanticipated by households. This is because anticipated grants led to resource substitution and redistribution effects. In other words, resources were taken away from students who obtained the grant and were re-allocated to other uses. Another important finding is that of a study conducted among secondary school girls in Malawi, which found that CCTs were more effective than UCTs at raising test scores (Baird et al. 2010). This stresses the role of conditionality in improving the effectiveness of behavioural policy tools.

School feeding (or school meals) programmes are other forms of school incentives to students with wider effects outside the classroom. This is due to the fact that nutritional deficits remain one of the most important factors of poor health status and mortality rates across developing countries. International co-operation is justified in those conditions on the basis that early malnutrition and micronutrient deficiencies can adversely affect physical, mental, and social aspects of child health. Effects on physical health may include underweight, stunted growth, lowered immunity, and mortality. Early malnutrition and micronutrient deficiencies have been linked to poorer cognitive functioning and learning capacity (Leslie and Jamison 1990; Scrimshaw 1998; Worobey and Worobey 1999). Skipping breakfast can adversely affect cognitive development, and produced emotional benefits, notably among children who are at risk of malnutrition (Pollitt 1995).

Government-subsidized school meals have been often supported by foreign aid in a number of countries including India, Bangladesh, Brazil, Swaziland, and Jamaica (World Food Programme, 2002). Proponents of school meals claim that these programmes can increase both school retention and academic performance (Levinger 1986; Allen and Gillespie 2001). Local agricultural and community development are also seen as potential indirect beneficiaries of school meals via an increased demand for locally produced food (Sanchez et al. 2005). Although earlier studies provided valuable information on the school feeding programmes, they stopped short in proving precise information about the impact of these programmes.

More recently Kristjansson et al. (2006) investigated the effectiveness of school feeding programmes in improving learning and also physical and psychosocial health for disadvantaged pupils. In terms of school attendance in developing countries, the authors found a significant and positive impact of school breakfast in the order of 2.3 per cent. Similarly, breakfast had a significant positive effect on math scores, but no effect was found when looking at spelling achievement and reading. Regarding anthropometric measures, school meals resulted in an average weight gain between 0.39 and 0.71 kilograms, whereas in terms of height, the effect varied from 0.38 to 1.43 centimetres. The study also shows that special attention should be paid to ensure that micronutrients important for growth, physical health, and cognition, such as iodine, iron, zinc, vitamin B-12, and calcium, are provided. The amount and type of fat and cholesterol should also be taken into account given their role in structure and function of parts of the brain which continue to develop into

adolescence and influence cognitive outcome. A follow-up study (Du 2004), reported in Kristjansson et al. (2006), shows that most effects of feeding with milk disappeared three years after feeding stopped; this would suggest that school feeding should be continued throughout school years.

### **Deworming treatments**

Another intervention supported by foreign aid has been in the provision of deworming treatments. Single-dose oral therapies can reduce hookworm, roundworm, and schistosomiasis infections by 99 per cent (Butterworth et al. 1991; Nokes et al. 1992; Bennett and Guyatt 2000), and the WHO has endorsed mass school-based deworming programmes in areas with high helminth infections. Miguel and Kremer (2004) examine the impact of a school deworming programme in western Kenya, where the incidence of intestinal worms is very high. The deworming programme was implemented by Dutch Internationaal Chistelijk Steunfonds (ICS) Africa, in co-operation with a local District Ministry of Health office.

Miguel and Kremer (2004) found that child health and school participation improved not only for treated students but also for untreated students at treatment schools due to reduced disease transmission, which indicates the potential positive externalities arising from deworming programmes. All in all, the direct effect of the deworming programme led to a 7.5 per cent average increase in school attendance, which including the cross-school externalities, lead to an increase of 0.15 years of school per pupil treated.

Iron deficiency anaemia is one the world's most widespread health problems, affecting approximately 40 per cent of children in African and Asian settings (Hall et al. 2001). Bobonis et al. (2006) evaluated the impact of a project in the slums of Delhi, India, that distributed iron supplementation, deworming medicine, and vitamin A supplements to 2-6 year old preschool students. The intervention costed only US\$1.70 per child per year. The authors found a significant increase in preschool participation rates and a reduction in preschool absenteeism. Effects were especially pronounced among girls and children from poor socio-economic background. The study also found large weight gains within the first five months of the project. The social benefits arising from the health externalities alone were found to be large enough to justify not only aid support but also full subsidization.

Despite the positive results, a recent review (Taylor-Robinson et al. 2012) found that deworming programmes worked best when selective deworming was implemented among infected children, although the evidence of weight gain or increase in haemoglobin levels remained weak among 42 trials in 53 studies. Equally important was the finding that targeted deworming, i.e. providing one or multiple doses to all children in endemic areas, did not report significant effects on found effects on weight, haemoglobin, or cognition.

#### School incentives to teachers

Another sub-group of behaviour-based policy has aimed to provide incentives to teachers instead of students. An example is the pay-incentive tournament implemented in Chilean secondary schools. The scheme provided monetary incentives to teachers who improved the performance of secondary school students over the course of one year. However, Contreras and Rau (2009) find that the gains in test scores were only short-lived and likely to be the result of teachers' manipulations. In other words, teachers' goal was that of succeeding in the tournament, but did not translate in long-term content-based improvements of students' preparation. Similar evidence has emerged from a teacher pay-incentive programme introduced in a sample of Kenyan primary schools. In the Chilean case, it was found that the gains in test scores were the result of teachers' manipulations in order to secure the pay reward (Glewwe et al. 2010).

Three similar interventions that provided Indian teachers with pay-incentives offer positive evidence contrasts that described just above. In particular, Duflo et al. (2012a) found positive test score effects which were the result of both pay-incentives and increased monitoring. Kingdon and Teal (2007) found that pay-incentives raised test scores only in private schools, as a result of increased teacher effort. It seems that, because in Indian public schools teacher contracts are mostly permanent, pay-incentives did not lead to increased effort as a result. This suggests that additional elements, such as a sanction enforcement or contractual employment characteristic, may influence the effectiveness of teacher reward interventions. Finally, Muralidharan and Sundararaman (2011) found that both individual and group pay-incentives raised test scores, but the first were more effective.

#### Cross-over incentives

The study carried out by Behrman et al. (2012) implemented a three component intervention, where pay-incentives were given to students only, to teachers only, or to both as well as to schools' administrative staff. The first two treatments rewarded individual performance, while the third was designed to elicit collaboration via the rewarding of, not only individual, but also group performance. Thus such intervention aimed to intervene at the same time on multiple levels of the education system. In fact, the most effective treatment at raising students' scores proved to be the combined one. While the studentfocused one was also effective, though to a lower extent, the teacher payincentive scheme proved to be ineffective on its own. This intervention suffered from an implementation shortcoming related to extensive cheating on the part of students, which is a likely eventuality in the context of upper secondary education when the monetary rewards at stake are high. While the authors report cheating adjusted estimates to account for such bias, the likelihood and impact of such occurrences should be carefully evaluated by any study dealing with performance-related reward schemes.

# Early childhood interventions

In a recent review, Nores and Barnett (2010) investigate the impact of various design features of early childhood interventions, including cash transfers, nutritional, educational, and mixed policies on welfare outcomes, including cognition, behaviour, health, and schooling. They find that interventions which provide direct care or education are the most effective ones. The combination of education and nutritional assistance seems to be more powerful for improving child development over nutritional assistance alone. However, context matters. Low-income countries reported the smallest effects, particularly in health outcomes. This seems to suggest that the challenging socio-economic and political environments may prevent poor countries from improving welfare outcomes.

# Bottom-up and top-down school management reforms

A final type of intervention is involving bottom-up and top-down school management reforms. The former refers to interventions which, by diffusing knowledge among local communities, parent-teacher associations, or parent committees, raise awareness, and increase participation as well as involvement in the education system management. Successful examples are the EDUCO community involvement scheme evaluated by Jimenez and Sawada (1999) in El Salvador, or the PROHECO participation initiative, evaluated by Di Gropello and Marshall (2004) in Honduras. Both interventions resulted in students' improved exam performance. This type of intervention may also be seen as partly crossing-over the behavioural incentive typology.

Top-down approaches to the rationalization of the education system management are instead governmental interventions, such as the Nicaraguan and Argentinian decentralization reforms described by King and Ozler (2005) and Galiani et al. (2008). Or the multi-level decentralization programme analysed by Lassibille et al. (2010) in Madagascar. Or the allocation of lowincome students to Chilean schools where the best management standards of practice are followed (Garcia Palomer and Paredes 2010). This type of interventions resembles more a supply-side intervention mechanism than a demand-led strategy. Similarly, in the case of management reforms, supply-side interventions lead to controversial outcomes. For example, test score gains produced by the Argentinian decentralization reform failed to reach the poorest students (Galiani et al. 2008). Formal autonomous status following the Nicaraguan decentralization reform does not explain increased test scores, only de facto autonomous management practices do (King and Ozler 2005). Lassibille et al. (2010) failed to uncover any significant impact of decentralization on exam scores in Madagascar. To the contrary, Garcia Palomer and Paredes (2010) found positive test score gains for the students allocated to better-managed schools.

# 4.2.5 Aid to social protection

Aid interventions in the social sectors have largely focused on the supply-side of the equation, aiming at facilitating an improved accessibility to public service provision. More recently, donors have turned their attention to the success stories of social protection programmes, large-scale non-contributory social transfer programmes that have emerged in middle-income countries since the late 1990s. 18 These transfer programmes have become a core component of poverty reduction strategies in these countries, reflecting a better understanding of the factors underpinning extreme deprivation, and the need of taking into consideration both supply- and demand-side constraints. The objectives, design, and institutionalization of these programmes differ, depending on their financial, administrative, and research capacity. Some are pure transfers, such as South Africa's Old Age and Disability Grant or its Child Support Grant. Others link transfers with basic service provision. Mexico's Oportunidades (previously known as Progresa) and Brazil's Bolsa Familia provide income transfers to poor households, on conditions that they regularly send their children to school and that household members attend health clinics. Other programmes offer transfers conditional on beneficiary households providing work in local infrastructure development or guarantee paid employment. Examples of these programmes are the National Rural Employment Guarantee Scheme (NREGS) in India and Ethiopia's Productive Safety Net Programme (PSNP). Finally, integrated anti-poverty programmes, such as Chile Solidario, combine transfers with a wide range of interventions in health, education, employment, income, registration, intra-household dynamics, and housing.

There are important differences between social transfer programmes in middle-income countries and those in low-income countries. On the whole, the former have greater financial, administrative, and research capacity to implement social protection to scale, and therefore, the role of aid in those countries has been marginal. In low-income countries, however, the extension of social protection has been driven by donor agencies and is characterized by precarious institutionalization and significant challenges in terms of domestic financial sustainability to bring them to national scale (Niño-Zarazúa et al. 2012).

The majority of existing programmes have been introduced in the last decade, and therefore, research on their impact and effectiveness is just beginning to provide a comprehensive knowledge base, but important knowledge gaps remain, in particular with regards to the longer-term effects. At this point it is not possible to establish with certainty the longer-term impacts of aidsupported social protection, at least in the context of developing countries. In developed countries, however, the role of social protection in improving wellbeing and facilitating economic and social transformation has been supported by a substantial body of evidence (see Atkinson 1995; Cornia and Danziger 1997).

The impact evaluation literature on transfer programmes has extensively focused on assessing the extent to which social transfer programmes achieve their explicit objectives. Where programmes have the objective of improving school attendance or facilitating asset accumulation, the effects are measured with relative precision. Less information is available on less direct effects—for example, the impact of social transfers on social inclusion and empowerment. Larger-scale programmes in middle-income countries have taken greater care in collecting evaluation data and commissioning relevant studies than has been the case among low-income countries. This imposes a bias in the literature towards middle-income countries, while limiting the discussion of the linkages between aid and social protection (Barrientos and Niño-Zarazúa 2010). For that reason, the focus here is on the projects that have relied largely on aid support.

In fragile states, social protection programmes are often a kaleidoscope of projects financed and implemented by a variety of donors, government agencies and NGOs. Such an environment does not foster a strong sense of ownership by beneficiaries, which weakens the likelihood of sustainability in the absence of donor interest or government commitment. DiCaprio (2011) has looked at this issue in the context of Cambodia by assessing whether the changed external environment might facilitate activism in other areas of social protection. She finds that building institutions that open political space for activism can be a successful strategy in states where governments are unable or unwilling to provide comprehensive social protection systems.

It is important to point out that outcomes from aid-supported transfer programmes reinforce each other. For example, improvements in nutrition as a direct result of income supplements will work to reinforce outcomes from schooling and health interventions. For simplicity, the discussion largely focuses on distinct outcomes, but it is important to keep in mind the complementarities across outcomes.

#### Nutritional and health outcomes

In terms of nutrition and health, social transfers, such as Ethiopia's PSNP, are found to have played an important role in combating seasonal malnutrition and income variability among poor households in low-income countries (Gilligan et al. 2009). In fact, the impacts of transfers on nutrition are especially significant in low-income countries and in rural areas. Participants in Bangladesh's Challenging the Frontiers of Poverty Reduction/Targeting the Ultra Poor programme reported a significant improvement in their overall calorie intake. At the baseline, 97 per cent of participants were reported to be malnourished. That percentage was reduced to 27 per cent after two years of participation in the programme (Rabbani et al. 2006).

A study on the Kalomo District Pilot Social Cash Transfer Scheme in Zambia finds that the nutritional status of the beneficiary population showed a marked improvement. The incidence of households living on one meal a day decreased from 19.3 per cent to 13.3 per cent. Food intake also appeared to have improved in terms of quality: the intake of fats, proteins, and vitamins increased (Ministry of Community Development and Social Services German Technical Cooperation 2006).

More specifically, impact studies of CCTs provide strong evidence of a positive impact on the use of health services, nutritional status, and health outcomes, assessed by anthropometric measurements and self-reported episodes of illness, respectively. As pointed out by Lagarde et al. (2009), it is hard to attribute positive effects to cash incentives specifically because other components may also contribute, although several studies provide evidence of positive impacts on the uptake of preventive services by children and pregnant women.

The good functioning of CCTs relies on different design features. First, in many countries, it has relied on efficient targeting mechanisms that reach and serve the poorest and most vulnerable. Another key element for the good functioning of CCTs is the capacity of the programme implementer to monitor whether the programme objectives and requirements are met. The size and timing of the monetary incentive is another key dimension of CCTs. Because they have been conceived as a social policy instrument, monetary incentives in Latin America have been calculated in relation to the poverty level. More recent programmes, however, have been designed to address the direct and indirect financial costs linked to accessing the healthcare services.

In addition to design features, the effectiveness of CCTs is also contingent on the adequate functioning of health systems, capable to address the potential increase in the demand for health services induced by CCTs. In fact, a number of programmes in Latin America also introduced some supply side interventions to strengthen the delivery of health services in intervention areas (Niño-Zarazúa 2011). Nevertheless, CCTs cannot address all the health constraints observed across developing countries. For example, even with important financial incentives, CCTs have been less successful in improving vaccination coverage (Lagarde et al. 2009). It is essential thus that donors and policy makers carefully analyse the various barriers to health services faced by poor and vulnerable. If supply-side barriers, such as lack of vaccines or drugs are responsible for ill health and a low uptake of services, CCTs are unlikely to provide a solution, or at least not the only one.

Evidence on improvements in nutrition as a result of the introduction of transfer programmes appears to be strong across programmes and across countries. It confirms the direct link between income supplementation and food consumption among beneficiary households. Evidence is particularly clear and strong in terms of improvements in child nutrition, suggesting medium- and long-term effects in children's lifetime opportunities. Some transfers directly target improvements in healthcare access and utilization. Others affect healthcare indirectly, through the supplementation of household income and the associated improvements in household consumption. Most evidence, however, come from middle-income countries, where programmes are mainly funded by national governments, so establishing a link to foreign aid is unfeasible at this stage. Evidence on how effective the replicability of CCTs are under different conditions—particularly in more deprived settings—is still unclear because they depend on effective primary healthcare and mechanisms to disburse payments. Some impact assessments of pilot projects conducted in low-income countries may shed light into this issue.

#### Education

Many social transfer programmes directly target improvements in the schooling of children in beneficiary households. This is usually done through specific programme objectives, improvements in supply, and coresponsibilities. Similar effects can also be observed in pure transfer programmes in countries with reasonable levels of school infrastructure. Most programmes target school enrolment and attendance. As with nutrition, there is strong evidence across a range of programmes that school enrolment and attendance objectives are being met. The issue of whether these improvements are sufficient in themselves to improve future opportunities is harder to confirm at this point. Similar to healthcare, studies assessing the effectiveness of social transfers in education largely come from middle-income countries. They point at more significant impacts on secondary school enrolment and attendance than in primary school. Very few programmes supported by donor agencies have produced impact evidence.

In Bangladesh, for instance, the Food for Education programme is reported to have improved school enrolment among girls by about 44 per cent and among boys by 28 per cent, compared to children outside the programme. The programme also appeared to reduce school dropout rates: Only about six per cent of beneficiary children dropped out of school, compared to 15 per cent of non-beneficiary children (Ahmed and del Ninno 2002). The findings suggest that school enrolment and attendance improve significantly where they are explicit programme objectives. Some transfer programmes without an explicit focus on schooling, such as social pensions, can make progress on these dimensions in middle-income countries with reasonable service infrastructure. The extent to which these changes can be replicated in the context of lowincome countries, where deficits in public service provision are pervasive is, however, more difficult to confirm at present.

# 'What could work' better in the social sectors?

From a literature review on policies aim at improving quality of education, it is found that most programmes attempt to increase teacher satisfaction by providing them with monetary incentives which help teachers to be more satisfied with their income, but not necessarily with other aspects of their work that also could affect teacher performance. In general, there is a lack of initiatives aimed at raising teacher attendance by improving teachers' satisfaction with their work environment, workload, or opportunities for professional development. The design of programmes oriented to improve these factors would help to expand the scope of interventions, taking into account both pecuniary and non-pecuniary incentives to improve teacher attendance. The same applies to the way interventions tackle the determinants of teacher attendance at the school level. There is an emphasis on creating and

strengthening monitoring systems but other school-related variables relevant for teacher attendance are not necessarily considered.

In terms of capacity building, many studies have noted the slow progress in strengthening the planning and implementation capacity in the education sector in low-income countries. Rather than focusing on enhancing technical skills in the traditional manner, which is largely done through training abroad, resident external technical assistants, and equipment, new approaches must give attention to enhancing countries' institutional and organizational capacity to mobilize, utilize, and retain existing skills; better integrated education sector planning with other sectors, including industry, and broadening the capacity building to cover areas, such as enhancing equity, student performance, and teacher accountability. Clearly, success in implementing this type of reform requires strong national political commitment and leadership. A key reason for the slow progress is the difficult political economy of institutional reforms, especially in stagnant economies with weak governments.

Past experiences from middle-income countries has been catalytic for the question of what could work in other developing country contexts. The involvement of the private sector in social policy design can be crucial to improve efficiency and long-term sustainability of social sector policies. The case of Mexico's Oportunidades programme, and the introduction of an electronic payment system, with the involvement of non-banking and microfinance institutions, offers important lessons. Masino and Niño-Zarazúa (forthcoming-a) find that the switch from cash payment to electronic payment delivered via a savings account have implications in terms of transaction costs, time allocation, as well as behavioural attitudes towards savings and financial innovation. They find that participation in informal saving groups was reduced; that the frequency of remittance reception increased as a result of lower transaction costs, and that, when hit by idiosyncratic shocks, beneficiaries of bank accounts were more likely to cope by using savings rather than by contracting loans or reducing household consumption. The study also reveals impact heterogeneity between rural and urban household beneficiaries, with important implications for policy and replicability of similar innovations in other developing country contexts.

In the area of healthcare policy, and looking more specifically at strategies that aim to improve the quality of service provision, studies have found that contracting out has the potential of improving equity in access to primary healthcare if the poor and the services that mostly benefit the poor are well targeted by the contracting out initiatives. This, however, does not imply that contracted private providers perform better than public provider. As pointed out by Liu et al. (2008), and in Section 4.2.3, although contracting out health services to private providers has the potential to lower production costs for similar services, it is unclear whether contracting lowers the overall cost of health service delivery, including costs to the purchaser for contract management and M&E. In fact, it has also not been possible to demonstrate that contracting out increases the efficiency of the overall health system.

# The challenge of scaling-up social sector policy

Aid projects aimed at strengthening the supply-side of public service provision have made progress towards a more holistic approach in the way aid integrates inputs from service providers, with less dependency on external consultants as it happened in the past. The shift towards broader approaches to aid delivery reflects limitations with the project aid approach in terms of achieving wider impacts, political ownership and financial sustainability. While the potential benefits of policy innovations may be readily apparent, the process of successfully introducing these innovations on a much larger scale involves an altogether different set of challenges—mainly political, financial, and institutional—that pilot projects by their very nature cannot adequately address. At the heart of these challenges lies the issue of *scalability*.

Donors have begun to adopt budget support, SWAps, and other aid modalities in the social sectors for aid delivery. These approaches places great responsibility on the capacity of recipient government systems and, therefore, whilst the potential benefits of wider aid approaches are greater than those accruing from conventional project-based support, the associated risks may also be greater. The reliance on high levels of institutional capacity and commitment may involve strengthening existing capacity at many different levels. This focus on the system as a whole may have the effect of delaying impacts on beneficiaries but if successful, have a more lasting effect than the short term window offered by project aid interventions. Budget support and SWAps also present new challenges with respect to M&E. The task of identifying the impact of contributions from an individual donor becomes almost impossible and therefore donors must become content with systemwide monitoring systems and joint recognitions when drawing attribution effects of given policies.

However, at the present time, donor countries faced very few prospects of expanding wider approaches to aid delivery. There are technical and political considerations at play here for government commitments to sector policy change and to ownership of the agreed sector policy framework. The process of producing a sector policy framework from project aid initiatives takes time and cannot be easily accelerated. It requires donor co-ordination with governments to ensure that key areas within the sector receive adequate support. This requires a shift in aid management resources, and high levels of institutional capacity and political commitment to strengthening existing capacity at a number of levels. In addition, wider aid approaches demand attention from project administration towards negotiation of sector strategy and resource allocations, and a focus on the whole system that can delay impacts on beneficiaries. For all these reasons, wider aid modalities are still not feasible in many developing countries.

Several barriers, both financial and non-financial, have been encountered when trying to scale-up aid-funded health programmes (Hanson et al. 2003). A

review by Mangham and Hanson (2010) highlighted absorption capacity and health system needs as key constraints to scaling-up health interventions. Concerns regarding absorption capacity arise due to micromacroeconomic constraints countries face in using additional aid resources effectively. There are worries regarding the effect increased development assistance may have on the partner governments' ability to plan, manage, and budget these resources, and their impact on service delivery (De Renzio 2005; 2007; International Monetary Fund 2007). There are also concerns about diminishing returns of increased aid, although studies have shown that these levels of funding have not yet been reached (Bourguignon and Sundberg 2006; Feeny and McGillivray 2011). Non-financial barriers to scaling-up aid-funded health programmes can be encompassed as health system needs. These include the capacity of health workers and the appropriate policy and institutional framework that need to be in place for additional assistance to be used effectively (Mangham and Hanson 2010).

Two further concerns are quality and equity (Mangham and Hanson 2010). There are worries that scaling-up health services will decrease the quality of those services, particularly if health systems' needs for the scale-up are not in place. For this to be prevented, it is important that additional expenditure on health infrastructure is accompanied by increased recurrent spending to support the additional health sector supply. There is some evidence that this is happening, with the Global Fund funding the construction of facilities, training healthcare personnel, as well as improving the availability of medicines (Schwartlander et al. 2006; Yu et al. 2008). Moreover, there may exist a tradeoff between efficiency and equity when scaling-up health programmes. This is because it would take more resources to reach the poorest populations, as they are often hardest to reach, and therefore scale-ups that aim to reach as many people as possible may not reach these populations (Mangham and Hanson 2010). This has been found to be the case in two studies evaluating the affordable medicines facility for malaria initiative and the evaluation of the '3 by 5' initiative by the WHO.19 In both cases they found that although the interventions had achieved wider coverage, this tended to be focused on the upper quintiles with the poorer populations still experiencing the most acute shortages of medicines (Battistella Nemes et al. 2006; Cohen et al. 2010b).

Work undertaken by Hanson et al. (2003) identified five levels at which the above constraints can operate, and to which interventions to address them should be aimed. The first is at the level of the community and household, where the key constraints are lack of demand and use of interventions. The second is at the level of health services delivery, which includes health systems issues, such as the quantity and quality of human resources, availability of drugs and medical supplies, etc. The third level of constraints is at the level of health sector policy and strategic management, where constraints include lack of adequate policies and incentives and over-reliance on donor funding. The final level includes public policies cutting across sectors and environmental and contextual characteristics, such as governance and the overall policy framework.

Despite all of the above, many examples can be found in the literature of successful scale-up interventions (see TABLE 5 for review). A study of the scale-up of an adolescent and sexual health programme in Tanzania was reported to achieve high coverage. The authors associate the success of the scale-up with the structured nature of the process. However, they express concerns regarding the quality of the programmes and the need for increased supervision (Renju et al. 2011b). In a set of case studies carried out by Medlin et al. (2006), the authors found that country ownership, strong leadership and management, as well as realistic financing were all associated with effective scale-up of programmes. Similarly, three case studies conducted as part of the commission of macroeconomics and health in Chad, India, and Tanzania highlight the importance of addressing demand and supply issues by engaging with the community to integrate their needs and perceptions, and managing human resources and health infrastructure (Wyss K et al. 2003). They also highlight the need for clear objectives and information systems for monitoring progress, strong evidence-based technical design and innovative approaches to address constraints at the policy and management level (Rao Seshadri 2003), and the importance of sequencing and addressing policy and infrastructure constraints, often outside the health ministry (Munishi 2003).

Clinical interventions, such as immunization services, are one of the most costeffective ways of reducing child mortality, with implicit positive externalities attached to them. However, coverage rates of basic vaccines in developing countries are stagnating. While official policy recommendations are for all countries to reach at least 90 per cent coverage with the primary series of three doses of diphtheria-tetanus-pertussis (DTP) vaccine, about 20 per cent of the 165 countries with data have never achieved 80 per cent coverage, and 10 per cent of these countries have never achieved 50 per cent coverage.

A recent study (Pegurri et al. 2005) found that with one exception, all interventions in the area of immunization had a positive impact on the proportion of fully vaccinated children. The exception was a mass campaign when evaluated for longer than one year. This was associated with high resource requirements and a disproportionate attention given by donors and ministries, which appear to have disrupted the routine services and their longterm results. Thus, mass campaigns may be better used when local circumstances and health infrastructure do not allow high coverage to be achieved through routine services in, e.g., geographically isolated areas.

Pegurri et al. (2005) also found an insignificant difference in the performance of supply- and demand-side interventions. However, some of the supply strategies, such as assuring the availability of resources required to provide immunisation services—including vaccines, syringes, cold chain equipment, and transport, and the presence of managerial and technical skills were identified as requirements for prior stimulating demand.

TABLE 5 Successful scale-up aid interventions in the health sector

Study	Main findings
Steketee and Eisele (2009)	Review of Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and Malaria Indicator Surveys in African malaria-endemic countries in the time period of 2006—08. The study found great variation between levels of coverage of ITNs, treatment rates, and intermittent preventive treatment (IPTp). Furthermore, the authors found that 52 per cent of the countries studied had an equitable distribution of ITNs, 30 per cent of treatment coverage, and IPTp in pregnant women was higher in urban and richer households. This study shows that equitable scale-up of malaria programmes is possible, although only two countries achieved equity in all three areas, with distribution of mosquito nets achieving higher coverage levels. The study found that countries with higher coverage did not necessarily achieve higher levels of equity. Furthermore, they conclude that two factors are associated with higher equity: the policies and delivery strategy as well as the quality of delivery systems available.
Wolkon et al. (2010)	This study analyses the coverage of a campaign to scale-up ownership of ITNs by integrating ITN delivery with the vaccination campaign in six regions of Togo. The authors conducted community-based cross-sectional surveys one and nine months after the campaign to assess coverage, equity and use of ITNs. The study found that the intervention achieved high levels of coverage and equity, even nine months post-campaign. Despite high levels of coverage, however, the study found low levels of use of ITNs. The authors of this study conclude that integrated campaigns are an effective way to scale-up coverage, and therefore recommend this strategy to other countries. In addition, they reinforce the message that distributing ITNs free of cost was key in achieving high coverage.
Cohen et al. (2010a)	This study assesses the effectiveness of a pilot subsidy for artemisinin-based combination therapies (ACTs) used for malaria treatment in two districts of Tanzania. The study consisted of a baseline and four follow up surveys in the form of exit interviews over a period of 15 months. The results from the study indicate that although sales of ACTs increased substantially, there were significant geographical variations with shops closer to towns, main roads and accessibility of individuals of higher socio-economic status experiencing higher stocking and sales of ACTs. The study concludes that additional efforts are needed to achieve equity as this subsidy is scaled up across different countries.
Scott et al. (2005)	This study reports on the findings of a cross-sectional descriptive study on the availability and use of HIV programmes, as well as management and support structures in three districts of South Africa. The findings from the study reveal inequalities in service delivery between the richer, urban site and the poorer rural ones. The study concludes that the scale-up of HIV services is exacerbating inequalities in service delivery and calls for policy makers to take into consideration equity issues as these may lower the effectiveness of interventions.
Renju et al. (2011a)	This study reports on the scale-up of a school-based reproductive and sexual health programme in Tanzania. The study found that the 10-fold scale-up achieved a high coverage, which the authors attribute to the structured nature of the process. However, the authors express worries that this may have come at the cost of quality of the intervention. The study recommends higher levels of supervision and incentives to improve on this.

Study	Main findings
Medlin et al. (2006)	This series of 17 case studies found that country ownership, strong leadership and management, and realistic financing were all associated with effective scale-up of programmes.
Wyss et al. (2003)	This paper reports on an assessment of the barriers to scaling-up health interventions in Chad. It highlights the importance of addressing demand and supply issues by engaging with the community to integrate their needs and perceptions, and managing human resources and health infrastructure.
Seshadri (2003)	This study analyses the constraints faced by two Indian states when scaling-up health interventions. It finds that in order to be successfully scaled up, programmes need clear objectives and information systems for monitoring progress, strong evidence-based technical design and innovative approaches to address constraints at the policy and management level.
Schneider et al. (2010)	This study compares the operational and strategic management of the ART scale-up in three provincial governments in South Africa, which had achieved different levels of coverage. The findings of the study reveal that although similar approaches were adopted for chronic disease care amongst the three provinces, differences were observed on political and managerial leadership, programme design, M&E systems and the nature and extent of external support and partnerships. The paper concludes by highlighting the importance of the managerial process for successful scale-up of programmes.
Abuya et al. (2010)	This paper compares the scale-up processes of private medicine retailers in three districts in Kenya. It found that technical support and sufficient resources were essential for successful scale-up, although not enough. The paper found that an effective strategy for managing relationships and strong and transparent management systems are also needed.
Seymour (2004)	This study was part of a series of case studies demonstrating successful health programmes. It reports on the scale-up of TB Direct Observed Treatment services from 0 to 90 per cent in five years. The author credits the success of the scale-up with political commitment and the use of creative incentives.

Source: Martínez Álvarez and Acharya (2012).

Evidence shows a wide variation in average costs referring to the same type of interventions among and within socio-economic settings. Comparisons within countries appear to show that the average incremental costs of outreach teams are higher than the average incremental costs of mass campaigns, and that both are higher than the average total costs of routine services. It is therefore possible that the average incremental cost of an expansion of routine immunisation services would be even more favourable as some fixed costs may be excluded. However, all these conclusions would need to be tempered by estimates of the uncertainty around each cost. The strategies with the highest percentage increases in full coverage were community health workers and channelling, door-to-door canvassing, whereas the least costly policies were peer training and channelling. Nevertheless, the evidence so far limits the generalization of the findings (Pegurri et al. 2005). LMICs, which have made primary care a cornerstone of their health systems, have been successful in expanding coverage to a range of preventive and curative services.

Political commitment of incumbent governments and ownership of policy strategies are fundamental ingredients for the successful scalability of social policies. Taking primary care systems as example, irrespective of political system, a clearly defined vision of policy has often gone hand in hand with a strong commitment to access. This is particularly apparent in several wellstudied historic examples, including Cuba, Iran, Sri Lanka, and Kerala, India, where primary care expansion resulted in universal access to health care. Most of the health improvements in many of those countries have been unsurprisingly observed in primary care-sensitive mortality, particularly child mortality and mortality from infectious diseases (Kruk et al. 2010).

The discussions and actions surrounding the piloting and potential scaling-up of social protection programmes in SSA also offer important lessons in terms of the role of politics and political processes. The question of whether the emergence of social protection is a response to domestic dynamics or is driven by multi- and bi-laterals has been very much contested throughout the process. Whether these programmes constitute a short-lived donor fad or the beginning of social protection systems in SSA, is hard to discern at this point in time.

The Livingstone Process provides an indication of the potential for African governments to move ahead with a commitment to the extension of social protection.<sup>20</sup> Questions about the domestic ownership of the process, the role of donors, as well as financial and capacity constraints show that important challenges lie ahead. The fact that many of the new social protection initiatives are short-term pilots with limited scope, reach, and scale reflects the reluctance of political elites in Africa to embrace social protection policies (Hickey 2008). Nevertheless, it is clear that social protection has emerged as an important shift in social policy thinking, moving from the delivery of emergency humanitarian relief towards regular and predictable income-transfers that facilitate the accessibility and utilization of social services (Niño-Zarazúa et al. 2012).

While policy scalability is critical for an improved accessibility to social services, there are cases where community-based strategies can offer alternatives to service delivery. For example, although it is recognised that almost half of the newborn deaths could be prevented by scaling-up evidencebased available interventions, such as tetanus toxoid immunisation to mothers; clean and skilled care at delivery; newborn resuscitation; exclusive breastfeeding; clean umbilical cord care; management of infections in newborns, many require facility-based and outreach services. A significant proportion of these mortalities and morbidities could also be addressed by developing community-based interventions which should be supplemented by developing and strengthening linkages with the local health systems.

Some of the recent community-based studies of interventions targeting women of reproductive age have shown variable impacts on maternal outcomes, and hence it is uncertain if these strategies have consistent benefit across the continuum of maternal and newborn care (Seguin and Niño-Zarazúa 2013). Nevertheless, it is important to point out that community involvement in the delivery of social services may well prove unsuitable and unfeasible for largescale social policies, which once again reinforces the importance of state-led policy responses.

The long-term sustainability social service and its prospects for scalability are closely connected with the fiscal space of developing countries. European countries financed the construction of their social institutions back in the 1950s through an increase in tax revenues, especially social security payroll taxes. It is unlikely that developing countries today could replicate that experience. The size and significance of informality in labour markets in developing countries limits the scope of social security payroll taxation.

The available options for financing the scalability of social sector policy varies across countries and regions, but especially across LMICs, and are contingent on the levels of development as well as institutional settings. In middle-income countries with more available sources to financing social sector policies, scalability constraints usually arise in the context of balancing the demands from various political constituencies and competing groups of interest (Niño-Zarazúa 2011).

In low-income countries with limited revenue sources as well as urgent and wide-ranging social demands, social sector policies and programmes remain framed under, and highly dependent on, foreign aid strategies. Quattri and Fosu (2012) have investigated the impact of the external debt-servicing constraint, as well as external aid, on government expenditure allocation in SSA countries after the launch of the Heavily Indebted Poor Countries Initiative (HIPC). They find that the debt effect, while substantially lower than existing estimates for the pre-HIPC period, remains negative for the social sector with education expenditure funding gaps, suggesting that appropriate measures must be undertaken in order to prevent the deleterious effects of debt, particularly on the social sector.

Donors' advocacy to scale-up 'successful' policy innovations are often met with resistance from finance ministers concerned over the sustainability of social programmes through the medium term. Nevertheless, there are a number of options that can potentially serve the purpose of increasing the

fiscal space to facilitate the scalability of social policies in developing countries. These include, in general, revenue mobilization via taxes, redistribution, and shifting public expenditure.

### 5.1 Revenue mobilization

Tax revenues are a major source for financing social sector policies. Taxes represent the largest source of government revenue in most developing countries. In LLMICs, taxes represent about 80 per cent of government revenues, followed by revenues from property income, sales of goods and services, grants from foreign governments, international organizations, and property income (IMF 2009). In middle-income countries, taxes make up 90 per cent of government revenues, followed by other revenues and social security contributions. Low-income countries, in particular, face heavy constraints on their capacity to improve tax collection systems. Tax revenues as a share of GDP have shown only very modest growth in the sub-Saharan region; from 13.5 per cent in 1980 to 18.2 per cent in 2004 (Keen and Mansour 2009). Among these, Value Added Tax (VAT) is the main source of government revenue; about 4.5 per cent of GDP vis-à-vis 1.5 per cent from personal income tax.

Constraints to collect taxes in developing countries, especially personal income tax, are associated with the structure of the economy (the rural economy and the informal sector are very difficult to tax), the administrative capacity of revenue authorities and political economy factors (Tanzi and Zee 2000). An important question is what are the potential alternatives for revenue mobilization in developing countries? Past experiences provide important lessons, some of which are relevant to mention here.

Renegotiation of contracts with foreign companies involved in the exploitation of natural resources can support the expansion of social policies in poor but resource rich countries. For example, the economic growth in Asia led to an increase in the global international demand for minerals and hydrocarbons, which benefited the Bolivian economy. A renegotiation of contracts with foreign companies that included taxation on hydrocarbons and privatization of state enterprises helped the Bolivian government to increase sales of hydrocarbons, from two per cent in 2004 to more than 45 per cent in 2008, measured as a percentage of the government's total revenues (Barrientos and Niño-Zarazúa 2011b). The fiscal space generated by increasing revenues from natural resources supported the expansion of Bono Juancito Pinto and Programa Nacional de Atención a Niños y Niñas Menores de Seis Año (Banco Central de Bolivia 2009).

The improved growth performance of SSA countries since the 1990s, and the discovery and exploitation of natural resources (including oil) in Angola, Botswana, Cameroon, Chad, Côte d'Ivoire, Gabon, Equatorial Guinea, Namibia, Nigeria, DRC, Sierra Leone, Togo, and Zambia, have created the conditions for an improved fiscal space in these countries (Keen and Mansour 2009). The introduction of sovereign wealth funds in Nigeria, Botswana and, most recently Angola, suggests that oil and minerals could help secure a share of revenues from natural resources to finance social sector policies in the longer term.

In Chile, the government generated a fiscal space partly due to high international copper prices, but also as a result of a one-off rise in the rate of VAT earmarked for social spending in the area of health, education, and social protection, and anti-tax-evasion policies. The VAT evasion rate, for example, was reduced from 20 per cent in the 1990s to less than 10 per cent in 2009 (Velasco 2009). This Chilean case illustrates the importance of improving tax collection systems, but also a trend in raising the rate of VAT to finance social sector policies.

VAT on 'sin' products, such as cigarettes and alcohol, could in fact rise revenues in countries like India and Vietnam, equivalent to 0.3 and 0.4 per cent of GDP, respectively. Indeed, taxation can be a powerful instrument both to reduce risks from consumption of unhealthy products, and be a major source of revenue generation to support the scalability of social policies (Jamison et al. 2013). The World Development Report 1993 already noted that a 10 per cent price increase in tobacco would be expected to reduce consumption by about 4 per cent and by substantially more in adolescents (World Bank 1993).

A large number of studies, including a growing number from LMICs, clearly demonstrate that tobacco excise taxes are a powerful tool for reducing tobacco use while it provides a reliable source of government revenues (Chaloupka et al. 2012). For example, in China and India, a 50 per cent price increase in cigarettes from tax increases would prevent 20 and four million deaths respectively, and generate an extra US\$20 and US\$ two billion in revenue annually, respectively (Asian Development Bank 2012). Global experiences with tobacco taxation and tax administration have been used by WHO to develop a set of 'best practices' for maximising the effectiveness of tobacco taxation.

#### 5.2 Redistribution

Redistribution policies have been important for financing the scalability of social sector policies in high-income countries. In low-income countries, however, the redistribution capacity remains very limited due to institutional, societal, and political factors (Alm and Wallace 2006).

Ravallion has estimated the redistribution capacity of developing countries as a means to tackle poverty (Ravallion 2009a). He calculated the marginal tax rate on the 'rich' that would be necessary to eliminate the normalised aggregate poverty gap.<sup>21</sup> The overall findings show that poorer countries have a very limited capacity for redistribution. For many countries with average consumption below US\$2,000 a year, the marginal tax rate needed to cover the aggregate poverty gap would simply be economically and politically prohibitive, as it would exceed 100 per cent. This implies that redistribution is more relevant for middle- and upper-middle income countries with high income inequality and a relatively large number of rich people. The redistributive capacity of low-income countries could nonetheless improve in the longer term, assuming that higher mean incomes from sustained growth would require higher marginal tax rates on the rich to financing the scalability of social sector policies.

## Shifting public expenditure

There may be scope for some countries to shift expenditure from other areas to the social sectors. Tax exemptions (and subsidies) on foodstuff, school materials, and agricultural tools are common in developing countries. They tend to show large leakages to the non-poor, while diminishing the tax base. In Mexico, for example, in the aftermath of the 1994-95 financial crisis and before the introduction of Progresa, (later renamed as Oportunidades) 75 per cent of the total budget allocated for generalized and targeted food and in-kind subsidies reached just a fraction of the poor, as subsidized food consumption was largely allocated to urban areas, despite the fact that nearly 60 per cent of the poor lived in rural communities (Niño-Zarazúa 2011).

The policy decision of introducing Oportunidades as a gradual replacement of previous food subsidies was critical for the long-term sustainability of the programme, as the introduction of the programme on the top of food subsidies would have simply been unfeasible under conditions of limited fiscal resources. Levy (2006) has underlined the importance of the presidential leadership in phasing out food subsidies to finance Oportunidades; a decision that helped the Mexican government to avoid additional pressures on the federal budget.

Fuel subsidies are also common in developing countries. In Nigeria, for instance, the government addressed international fuel price volatility by subsidizing the pump price, despite the fact that fuel subsidies showed a muted effect in terms of mitigating the impacts of rising fuel costs on household consumption, especially among the poor, whose access to petroleum products, and kerosene in particular, remained scarce and unpredictable (Chiripanhura and Niño-Zarazúa 2013). Shifting expenditure from subsidies to targeted social spending can be an effective way to reduce poverty, but there are practical obstacles for shifting expenditure, making this alternative likely to be a medium-term objective.

The political economy literature suggests that the greater the number of losers from a policy change, and the more up-front the losses are, the more difficult it is to shift public expenditure (Gelbach and Pritchett 1995). The recent experience of the Nigerian government attempting to undue the highly regressive fuel subsidy vividly illustrates the complexity of this alternative. Faced with widespread political opposition, national strikes, and civil protests

the Nigerian president was forced to reverse the government's decision to remove the subsidy.

Foreign aid can play an important role in helping developing countries to improve the revenue raising capacity, and facilitating the scaling-up of social sector policies. This would require better co-ordination from bi- and multilateral donor agencies, while enabling a switch from aid to domestic financing, and thus guarantee the sustainability of social sector policies. Ensuring the sustainability and political legitimacy of social sector policy requires that, in the medium and longer term, they are financed by domestic sources. As discussed earlier, strengthening institutional capacity through PBAs, including SWAps and budget support, has some advantages vis-à-vis project aid. Social sector policies are more effective if they integrate interventions across sectors, and co-ordinate the efforts of a range of providers within the public, voluntary, and private sectors. The time window of social sector policies is an important consideration. Social sector policies are most effective in the medium and long term. This is in stark contrast to the short-term horizon of project aid.

# 6 The importance of transferability of policy knowledge and design

Policy transferability in the social sectors can be seen as a function of the role that knowledge plays in the development process. The increased globalization process, coupled with the revolution in information technology, has given rise to multi- and bi-lateral initiatives to replicate successful policies to other socioeconomic environments. This is largely the outcome of a better understanding of 'what works' in the social sectors for economic growth and development. But the interaction between the developments in contemporary global knowledge and aid interventions is complex, and bounded by country- and time-specific factors. This includes finding the right balance between aid policies and enhancing national capacities to develop new knowledge and to acquire and adapt existing knowledge developed abroad. This is relevant, particularly for low-income countries, where the private sector plays a minor role in knowledge creation and diffusion, and where the knowledge base is limited. Under such circumstances, aid can help develop the capacity of the public sector, not only to create knowledge but also to acquire and adapt knowledge, as well as to improve the skills needed to absorb new knowledge.

Foreign aid has played a determining role in helping countries pilot and innovate more ad hoc social programmes adapted to local conditions. The experience of transferability of social protection programmes across Latin America and more recently, from Latin America to SSA is illustrative in that respect.

Microfinance is another important example of knowledge transfer. Since its institutionalization about 35 years ago, microfinance has been promoted and supported by foreign aid as an innovative tool against poverty and vulnerability across Africa Asia, Latin America and Europe. Microfinance has proved not only to allow the poor to access credit, but because it often relies on grouplending also encourages peer sharing while reducing transaction costs to the lender by achieving economies of scale. Although microfinance has been extensively examined under various socio-economic conditions, it remains difficult to establish clear, robust and incontestable evidence of microfinance's impact on poverty and wellbeing

A recent ReCom study shows that microfinance has a significant positive impact on per capita income, non-land asset value and poverty incidence (Maitrot and Niño-Zarazúa forthcoming). Microfinance fails, however, to engender positive change on other poverty dimensions, namely non-food expenditures, per capita monthly and daily food expenditures, medical expenditures, and livestock. Overall, across countries and methodologies, it seems that microfinance generally has a short-term positive effect on borrowers, but that this effect is not necessarily sustained in the long term.

In terms of regional differences in impact, microfinance in Africa appears to have a more positive impact on poverty compared to elsewhere. Important trends can also be extrapolated from this analysis: A few impact studies found that the effect of microfinance on households' poverty and wellbeing is more likely to be significantly positive in the case of women, as opposed to male borrowers in Asia and South America. This might indicate that lending to women may be more effective when addressing poverty and welfare deprivations than lending to men. The study also indicates that the socioeconomic conditions of households seem to influence the way they use and benefit from access to credit, with better off households reaping more effectively the benefits from microfinance. In those contexts, technical cooperation and support becomes equally relevant to financial assistance for policy learning.

In that sense, new and emerging donors engaging in South to South cooperation can provide valuable expertise, some of them being aid recipients until recently themselves (or are still receiving aid). With that in mind, a new form of co-operation, known as triangular co-operation, has emerged, where traditional donors—belonging to the Development Assistance Committee (DAC) of the OECD-provide assistance to support southern donors' programmes, given their technical advantage. An example of this is Germany's support for Brazilian HIV programmes across Latin America (Working Party on Aid Effectiveness 2009). Error! Reference source not found. shows some further examples of triangular co-operation.

Examples of triangular co-operation in the health sector

DAC donor	Emerging donor	Recipient country	Project/Programme description
Canada	Brazil	Haiti	Haitian National Vaccination Programme strengthening
Japan	Brazil	Angola	Development of human resources for health in Josina Machel Hospital
Japan	Brazil	Madagascar	Child health services improvement programme
UK	Brazil	Peru	HIV control
US	Brazil	São Tomé and Príncipe	Malaria control and prevention
Italy	Tunisia	Niger	Training of health workers
Japan	Mexico	Nicaragua	Integrated management of plagues
Japan	Sri Lanka	Various African countries	Hospital management

Source: Martínez Álvarez and Acharya (2012).

Few studies evaluating aid practices by new and emerging donors can be found in the literature. However, so far the evidence indicates that there are no significant differences between new and old donors in their distribution and practices, except that new donors do not appear to be influenced by the level of corruption of the recipient country when making decisions about aid allocation (Dreher et al. 2011). Emerging donors have been praised for bringing extra funds, but there are concerns about increasing fragmentation, their high levels of tied aid, a lack of engagement in dialogue with partner countries, and an unwillingness to harmonize with other donors (Working Party on Aid Effectiveness 2009). Other characteristics of non-DAC donors are that they provide more flexible assistance and mainly engage in project assistance and technical co-operation (Working Party on Aid Effectiveness 2009).

In the area of social protection, there have been important lessons in terms of transferability of policy design and policy implementation. Transfer programmes developed and scaled-up in Latin America have now been piloted under various socio-economic and political conditions in several SSAn countries including Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria, Rwanda, Tanzania, Uganda, Sierra Leone, Liberia, and Zambia. And very few programmes have so far been able to scale at national level. Ethiopia's PSNP provides important lessons in that respect (Niño-Zarazúa et al. 2012). In many instances, the process of knowledge transfer about what and how policy works has been supported and facilitated by bi- and multi-lateral donor agencies.

This has been the case with the Africa-Brazil Programme on Social Development, which was launched in January 2006 during a meeting organized by Brazil's Ministry of Social Development and Fight against Hunger (MDS) and DFID. The meeting gathered delegations from Ghana, Mozambique, Guinea Bissau, South Africa, Nigeria, and Zambia with the aim of exchanging experiences of Bolsa Familia, a CCT programme in Brazil (Barros 2011). The meeting led to an agreement between MDS and DFID in February 2007 to implement the Livelihood Empowerment against Poverty (LEAP) in Ghana (see Box 5). Fundamentally important was the political commitment of the Ghanaian government that saw the implementation of the LEAP programme as a win-win situation, as the process was perceived to strengthen all the institutions involved.

The Ghanaian case posed important challenges though. An important one was related to the unavailability of MDS's experts to work as consultants to the LEAP, something that had been considered by the Ghanaian team as necessary, and initially agreed with the MDS to speed up the programme's activities. The MDS experts were absorbed by domestic demands and unfamiliar with the Ghanaian reality that often led to informational gaps in terms decisions made by high-level authorities and the implementing capacities.

Due to limited human and financial resources, the co-operative agreement between Brazil and Ghana was implemented with the support of DFID and multi-laterals, such as the United Nations' Food and Agriculture Organization (FAO), World Food Program (WFP), and the International Policy Centre for Inclusive Growth (IPC-IG). These organizations have played important roles in promoting the Brazilian experiences abroad; mediating demands; partnering in multi-country projects; giving technical advice; M&E; and supporting learning and research. With limited Brazilian human and financial resources, the implementation and evaluation of the programme has been partnered through triangular and multi-stakeholder initiatives (Leite et al. 2013). The main lesson learnt by the MDS was that something working in Brazil would not be a guarantee for it to automatically work in Africa.

### Box 5: A chronology of the Africa-Brazil co-operation programme

May 2005: With DFID's support, MDS makes a study tour to South Africa, Nigeria, and England to present the Bolsa Famila programme in meetings organized by the African Union (AU).

September 2005: Minister Patrus Ananias, MDS, and Miranda Munro, director of DFID Brazil, met to discuss the possibility of co-operation among MDS and DFID.

October 2005: DFID funds the participation of a representative of South Africa's government in the seminar 'Bolsa Família: Two Years of Successfully Fighting Hunger and Poverty in Brazil', held in Brazil. Publication of DFID's practice paper 'Social transfers and chronic poverty: emerging evidence and the challenge ahead'.

January 2006: Representatives of Ghana, Guinea Bissau, Mozambique, Nigeria, South Africa, and Zambia take part at a study tour in Brazil on CCT programmes. Ghana declares its interest in receiving technical co-operation from Brazil in social grants.

March 2006: With the support of DFID, two representatives of the MDS take part in the 'Workshop on Social Protection: A transformative agenda for the twenty-first century', held in Zambia. The meeting, which gathered representatives from 13 African countries (Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe), Brazil, UN agencies, development partners, and of NGOs, results in the 'Livingstone Call for Action', through which member states of the AU committed themselves to implement social protection initiatives, including cash transfers, in the following three years.

July 2006: Publication of DFID's White Paper 'Eliminating world poverty: Making governance work for the poor'.

October 2006: Three representatives of the MDS take part in the 'Regional Workshop on Cash Transfers' in Johannesburg.

February 2007: MDS-DFID co-operation with African countries is officially agreed upon during the visit of DFID's statistical advisor Saul Morris to Brazil. It is decided that its first initiative would be providing technical assistance to Ghana in the implementation of the LEAP, with the support of the International Policy Centre.

2-6 July 2007: Technicians from MDS's National Department on Citizenship Income go to Ghana to provide co-operation in Single Registry for Social Programs (first mission).

13-24 August 2007: Technicians from MDS's Department on Evaluation and Information Management go to Ghana to provide co-operation in M&E (second mission).

16 August-3 September 2007: Technicians from MDS's National Department on Citizenship Income go to Ghana to provide co-operation in Single Registry (second mission).

25 August-3 September 2007: Technicians from MDS's National Department on Social Assistance go to Ghana to provide co-operation in child labour (second mission).

2-17 September 2007: Technicians from MDS's National Department on Citizenship Income go to Ghana to provide co-operation in conditionalities management and single registry (third mission).

March 2008: The LEAP starts in Ghana as a five year pilot experience in which the main components are CCTs and UCTs to orphans and vulnerable children, the elderly above 65-years old, and the disabled. MDS and DFID agree to include four other African countries in the Africa-Brazil programme.

April 2008: Experts from MDS take part in the 'Regional Meeting of Experts in Social Protection from the African Centre-South Region' in Uganda, in preparation for the 'First African Union's Ministerial Meeting in Social Protection'. The regional meetings were organized with the funding of DFID and the assistance of Help Age International.

June 2008: Experts from MDS take part in the 'Regional Meeting of Experts in Social Protection from the African Western Region' in Senegal.

August 2008: Delegations of Angola, Ghana, Kenya, Mozambique, and Namibia as well as representatives of the African Development Bank, the New Economic Partnership for African Development, and the AU take part at another study tour in Brazil. Brazil initiates bi-lateral dialogues to identify demands of each country.

October 2008: The Brazilian Minister of Social Development, Patrus Ananias, takes part at the conference 'Towards a Sustainable Social Development Agenda for Africa', held in Namibia under the AU.

August 2009: The seminar 'Social Protection in African Countries' opens another study tour in Brazil, gathering an audience of 220 people.

May 2011: The Kenyan government and representatives of the Brazilian Agency of Cooperation (ABC), MDS and DFID sign a co-operation work plan to structure their partnership, set a schedule, and agree responsibilities of each party. A delegation of 14 permanent secretaries and civil servants from five ministries visit Brazil to learn about Brazilian social protection policies and systems, as well as assess how Brazil could support Kenya in designing and implementing an integrated social protection single registry.

Source: Leite et al. (2013)

## 7 Conclusions

The evidence collected throughout the ReCom programme on aid effectiveness in the social sectors brings important insights and policy lessons for researchers, policy makers, practitioners, and the general public, interested in the concern of aid, social sector policy, poverty, and human development.

One thing that has become clear throughout the ReCom programme is that, when looking at successful stories in economic and social development over the last 50 years, development processes often require 'trial and error' to arrive to certain diagnosis about 'what works' in social sector policy. Socio-economic and political environments as well as key policy choices have proved to be at the centre of any development success. A crucial part in that process largely depends on how effectively a country exploits its abundant human resources for production and exchange in the global economy.

Improving the access to, and availability of, social services in developing countries has been at the centre of the recent global development efforts. It is through social services that human resources can be effectively transformed into human capital, which supports the competitive economic structure of countries; much progress has been achieved over the past two decades in terms of improving access to social services.

In the area of education, for instance, there has been a significant reduction in the number of children not attending school, and a marked improvement in access to education for girls in primary education. Education aid has, as discussed in the position paper, played an important role in supporting the worldwide education sector to achieve these improvements.

Nevertheless, the quality of education is still very low in many developing countries, and aid alongside governments in developing countries could do much more to rectify this problem. But the fact is that international donors have often put pressure on recipient governments to increase school enrolment. This has been counterproductive as it gives emphasis to quantity in detriment of quality.

The domination of single policy objectives and targets in the global development agenda, via the MDGs, has received much attention and financial support from the international community. Aid contributions to the social sectors increased significantly from just above five per cent of total aid flows in the late 1960s to around 40 per cent in 2011. While this approach has facilitated a global focus on concrete traceable development targets, it has ignored important interactions and complementarities between different subcategories of social policies. Some sub-categories often complement each other, and funding one sub-category has spillover effects in others. The position paper has extensively reported numerous cases in, for example, the education sector, where a complementary relationship between primary and secondary education exists whereby, if funding for primary education is

increased while supporting secondary education, it further enhances primary education enrolment.

Clearly, a major challenge facing policy makers now relates to the difficulty of finding a balance between increasing access to social services while keeping and raising their quality. This often demands a holistic approach to policy, in which elements that enhance the supply-side policy structures are combined with community-level participation alongside monetary incentives, and policy devices that tackle and address incomplete or imperfect information.

While the overall 'best practice' principles endorsed at international fora on aid effectiveness are noble and have generally been found to improve the quality of development assistance, they are very general, often unrealistic, and need to be adapted to local contexts. The key impediments to effective development assistance in social sector policy appear to be connected with issues of resource allocation, donor fragmentation, and the processes of aid giving.

Data collected over the past decade shows that the international community has struggled to abide by the principles of the Paris Declaration. Evidence shows that aid is not always directed to where it is most needed. This occurs in part because donor motivations are not purely altruistic, but there is an array of drivers behind development assistance. Aid allocations may be made as part of national security policy or to enhance donor countries' foreign policy and trade objectives. This has also led to donors crowding around certain countries and certain causes which are seen as strategically important.

The phenomenon of donors crowding around particular countries (or sectors), what it is often referred to as aid fragmentation represents a limitation for the effectiveness of aid. Fragmented aid delivery creates direct costs for recipient countries that have to deal with multiple donors and projects simultaneously. But there are also indirect costs. As documented in the position paper, the presence of a large number of aid agencies in a country can drain the recipient country of local staff, lead to excessive time spent in training, and cause projects to be duplicated.

The concern of *aid fungibility* has attracted the attention of scholars and policy makers alike. Fungibility is prevalent in some sectors, particularly healthcare, with studies showing that aid to health is often used for purposes other than those intended. However, evidence also shows that fungibility is not as big a problem as is sometimes perceived. Some level of fungibility is just a result of donors and recipients having different preferences. By focusing on this almost inevitable feature of aid, larger development concerns are missed.

Another unsolved issue relates to question of whether donors should focus on poor countries or poor people. The fact that a large number of countries have upgraded to a middle-income status has meant that for the first time in history, more than two-thirds of the world's poor reside in middle-income countries. Poverty in such contexts reflects a complex set of structural roots, dysfunctional institutions, market imperfections, and pervasive social norms.

These factors will require innovative forms of development co-operation to tackle global development concerns.

From an aggregate macro perspective, research under ReCom has identified a number of factors contributing to positive aid policy outcomes in the social sectors. These include:

- Strong political leadership and commitment by governments and political elites to introduce, improve, and scale-up social policy innovations.
- Well-designed partnerships with central as well as local governments and NGOs in the design and implementation of programmes.
- Regular and predictable funding support. The unpredictable nature of aid hinders the ability of recipient governments to plan their budgets, which in turn makes managing the long-term process of development policy difficult. Ultimately aid that is unpredictable is less likely to be spent effectively.
- Simple and flexible policy innovations that adapt to local conditions and social norms.
- Programmatic approaches that recognize the need to invest both in physical infrastructure and human resources to enhance the supply-side capabilities of governments to deliver good quality social services.
- Household and community participation in the design, execution, and monitoring of programme activities.
- Rigorous impact M&E systems that facilities the assessment and if needed, fine-tuning of programme features.

Research under ReCom has shown that rigorous impact evaluation studies have played an important role in the shift towards evidence-based development policy, and in many instances, provided crucial ammunition to those advocating for the introduction and expansion of social sector policy, like in the case of social protection in Latin America.

This has been a positive step although it has not been free from challenges: Evaluation data from developing countries are often incomplete, limited, and of poor quality, although the literature on aid effectiveness has been growing in parallel with data sources and developments in econometric methods.

What constitutes best practice and aid effectiveness are empirical questions that highlight the importance of assessing what works in development policy.

In the position paper, the discussion about how to measure what works in social sector policy is presented in Section 3, but in general, it is divided into two approaches: The first approach consists of studies that focus on the macro-level dimensions, linking aid, social sector spending, and growth. These studies rely on cross-country regressions and more recently, dynamic panel econometric techniques. The second group of studies focus on the micro-level dimensions, looking in particular at the impacts of specific projects, programmes, or policies on the intended beneficiaries. These studies rely on

experimental or quasi-experimental research designs, and as discussed in Section 3.2, each has advantages and disadvantages regarding the internal and external validity of findings.

National statistical offices and data collection systems have proved to be critical and an integral part of the international development efforts. After all, the knowledge generated about the effectiveness of a given policy can be seen as a public good that generates positive externalities beyond the boundaries and scope of individual policies. The case of communicative diseases is a clear example where global collective action is justified and needed.

Pilot projects largely favoured and supported by donor agencies can help provide information on whether social policies have been designed and implemented correctly, and also provide necessary learning and training for the relevant agencies. However, in practice pilots have seldom incorporated strong evaluation procedures, and therefore have had a limited ability to serve as a tool to engage and persuade domestic political elites to scale-up 'successful' policy interventions.

Needless to say is the fact that aid does not seem to work as effectively in countries where the policy environment is poor, even though some carefully targeted, vertical aid policies can confer some (limited) benefits. For instance, innovations in the area of child immunization and basic education offer some important lessons. In countries with weak institutions, focus on policy dialogue and technical assistance is fundamental to improve the environment that can facilitate future investments and financial support from donors and the private sector.

The different aid modalities, their success stories and failures, have been extensively documented in the position paper. In particular, the need for a shift in the aid architecture from project aid to programme-based approaches has been consistently highlighted by aid experts and researchers, and the implications and constraints of scaling-up successful projects is underlined.

Evidence shows that for aid to be effective at improving the quality of social services in a sustainable manner, a system-wide approach involving more actively the governments of recipient countries is needed. However, driven by the desire for quick and demonstrable results, donors have often had the tendency to rely on project aid which limits the capacity of donor money to build sustainable institutional capacity.

A key lesson arising from ReCom is that sustainable policy choices cannot and will not be achieved through individual short-lived projects, even if those projects are successful in their own right. Instead, aid to the social sectors needs to be seen as a long-term process, whereby capacity development and expansion of policy innovations require more active involvement of governments in recipient countries to manage and co-ordinate such policies. While the potential benefits of social sector policies may be apparent, the process of successfully introducing these innovations on a much larger scale

involves an altogether different set of challenges, which are directly connected with the concern of scalability.

The discussion has focused in particular on three core challenges: first, political commitment from incumbent governments and elites; second, the long-term financial sustainability of social policies; and third, the administrative capacity of governments to deliver social services. If aid to the social sectors is to be going forward more effectively, then these challenges will need to be addressed collectively. Financing, in particular, is seen as a major concern. The position paper presents a number of policy strategies that could potentially increase the fiscal space needed to scale-up social sector policies in developing countries. These include revenue mobilization via taxes, redistribution, and shifting public expenditure.

The globalization process, coupled with the revolution in information technology, has given rise to donor initiatives to replicate successful policies in other socio-economic environments. This is largely an outcome of better understanding of 'what works' in social sectors policy.

However, evidence presented throughout the position paper shows that what works in one context may not necessarily work in another. The concern of transferability of 'good policy' has proved to be a very challenging enterprise, particularly given the heterogeneity of contexts and factors that determine wellbeing conditions. ReCom studies, and history more general, have shown that the simple replication of successful policy stories does not always work. The most successful projects and programmes are those that make an effort to understand the local needs and tailor their design features, objectives, and strategies to the socio-economic, political characteristics, and social norms that govern specific societies. In that process, giving governments and other local partners real ownership over the development process has proved to be fundamental. In the end, the principal drivers of development are domestic and it is therefore important to have adequate expectations about how much aid can achieve, and communicate this effectively both to constituencies in donor and recipient countries.

Foreign aid has played an important role in helping countries pilot, innovate, and develop more ad hoc social programmes adapted to local conditions. The experience of knowledge transfer in the area of social protection from Latin America to SSA is illustrative in that respect. New and emerging donors engaging in South to South co-operation and providing valuable expertise is a reflection of the new and rapidly changing aid architecture.

The discussions and analysis throughout the position paper indicate that aid has been generally good for development. It has overall supported the building blocks of economic growth and progress. In short, evidence suggests that aid reduces poverty, augments schooling, boosts life expectancy at birth, and reduces infant mortality. Investments both in physical and human capital are identified as key causal links through which aid transmits economic growth. However, there is a need to sound a word of caution here. Even though foreign aid has produced positive outcomes, it should not be looked upon as a panacea. The impact of aid is positive but moderate, and does not work well at all times and in all places. Two important policy lessons are worth pointing out here.

First, an important element in the discussion of aid effectiveness reflects the general consensus that democratic processes (and good governance) are sine qua non conditions to ensure better and more optimal aid allocations to the social sectors.

*Priority* and *optimality* are, however, not two sides of the same coin, especially in the context of fragile states. Prioritizing aid to the social sectors is particularly important as it boosts economic development; augments humanitarian action; and helps post-conflict recovery by means of supplementing peace- and state-building efforts. Further, this can be achieved regardless of whether aid allocation is socially optimal in terms of efficiency and equity.<sup>22</sup>

Second, the returns to social sector aid investment are most likely to be observed in the long term. The message here is simple: Donors and policy makers need to be patient, as the social and economic benefits emerging from foreign aid may take decades to appear.

Evidence produced and collected throughout ReCom has highlighted a number of policy innovations that have in some instances dramatically changed the landscape of living conditions of millions in developing countries.

The prominence of recognition of HIV/AIDS as a global threat resulted in a proportion of development aid for health going to HIV/AIDS, rising by a factor of four in less than a decade. That has led to significant improvements in the knowledge about the causes of the disease and best strategies to tackle with it.

The role and contribution of foreign aid in the area of child immunization is unquestionable. Polio cases have rapidly dropped from more than 400,000 in the 1980s on an annual basis to only 700 reported in 2011. Similarly the percentage of children immunized against diphtheria-tetanus-pertussis increased from only 17 per cent in 1980 to 80 per cent in 2011. This is truly remarkable, and the international development community should be congratulated for these achievements.

Nevertheless, there are huge development challenges for the years to come, and the micro-level evidence presented throughout the position paper reveals important insights into the policy innovations that may provide clues about future development strategies. In particular, the discussion has concentrated on the policies that have worked, where they have worked, and why. The discussion has concentrated on health, education, water and sanitation, and social protection as core areas of social sector policy. Section 2 has summarized the main lessons, but in general they point at a complex array of innovations and policy strategies that have produced mixed and often unexpected results.

While the majority of interventions against HIV/AIDS, TB, and malaria had positive short-term effects, these were frequently not translated into long-term sustainable health outcomes. Increased access to HIV/AIDS treatment and nutritional supplements has resulted in significant improvements in short-term employment and productivity among affected households. Nevertheless, outof-pocket spending on transportation, cost of diagnosis, and care continue to be catastrophic among families affected by the disease even when access to treatment is facilitated. The implication of these is that donors should couple initiatives that provide greater access to treatment with support measures to avoid the secondary costs associated with seeking this treatment.

In the area of maternal healthcare evidence shows that that policies that most successfully reduced maternal mortality have established functioning maternal healthcare systems with access to skilled birth attendants equipped with appropriate drugs, supplies and equipment, as well as systems of referral to higher levels of care in the event of obstetric complications.

Diarrhoea and respiratory diseases remain the leading causes of morbidity and mortality globally for children in LMICs, although there has been a decline in incidence rates of the diseases. Recent advancements in the development of rotavirus vaccines and implementation of vaccination programmes have been fundamental in that process. Other clinical interventions for diarrhoea and respiratory infections include antibiotics, probiotics, and zinc.

Further research in identifying and implementing effective non-clinical interventions against child mortality and morbidity beyond vaccines remain limited. Nevertheless, the position paper identified a number of strategies that range from hygiene and sanitation, water supply, water quality, to multiple interventions that introduce water supply, water quality, sanitation, and/or hygiene education elements in the case of diarrhoeal diseases, and education and training programmes in the case of acute respiratory diseases.

Developing countries, often with support from donors, have tried to implement numerous types of policy strategies to improve the quality of health services. Several factors are found to undermine the quality of public sector health services. These include resource constraints; low salaries; high workload; poor incentives and conditions of service; lack of family and general practice systems; and insufficient information about the appropriate use of drugs; resistance to antibiotics; costs; and patients' rights to challenge poor service. Contracting out primary healthcare services has been explored as a means to improve the quality of services with inconclusive results.

In the area of education, donor agencies have worked on various policy strategies aimed at improving the accessibility to and quality of service delivery. Policies subject to analysis in the position paper include school size; class size; school choice; school privatization; tracking; teacher education and certification; teacher pay; teaching methods; curricular content; graduation requirements; and school infrastructure investments. These have been grouped into three general policy strategies: supply side capability interventions; behavioural incentives; and community participation. Evidence shows that there are a variety of interlinked factors or channels through which aid policy impacts educational outcomes. It is therefore important to disentangle the short-term from the medium- and long-term objectives in a stepwise manner. Such factor breakdown allows improved targeting and evaluation of policy interventions.

Aid and social policy strategies in general have largely focused on the supplyside, aiming at facilitating an improved accessibility to social services. More recently, donors have turned their attention to social protection that often focuses on demand-side considerations. The impact evaluation literature on social protection has extensively focused on assessing the extent to which social transfers achieve their explicit objectives. The position paper presents a synthesis of the impact evidence of transfer programmes on various wellbeing dimensions. These include nutritional, health, and education outcomes.

Financial and institutional barriers to aid effectiveness are prevalent in developing countries, but social norms and ignorance can also deter the way aid is intended to impact the poor and vulnerable. Under such environments, interventions which combine measures intended to encourage behavioural changes with financial and medical assistance can be the most effective ones.

Nevertheless, as effective as behavioural incentives appear to be, evidence also shows that their short-term impact often does not translate into long-term positive practices. For example, financial incentives to own ITNs to prevent malaria infections in Madagascar increased net use by 24 per cent in the shortterm. However, after six months net ownership and use was lower among the intervention group than the control group.

ReCom background papers have addressed and summarized a large number of social sector policies. From this work, a significant number of successful aid interventions have been identified and analysed throughout the position paper. The evidence arising from this work is encouraging but still scant. Overall, they show that beyond design features, contextual factors are often the key determinants in ensuring success in aid policy. The position paper has brought out these complexities and identified key future policy challenges.

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## Notes

- For a good overview of the importance of education, see DFID (2013).
- It is fair to say that the World Bank has adopted social protection (and labour) programmes in developing countries as a central part of its mission to reduce poverty. This has been reflected in tripling the social protection and labour lending in the last past few years, from an annual average of US\$1.6 billion in 1998–2008, to US\$4.2 billion in 2009–11.
- Private returns to education were also found to be higher than returns to investments in physical capital, with average rates of returns to an additional year of schooling in the order of 10 per cent (Psacharopoulos and Patrinos 2004).
- The implicit greater weight of income transfers to the poorest would also satisfy the Pigou-Dalton Principle, which states that an income transfer from the rich to the poor (even in a global cross-border perspective) would result in greater equity as long as the transfer does not reverse their current position (Dalton 1920).
- Highlighting the sensitivity of the donor-recipient relationship, the president of India described British aid as 'peanuts' (Economist, 10 November 2012: 60).
- Prioritarians argue that priority should be given to helping the worst off because an improvement in their wellbeing, say as a result of a policy, has greater [ethical] value in the context of societies with a shared sense of justice (For a discussion, see Parfit 1991, 1997; Barrientos 2010).
- This confirms the evidence from previous studies. For example, Headey (2007)argues that multi-lateral aid for 56 countries for years 1970-2001 was less politically motivated, and has had a positive effect.
- Project aid are discretionary interventions usually delivered through parallel systems, bypassing the government, where donors have control over the design, monitoring, disbursement, as well as accountability procedures, and NGOs or the private sector are in charge of implementation.
- SWAps are instruments for donors working on the same sector that aim to improve donor co-ordination, government ownership, and lower transaction costs of aid. They represent a partnership between donors and the partner government (Hutton and Tanner 2004; Sundewall and Sahlin-Andersson 2006). The terms of the partnership are often agreed in advance, and vary between different countries. Budget support is a type of aid modality that has the characteristic of having little or no earmarking. There are two types of budget support: general and sector budget support. General budget support involves donors providing aid directly to the

government's budget, linked to a poverty reduction strategy. Budget support can be delivered as sector budget support, where funds are earmarked to a particular sector, often in health and education sectors.

- Global Fund to fight AIDS Tuberculosis and Malaria (2007).
- 11 Pertussis is commonly known as whooping cough.
- The authors define pro-poor spending as expenditures on the social sectors: education (especially primary education); healthcare (especially basic healthcare); water and sanitation; agricultural research and extension; as well as rural roads.
- The World Bank's (2004) World Development Report contends that the purportedly 'weak' relationship between public spending (on health and education) and indicators of social outcomes is due to the fact that little of the spending on health and education goes to the poor, although governments allocate about a third of their budgets to these sectors.
- Van de Sijpe (2012: 33) points out that while the limited fungibility of education and health aid that arises from project aid could be seen as a positive result, the 'positive interpretation persists only if the aid in these sectors effectively produces valuable outcomes. Moreover, if the low fungibility of off-budget aid arises because a recipient government is not fully aware of this aid, then any positive effects of non-fungible off-budget aid must be balanced against the possible deleterious effects on government capacity and ownership that are incurred when channelling funds outside of a budget'.
- For a review of the most recent evidence on the impact of aid on growth, see Juselius et al (2013); as well as the review by Mekasha and Tarp (2013).
- <sup>16</sup> Based on estimates by WHO.
- <sup>17</sup> The principal–agent problem in this context is concerned with the difficulties in motivating developing country governments (the agents), which are recipients of foreign aid, to act according to agreed arrangements and interests of constituencies in donor countries (the principal).
- The term 'social transfers' employed here applies to contributory and noncontributory programmes in developing and developed countries, aimed at protecting standards of living, and tackling poverty as well as vulnerability.
- See more: http://www.who.int/3by5/en/
- The Livingstone process refers to the Ministerial Conference that took place in March 2006 in Livingstone, Zambia, where 13 African governments agreed to put together national social protection plans to support the elderly and vulnerable groups. Subsequently, the ministers met

- in November 2008 in Windhoek to take plans forward. For a detailed account of the Livingstone process, see www.helpage.org
- Marginal tax rate is understood here as the proportion of tax paid for each additional income unit earned at the highest income threshold.
- The concept of efficiency is used here in terms of Pareto optimality. A resource allocation is efficient if it is impossible to make one member of society better off without making another member worse off. Equity, however, is a normative concept that reflects the principle that the distribution of social goods and services is equitable.

# Appendix 1: Externally peer-reviewed publications<sup>i</sup>

#### Books and journal special issues A1.1

### A1.1.1 Published and forthcoming

Addison, T., and F. Tarp (eds) (forthcoming). 'Aid Policy and the Macroeconomic Management of Aid'. Special issue of World Development.

- 1. Aid Policy and the Macroeconomic Management of Aid T. Addison and F. Tarp
- 2. Assessing Foreign Aid's Long-Run Contribution to Growth and Development C. Arndt, S. Jones, and F. Tarp
- 3. Aid and Income: Another Time-series Perspective M. Lof, T.J. Mekasha, and F. Tarp
- 4. Aid Supplies over Time: Addressing Heterogeneity, Trends and **Dynamics** S. Jones
- 5. Business Cycle Fluctuations, Large Macroeconomic Shocks, and Development Aid E. Dabla-Norris, C. Minoiu, and L.-F. Zanna
- 6. Consequences of Aid Volatility for Macroeconomic Management and Aid Effectiveness J. Hudson
- 7. International Coordination and the Effectiveness of Aid A. Bigsten and S. Tengstam
- 8. The Hard Challenge of Aid Coordination F. Bourguignon and J.-P. Platteau
- 9. Aid and Government Fiscal Behavior: Assessing Recent Evidence O. Morrissey
- 10. Fiscal Composition and Aid Effectiveness: A Political Economy Model P. Mosley

11. Policy Responses to Aid Surges in Countries with Limited International Capital Mobility: The Role of the Exchange Rate Regime

A. Berg, R. Portillo, and L.-F. Zanna

Gisselquist, R. M. (ed.) (forthcoming). 'Aid and Institution-Building in Fragile States: Findings from Comparative Cases'. Special issue of The Annals of the American Academy of Political and Social Science.

- 1. Introduction: Applying Comparative Methods to the Study of State-Building: Key Concepts and Methodological Considerations R. M. Gisselquist
- 2. Aid and Institution-Building in Fragile States: Taiwan, South Korea, and South Vietnam 1950s-1970s K. Gray
- 3. Aid and Policy Preference in Fragile Oil-Rich Countries: Comparing Indonesia and Nigeria A. H. Fuady
- 4. Aid and Governance in Vulnerable States: Bangladesh and Pakistan since 1971 M. Khan
- 5. Introduction Aid and Institution-Building in Central America: The Re-Formation of Rule of Law Institutions in Post-Conflict Societies J. M. Cruz
- 6. Foreign Aid, Resource Rents and Institution-Building in Mozambique and Angola H. Perez Nino and P. Le Billon
- 7. State-Building through Neotrusteeship: Kosovo and East Timor in Comparative Perspective L. M. Howard
- 8. Aid and Institution-Building in Fragile States: The Case of Somali-Inhabited Eastern Horn of Africa K. Menkhaus
- 9. Aid and Institutions in Rwanda and Burundi D. Curtis
- 10. Post-War Reconstruction in Sierra Leone and Liberia in Comparative Perspective A. K. Onoma
- 11. Findings from Comparative Cases R. M. Gisselquist

Gisselquist, R. M., and M. Niño-Zarazúa (eds) (forthcoming). 'Experimental and Non-Experimental Methods in the Government Performance: Toward a Middle Ground?'. Special issue of The Journal of Globalization and Development.

- 1. Introduction: What Can Experimental Methods Tell Us about Government Performance? R. M. Gisselquist and M. Niño-Zarazúa
- 2. Evaluating Antipoverty Transfer Programs in Latin America and Sub-Saharan Africa: Better Policies? Better Politics? A. Barrientos and J. M. Villa
- 3. A Structural Approach to Generalization in Social Experiments F. Martel Garcia and L. Wantchekon
- 4. The Ethics of Field Experimentation M. Humphreys
- 5. The Porous Dialectic: Experimental and Non-experimental Methods in Development Economics R. Dehejia
- 6. Measuring Government Performance in Public Opinion Surveys in Africa: Towards Experiments? M. Bratton
- 7. Ancillary Experiments: Opportunities and Challenges K. Baldwin and R. Bhavnani

Gisselquist, R. M., and D. Resnick (eds) (forthcoming). 'Aiding Government Effectiveness in Developing Countries'. Special issue of Public Administration and Development.

- 1. Introduction R. M. Gisselquist and D. Resnick
- 2. Policing Reforms and Economic Development in African States: Understanding the Linkages, Empowering Change O. Marenin
- 3. Economic Governance: Improving the Economic and Regulatory Environment for Supporting Private Sector Activity C. Kirkpatrick
- 4. The Impact of Adult Civic Education Programs in Developing Democracies S. Finkel

- 5. Foreign Aid and Decentralization: Policies for Autonomy and Programming for Responsiveness J. Tyler Dickovick
- 6. Taxation and Development: A Review of Donor Support to Strengthen Tax Systems in Developing Countries O.-H. Fjeldstad
- 7. Civil Service Reform: A Review S. Repucci

## Resnick, D. (ed.) (forthcoming). 'Urban Governance and Service Delivery in African Cities'. Special issue of Development Policy Review.

- 1. Urban Governance and Service Delivery in African Cities: The Role of Politics and Policies
  - D. Resnick
- 2. Urban Service Delivery in Africa and the Role of International Assistance
  - R. Stren
- 3. Opposition Politics and Urban Service Delivery in Kampala, Uganda G. Lambright
- 4. Strategies of Subversion in Vertically-Divided Contexts: Decentralisation and Urban Service Delivery in Senegal D. Resnick
- 5. Vertical Decentralisation and Urban Service Delivery in South Africa: Does Politics Matter? R. Cameron

## Resnick, D., and N. van de Walle (eds) (2013). Democratic Trajectories in Africa: Unravelling the Impact of Foreign Aid'. Oxford, UK: Oxford University Press.

- 1. Introduction: Why Aid and Democracy? Why Africa? D. Resnick and N. van de Walle
- 2. Democratization in Africa: What Role for External Actors? D. Resnick and N. van de Walle
- 3. Foreign Aid and Democratic Development in Africa S. Dietrich and J. Wright
- 4. Foreign Aid in Dangerous Places: The Donors and Mali's Democracy N. van de Walle

- 5. Two Steps Forward, One Step Back: The Limits of Foreign Aid on Malawi's Democratic Consolidation D. Resnick.
- 6. The Changing Dynamics of Foreign Aid and Democracy in Mozambique C. Manning and M. Malbrough
- 7. Donor Assistance and Political Reform in Tanzania A. M. Tripp
- 8. Foreign Aid and Democratic Consolidation in Zambia L. Rakner
- 9. Beyond Electoral Democracy: Foreign Aid and the Challenge of Deepening Democracy in Benin M. Gazibo
- 10. Ghana: The Limits of External Democracy Assistance E. Gyimah-Boadi and T. Yakah
- 11. Conclusions and Policy Recommendations D. Resnick.

### A1.1.2 Under review and in preparation

Addison, T., M. Niño-Zarazúa, and F. Tarp (eds). 'Aid, Social Policy and Welfare in Developing Countries'.

- 1. Introduction: Aid, Social Policy and Welfare in Developing Countries T. Addison, M. Niño-Zarazúa, and F. Tarp
- 2. Public Spending, Welfare and the Quest against Poverty and Income Inequality in Developing Countries F. H. Gebregziabher and M. Niño-Zarazúa
- 3. On the Impact of Sector-Specific Foreign Aid on Welfare Outcomes: Do Aid Modalities Matter? A. Abdilahi, T. Addison, M. Niño-Zarazúa, and F. Tarp
- 4. Aid, Political Cycles and Welfare in sub-Saharan Africa B. Chiripanhura and M. Niño-Zarazúa
- 5. The Progressivity and Regressivity of Aid to the Social Sectors B. Baulch and L. Vi An Tam
- 6. New Actors in Development Assistance: the Africa-Brazil Cooperation in Social Protection I. Costa Leite, B. Suyama, and M. Pomeroy

- 7. Targeting Social Transfer Programmes: Comparing Design and Implementation Errors Across Alternative Mechanisms R. Sabates-Wheeler, A. Hurrell, and S. Devereux
- 8. The Donor Co-ordination for Effective Government Policies? Implementation of the New Aid Effectiveness Agenda in Health and Education in Zambia S. Leiderer

## Addison, T., L. Scott, and F. Tarp (eds). 'Renaissance or Retreat? Aid in Changing Times'.

- 1. Introduction T. Addison, L. Scott, and F. Tarp
- 2. Aid as a Second-Best Solution. Seven Problems of Effectiveness and How to Tackle Them R. Manning
- 3. Rethinking the World of Aid in the Twenty First Century P. Heller
- 4. Aid and Poverty: Why Does Aid Not Address Poverty (Much) A. Shepherd and S. Bishop
- 5. Aid, Structural Change and the Private Sector in Africa J. Page
- 6. Aid and Infrastructure Financing: Emerging Challenges with a Focus on Africa T. Addison and P.B. Anand
- 7. Foreign Assistance and the Food Crisis of 2007-08 P. Abbott
- 8. Improving Donor Support for Urban Poverty Reduction: A Focus on South Asia N. Banks
- 9. A Changing Landscape with New Players and Challenges A. Chimhowu
- 10. Aid as a Catalyst for Pioneer Investment P. Collier
- 11. Global Poverty, Aid, and Middle-Income Countries: Are the Country Classifications Moribund or Is Global Poverty in the Process of 'Nationalizing'? A. Sumner

12. Conclusions: Renaissance or Retreat? T. Addison, L. Scott, and F. Tarp

### Addison, T., and F. Tarp (eds). 'Macroeconomic Management of Aid'.

#### Arndt, C., and F. Tarp (eds). 'Aid, Environment and Climate Change'.

- 1. Environmental and Climate Finance in a New World: How Past Environmental Aid Allocation Impacts Future Climate Aid C. Marcoux, B. C. Parks, C. M. Peratsakis, J. T. Roberts, and M. J. Tierney
- 2. Foreign Assistance in a Climate- Constrained World C. Arndt and C. Friis Bach
- 3. Land, Environment and Climate: Contributing to the Global Public Good T. W. Hertel
- 4. International Cooperation for Agricultural Development and Foodand Nutrition Security: New Institutional Arrangements for Related Public Goods J. von Braun
- 5. REDD+ as Performance-Based Aid A. Angelsen
- 6. Foreign Aid and Sustainable Energy L. Gomez-Echeverri
- 7. Aid, Environment, and Climate Change C. Arndt and F. Tarp

## Gisselquist, R. M. (ed.). 'Good Aid in Hard Places: Evaluating and Explaining Reform "Success" in Fragile Contexts'.

- 1. Good Aid in Hard Places: Evaluating and Learning from What Has Worked in Fragile Contexts R. M. Gisselquist
- 2. The National Solidarity Program: Assessing the Effects of Community Driven Development in Afghanistan A. Beath, F. Christia, and R. Enikolopov
- 3. Delivering Good Aid in Hard Places: The Yemen Social Fund for Development Approach L. Al-Iryani, A. de Janvry, and E. Sadoulet
- 4. The World Bank's Health Projects in Timor-Leste: The Political Economy of Effective Aid A. Rosser and S. Bremner

- 5. Afghanistan's Health Sector Rehabilitation Program M. K. Rashidi, F. Feroz, N. Kamawal, H. Niayesh, G. Qader, and H. Saleh
- 6. Education from the Bottom Up: UNICEF's Education Program in Somalia

J. H. Williams and W. C. Cummings

7. Success When Stars Align: Public Financial Management Reforms in Sierra Leone

H. Tavakoli, W. Cole, and I. Ceesay

- 8. Liberia's Gender-Sensitive Police Reform: Starting from Scratch? Improving Representation and Responsiveness L. Bacon
- 9. Impact Assessment of the Facilitadores Judiciales Program in Nicaragua

M. Barendrecht, M. Kokke, M. Gramatikov, R. Porter, M. Frishman, and A. Morales

10. Finn Church Aid and the Somali Peace Process R. Lepistö and J. Ojala

## Gisselquist, R. M. (ed.). 'The Challenge of Chronic State Weakness: Implications for State-building'.

- 1. The Challenge of Chronic State Weakness R. M. Gisselquist
- 2. Intervention, Aid, and Institution-Building in Iraq and Afghanistan: A Review and Critique of Comparative Lessons J. Monten
- 3. International Aid to Southern Europe in the Early Post-war Period: The Cases of Greece and Italy D. A. Sotiropoulos
- 4. Aid and State Development in Ghana and South Korea J. Kim
- 5. Foreign Aid and the Failure of State-Building in Haiti under the Duvaliers, Aristide, Préval, and Martelly T. F. Buss
- 6. Consociational Settlements and Reconstruction: Bosnia in Comparative Perspective (1995 to present) S. Stroschein

7. Aid, Accountability, and Institution-Building in Ethiopia: A Comparative Analysis of Donor Practice B. Abegaz

## Niño-Zarazúa, M. (ed.). 'Education Aid and Development: Have We Got It Right?'.

- 1. Introduction: Foreign Aid and Education: Principles and Actions M. Niño-Zarazúa
- 2. The Effectiveness of Foreign Aid to Education: What Can Be Learned?

A. Riddell

- 3. International Organizations and the Future of Educational Assistance
  - P. Heyneman and B. Lee
- 4. Making Aid Work for Education in Developing Countries: an Analysis of Aid Effectiveness for Primary Education Coverage and Quality

K. Birchler and K. Michaelowa

- 5. What Works to Improve Education Quality in Developing Countries
  - S. Masino and M. Niño-Zarazúa
- 6. Class Size versus Composition: Do They Matter for Learning in East Africa? S. Jones
- 7. How to Move from Measuring Separate Outcomes of School Food Provision to an Integrated Indicator Related to Learning? A. Gelli, F. Espejo, J. Shen, and E. Kristjansson

### Niño-Zarazúa, M. (ed.). 'Aid and Public Health Policy in Developing Countries'.

- 1. Introduction: Foreign Aid and Public Health Interventions in **Developing Countries** M. Niño-Zarazúa
- 2. Aid Effectiveness in the Health Sector M. Martínez Álvarez and A. Acharya
- 3. Global Collective Action in Health: The WDR+20 Landscape of Core and Supportive Functions N. Blanchet, M. Thomas, R. Atun, D. Jamison, F. Knaul, and R. Hecht

- 4. External Assistance and Aid Effectiveness for Maternal and Child Health: Challenges and Opportunities Z. A. Bhutta and S. Aleem
- 5. Universal Access to Drinking Water: The Role of Foreign Aid R. Bain, R. Luyendijk, and J. Bartram
- 6. Every Drop Counts: Assessing Aid for Water and Sanitation P.B. Anand
- 7. International Aid for Diarrheal Disease Control: Effectiveness and Potential for the Future R. A. Cash and J. Potter
- 8. What Do We Know about Non-Clinical Interventions for Preventable and Treatable Childhood Diseases in Developing Countries? M. Seguin and M. Niño-Zarazúa
- 9. Policy Interventions against HIV/AIDS, Tuberculosis and Malaria in Developing Countries: What are their Micro-Economic effects? A. B. Amaya and M. Niño-Zarazúa
- 10. On the Effectiveness of Policy Interventions Against Neglected Tropical Diseases M. Quattri and M. Niño-Zarazúa
- 11. Conclusion M. Niño-Zarazúa

Page, J., S. Jones, and F. Tarp (eds). 'Aid, Structural Transformation and Employment'.

Pritchett, L., M. Woolcock, and M. Andrews. 'Remaking the Developing Project: Why Building State Capability for Implementation is the 21st Century Development Problem, and What to do About It'.

## A1.2 Individual journal articles and book chaptersii

## A1.2.1 Published and forthcoming

Addison, T., C. Arndt, and F. Tarp (2011). 'The Triple Crisis and the Global Aid Architecture'. African Development Review, 23(4): 461-478.

Andrews, M., L. Pritchett, and M. Woolcock (2013). 'Escaping Capability Traps Through Problem Driven Iterative Adaptation (PDIA)'. World Development, 51: 234-244.

Arndt, C., S. Jones, and F. Tarp. (2010). 'Aid, Growth, and Development: Have We Come Full Circle?'. Journal of Globalization and Development, 1(2): 1-29.

Arndt, C., S. Jones, and F. Tarp (forthcoming). 'Aid Effectiveness'. In M. Ndulu (ed.), Problems, Promises, and Paradoxes of Aid: Africa's Experience. Ohio: Ohio University Press.

Gisselquist, R.M. (forthcoming 2014). Paired Comparisons and Theory Development: Considerations for Case Selection'. PS: Political Science & Politics, 47(2).

Jones, S., and F. Tarp (forthcoming). 'Jobs and Welfare in Mozambique'. In G. Betcherman (ed.), World Development Report 2013: Country Case Study Volume. Washington, DC: World Bank.

Juselius, K., N.F. Møller, and F. Tarp (2012). 'The Long-Run Impact of Foreign Aid in 36 African Countries: Insights from Multivariate Time Series Analysis'. Oxford Bulletin of Economics and Statistics.

Mekasha, T.J. and F. Tarp (2013). 'Aid and Growth: What Meta-Analysis Reveals'. The Journal of Development Studies, 49(4): 564-583.

Nanivazo, M. (forthcoming). 'Social Transfer Programmes and School Enrolment in Malawi: A Micro-simulation'. African Development Review.

Pritchett, L., M. Woolcock, and M. Andrews (2013). 'Looking Like a State: Techniques of Persistent Failure in State Capability for Implementation'. The *Journal of Development Studies*, 49(1): 1-18.

Tarp, F. (2011). 'Foreign Aid and Development'. In B. Badie, D. Berg-Schlosser, and L. Morlino (eds), International Encyclopedia of Political Science. Thousand Oaks, CA: SAGE Publications, Inc.

Tarp, F. (2012) 'The Rationale of Foreign Aid Policy'. In P. Andersen, I. Henriksen, J. H. Petersen and H. Zobbe (eds), How Does the World Look?. Copenhagen: Jurist og Økonomforbundets Forlag.

Woolcock, M. (2013). 'Using Case Studies to Explore the External Validity of 'Complex' Development Interventions'. Evaluation, 19(3): 229-248.

## Appendix 2: Events and presentations

- 1. Seminar: 'Aid and Development, Asia and Africa: The Role of Infrastructure and Capacity Development, East Asia: Growth and its Implication for African Development', School of Oriental and African Studies (SOAS), University of London, UK, 17-18 February 2011.
- 2. Seminar: 'The Impact of Aid: What is the Impact of Aid, Economic Development, Recipient Governments and Donors Themselves?', Sida, Stockholm, Sweden, 9 March 2011.
- 3. Presentation: 'Aid, Growth and Development: Are We Getting Results?', Finnish Development Days, Ministry for Foreign Affairs of Finland, Helsinki, Finland, 22 March 2011.
- 4. Seminar: 'Aid: Working for Development', Danish Ministry for Foreign Affairs, Copenhagen, Denmark, 17 June 2011.
- 5. Conference: 'Foreign Aid: Research and Communication', UNU-WIDER, Helsinki, Finland, 30 September-1 October 2011.
- 6. Conference: 'Macroeconomic Management of Foreign Aid', Nairobi, Kenya, 2-3 December 2011.
- 7. Seminar: 'Development Effectiveness: New Ideas, New Challenges', Development Policy Department, Ministry for Foreign Affairs of Finland, Helsinki, Finland, 19 January 2012.
- 8. ReCom Results Meeting: 'Aid, 'Growth and Macroeconomic Management', Copenhagen, Denmark, 27 January 2012.
- 9. Seminar: Sida Development Talks: Development Assistance and Growth, Sida, Stockholm, Sweden, 13 March 2012.
- 10. Seminar: 'Aid and Growth: an Overview, London, UK, 19 March 2012.
- 11. Seminar: 'Two Steps Forward, One Step Back? Progress, Setbacks, and Possibilities for Democratization, Africa', Helsinki, Finland, 18 April 2012.
- 12. Lecture: 'Foreign Aid and Domestic Politics, Recipient Countries', Stockholm, Sweden, 10 May 2012.
- 13. ReCom Results Meeting 'Democracy and Fragility', Stockholm, Sweden, 10 May 2012.
- 14. Seminar: 'Does Aid Contribute to Economic Development?', Helsinki, Finland, 15 May 2012.
- 15. Seminar: 'Cutting Edge Executive Education', Harvard University, Cambridge, Massachusetts, USA, 15-18 May 2012.
- 16. Seminar: 'Foreign Aid and Democracy in Africa', London, UK, 17 May 2012.
- 17. Seminar: 'Urban Governance and Service Delivery, Africa', Cape Town, South Africa, 5 June 2012.
- 18. Seminar: 'Donors, Democracy and Development: Unravelling the Impact of Aid in Africa', Accra, Ghana, 8 June 2012.

- 19. Gender Equality Theme Meeting, Helsinki, Finland, 12-13 July 2012.
- 20. Seminar: 'Urban Governance and Service Delivery, Africa: The Role of National Policies, Institutions, and Politics', within World Urban Forum 6, Naples, Italy, 5 September 2012.
- 21. Conference presentation: 'Successful Societies', Princeton University, New Jersey, USA, 21 September 2012.
- 22. ReCom Results Meeting: 'Jobs: Aid at Work', Copenhagen, Denmark, 8 October 2012.
- 23. Presentation: 'Aid, Growth and Development', Danish Economic Society, Copenhagen, Denmark, 9 October 2012.
- 24. Presentation: 'Has Foreign Aid Improved Governance in Sub-Saharan Africa? Experimental and Quasi-Experimental Findings' at Nordic Africa Days, Reykjavík, Iceland, 18-19 October 2012.
- 25. Presentation at a UNDP Seminar: New York, USA, 24 October 2012.
- 26. Presentation: 'Building State Capability: A PDIA Approach' at CID's 5th Annual Global Empowerment Meeting (GEM12), Harvard Kennedy School, Cambridge, Massachusetts, USA, 25 October 2012.
- 27. Presentation made to the World Bank Middle East and North Africa (MENA) region team, Washington DC, USA, 30 October 2012.
- 28. Presentation made to USAID governance group, Washington DC, USA, November 2012.
- 29. Presentation: 'Aid, Growth and Development', Danish Society for International Development and the Centre for African Studies, Copenhagen University, Copenhagen, Denmark, 2 November 2012.
- 30. Presentation: 'Does Foreign Aid Help?', IBIS General Assembly, Copenhagen, Denmark, 3 November 2012.
- 31. Presentation at EU European Social Fund Conference, the Netherlands, 6 November 2012.
- 32. Presentation: SIDA Development Talks, 'Capturing and Communicating Results: Complex Contributions', Stockholm, Sweden, 8 November 2012.
- 33. Presentation of ReCom results at workshop, 'The New Global Development Agenda', Ministry for Foreign Affairs of Finland and UNU-WIDER, Helsinki, Finland, 12 November 2012.
- 34. Presentation at MIT Department of Urban Studies and Planning Seminar: Cambridge, Massachusetts, USA, 14 November 2012.
- 35. Presentation at DFID, London, UK, 15 November 2012.
- 36. Workshop: 'Growth and Building State Capability through Problem-Driven Iterative Adaptation (PDIA)', Government of Uganda, Kampala, Uganda, 6-8 December 2012.
- 37. Presentation at RAND Graduate School Seminar: Santa Monica, USA, 10 January 2013.
- 38. Seminar at American University, School of International Service, Washington DC, USA, 30 January 2013.

- 39. ReCom Results Meeting: 'Aid and the Social Sectors', Stockholm, Sweden, 13 March 2013.
- 40. Guest lecture at Johns Hopkins University, School of Advanced International Studies, Washington DC, USA, 1 April 2013.
- 41. Presentation: 'Does Aid Contribute to Economic Development?', African Development Bank, Tunis, Tunisia, 4 April 2013.
- 42. Presentation at World Bank Institute, Washington DC, USA, 29 April 2013.
- 43. Presentation at the Harvard University Cutting Edge Executive Education Seminar, Cambridge, Massachusetts, USA, 13-17 May 2013.
- 44. Presentation at Civilian Training of the US Department of Defense, Washington DC, USA, 23 May 2013.
- 45. ReCom Results Meeting: 'Aid and Our Changing Environment', Stockholm, Sweden, 4 June 2013.
- 46. Promotion and exhibition booth on ReCom at the Deutsche Welle Global Media Forum, Bonn, Germany, 17-19 June 2013.
- 47. Promotion and exhibition booth on ReCom at the 8<sup>th</sup> World Conference of Science Journalist 2013, Helsinki, Finland, 24-28 June 2013.
- 48. Workshop: 'How to Make News Out of Foreign Aid', 8th World Conference of Science Journalists, Helsinki, Finland, 24 June 2013.
- 49. Lecture at World Bank DEC, Washington DC, USA, 26 June 2013.
- 50. Guest lecture at Sydney Law School, Sydney, Australia, 17 August 2013.
- 51. Lecture at South African National Treasury, Pretoria, South Africa, August 2013.
- 52. Presentation at Harvard Business Review, Brasil Public Management Training for local government officials, Brasilia, Brazil, 20 August 2013.
- 53. Symposium: 'Experimental and Non-Experimental Methods to Study Governance Performance: Contributions and Limits', New York, USA, 22-23 August 2013.
- 54. Lecture at Syracuse University, New York, USA, September 2013.
- 55. Briefing: ReCom programme for UNU-WIDER conference participants held, Helsinki, Finland, 19 September 2013.
- 56. Guest lecture at Columbia University, New York, USA, 20 September 2013.
- 57. Lecture at Johns Hopkins University Baltimore, USA, September 2013.
- 58. Public lecture at University of Bath, Bath, UK, 14 October 2013.
- 59. Panel discussion at American Evaluation Association, Washington DC, USA, 17 October 2013.
- 60. ReCom Results Meeting: 'Challenges, Fragility and Governance', Copenhagen, Denmark, 23 October 2013.
- 61. Workshop: 'Untying Development: Promoting Governance Governments with Impact', Harvard University, Cambridge, Massachusetts, USA, 23 October 2013.

- 62. Panel discussion: 'Impact Evaluation as a Learning Tool for Development Effectiveness Tomorrow', Inter-American Development Washington DC, USA, 24 October 2013.
- 63. Joint UNU and UNU-WIDER event: 'Fragility and Aid: What Works?', New York, USA, 25 October 2013.
- 64. Presentation: 'ReCom: What Works, Foreign Aid', Ministry for Foreign Ministry of Finland's Planning Day, Helsinki, Finland, 31 October 2013.
- 65. Lecture at New York University, USA, October 2013.
- 66. Conference presentation at LACEA-LAMES 2013, Latin American Economics Association (LACEA), Mexico City, Mexico, 2 November 2013.
- 67. Presentation: 'Aid, Environment and Climate Change', IDB-NDF seminar on Innovative Climate Financing Mechanisms, Nordic Development Fund, Helsinki, Finland, 4 November 2013.
- 68. Presentation at World Bank Institute Seminar, Washington DC, USA, 5 November 2013.
- 69. Panel discussion: 'Foreign Aid and Democracy, Africa', Carnegie Endowment for International Peace, Washington DC, USA, 6 November 2013.
- 70. Lecture at Australian Embassy, Jakarta, Indonesia, 11 November 2013.
- 71. Presentation: Overseas Development Institute, London, UK, 15 November 2013.
- 72. Project meeting: 'Aid and Institution-Building, Fragile States: Lessons from Comparative Cases', Helsinki, Finland, 15-16 November 2013.
- 73. Presentation at World Bank Seminar, Myanmar, 18 November 2013.
- 74. Presentation at World Bank Seminar, Nairobi, Kenya, 2 December 2013.
- 75. Project meeting: 'Good Aid, Hard Places: Learning from What Has Worked, Fragile Contexts', Helsinki, Finland, 12-13 December 2013.
- 76. ReCom Results Meeting: 'Aid for Gender Equality', Copenhagen, Denmark, 16 December 2013.

## Appendix 3: Commissioned papers

Papers commissioned on social sector theme for ReCom programme by UNU-WIDER and DIIS (marked by asterisk \*). Papers are summarized very briefly in terms of subject matter and implications.

Addison, T. and P.B. Anand (2012). 'Aid and infrastructure financing: Emerging challenges with a focus on Africa'. WIDER Working Paper 2012/056. Helsinki: UNU-WIDER.

The central argument of this study is that given the magnitude of the investment in infrastructure that is required, especially in Africa, the role of foreign aid in the future should be distinctly different. Aid will still be required to continue to fill the 'savings gap' in some small countries and land-locked countries. In most other countries, aid can play a very different role in facilitating the creation of institutional mechanisms that help mobilize more funding from other sources. These include domestic revenues (which already fund a large proportion of infrastructure), investments by China and the other 'BRICS', sovereign wealth funds, and infrastructure funds. The study provides an overview of evidence on infrastructure needs and also possible magnitudes of flows from different sources for investment in infrastructure.

Albrecht, P. (2013).\* 'Local actors and service delivery in fragile situations'. DIIS Report 2013:24. Copenhagen: Danish Institute for International Studies.

This report demonstrates why a broad definition of the state is necessary when programmes that aim to strengthen service delivery in fragile situations are being designed. Three case studies are presented that explore varying levels of external support to: community policing in Sierra Leone; primary healthcare provided by village doctors in Bangladesh; and primary education provided by NGOs and madrasas in Pakistan. On this basis two arguments are presented. First, the quantity and quality of service provision cannot be equated with a set of centrally governed institutions. It is performed by a broad range of actors, including NGOs, grassroots, community-based, faith-based, traditional voluntary organizations, and customary organizations (chiefs and tribal leaders) as well as religious leaders. Second, no local service provider acts independently of the broader system of governance in which it operates. As a rule, local service providers are part of an extensive system of governance that incorporates a variety of centrally and locally embedded organizations.

Ali, A., M. Niño-Zarazúa, F. Tarp, and T. Addison (forthcoming). 'On the impact of sector-specific foreign aid on welfare outcomes'. WIDER Working Paper. Helsinki: UNU-WIDER.

The paper conducts a cross-country analysis on sector-specific aid impacts on welfare outcomes that are associated with education, healthcare, water and sanitation policies, while controlling for other factors that influence such outcomes. The paper contributes to the existing literature in that it intends to examine the dynamic interconnectivity and complementarity between social sector policies and related welfare outcomes instead of just focusing on specific sectors and outcomes, giving a more holistic perspective to aid effectiveness in a dynamic setting. The paper also examines various aid modalities and assesses how these may influence welfare outcomes, as well as the source of the earmarked aid, e.g., bi- versus multi-lateral. The paper concludes with some reflection on policy design and practice.

Amaya, A.B. and M. Niño-Zarazúa (forthcoming). 'Policy interventions against HIV/AIDS, tuberculosis and malaria in developing countries: What are their microeconomic effects?'. WIDER Working Paper. Helsinki: UNU-WIDER.

HIV/AIDS, tuberculosis (TB), and malaria remain the leading causes of morbidity and mortality, primarily in developed countries. However, besides the health burden, these diseases also have negative macroeconomic effects due to decreased economic growth, primarily in SSA. At the microeconomic level these effects are much more evident, such as issues caused by loss of wages and lower monthly income; absenteeism from education and work; cost of treatment; and other expenses involved with care and transportation to health centres. Researching these microeconomic effects was done through 16 studies. It was found that cash transfer incentives for HIV, TB, and malaria, have positive short-term effects, yet these do not usually translate into long-term results. The uptake of microloans showed positive economic results for households, yet these interventions did not become widespread, with in some cases, a small number of eligible individuals requesting loans. Initiatives which provide greater access to treatment for these diseases have been shown to have important effects on employment and productivity, yet they must be coupled with support measures to avoid the secondary costs associated with seeking this treatment, such as transportation.

Anand, P.B. (2013). 'Every drop counts: Assessing aid for water and sanitation'. WIDER Working Paper 2013/025. Helsinki: UNU-WIDER.

Water and sanitation sectors have been the 'natural' subjects of aid for several decades. However, these sectors also were among those most affected by changes in aid approaches and tools. Though the overall magnitude of aid to water supply and sanitation (WSS) activities has increased significantly, it is not easy to connect aid with specific outcomes, such as reduction on mortality due to waterborne diseases or number of people with improved access. Though the WSS sector attracts about US\$7.4 billion of aid, this is perhaps smaller than what is needed to achieve the MDG sanitation target—let alone fully realizing the human right to water and sanitation. Donors need to be aware of 'accountability paradox' by which a demand for greater accountability can push investments away from much needed but difficult to measure institutional reforms towards easily measurable but perhaps somewhat less effective physical infrastructure. Further progress may require the development of appropriate tools so that aid is used more often in effectively catalyzing a range of institutions in finding solutions and less in terms of directly investing in delivery of services.

Bain, R., R. Luyendijk, and J. Bartram (2013). 'Universal access to drinking water: The role of aid '. WIDER Working Paper 2013/088. Helsinki: UNU-WIDER.

Financing and the role of aid within the water sector are poorly understood. We estimate the levels of spending achieved in developing countries during the MDGs period to be US\$80 billion per year. Aid represented a substantial proportion of total sector financing in SSA and Oceania (25 and 10 per cent, respectively) but less in other regions. Longitudinal analysis shows no detectable effect of volume of aid on progress. Importantly, we were unable to evaluate 'catalytic' aid. As the world approaches universal access to water, aid must increasingly focus on sustaining progress and assisting countries that still have sizable unserved populations.

Baldwin, K. and R.R. Bhavnani (2013). 'Ancillary experiments: Opportunities and challenges'. WIDER Working Paper 2013/024. Helsinki: UNU-WIDER.

'Ancillary experiments' are a new technique whereby researchers use a completed experiment conducted by others to recover causal estimates of a randomized intervention on new outcomes. The method requires pairing new outcome data with randomized treatments the researchers themselves did not oversee. Since ancillary experiments rely on interventions that have already been undertaken, oftentimes by governments, they can provide a low-cost method with which to identify the effects of large-scale and possibly ethically difficult interventions. We define this technique, identify the small but growing universe of studies that employ ancillary experiments in political science and economics, and assess the benefits and limitations of the method.

Barrientos, A. and J.M. Villa (2013). 'Evaluating antipoverty transfer programmes in Latin America and sub-Saharan Africa: Better policies? Better politics?'. WIDER Working Paper 2013/009. Helsinki: UNU-WIDER.

The paper provides a comparative analysis of the incidence of evaluation methods in antipoverty transfer programmes in Latin America and SSA. The paper identifies two broad explanations for the incidence of evaluation in antipoverty transfer programmes in developing countries, one emphasizing the advantages of a shift towards evidence-based development policy, and a second explanation emphasizing political factors. The paper assesses their relevance in the context of Latin American and SSA countries with a view to throwing light on whether the evaluation of antipoverty transfer programmes will lead to an improved effectiveness of the relevant government agencies.

Baulch, B. and L. Vi An Tam (2013). 'The progressivity and regressivity of aid to the social sectors'. WIDER Working Paper 2013/075. Helsinki: UNU-WIDER.

This paper analyses the distribution of total aid and aid to the social sectors between 2009 and 2011. Its key findings are four-fold. First, despite the stated objectives of donors, total aid disbursements are broadly neutral, favouring neither the most deprived nor relatively wellsoff countries. Second, the pattern of social sector aid disbursements follows those for total aid. Third, the aid allocation patterns of bi- and multi-lateral donors differ, with the latter donors generally being more focused on the poorest countries. Finally, the distribution of aid for health and population is more progressive than that for education or other social sectors.

Bhutta, Z.A. and S. Aleem (2013). 'A review of external assistance and aid effectiveness for maternal and child health: Challenges and opportunities'. WIDER Working Paper 2013/099. Helsinki: UNU-WIDER.

This paper primarily focuses on how global funding has supported interventions that have proven to be successful in reducing maternal, newborn, and child mortality around the world. The growth rate of development assistance targeted towards these specific interventions has varied greatly over the past years, and we highlight the channels through which funds reach their target recipients. An important conclusion to note is the need for donors to align their programmes with government-defined priorities in order to ensure the achievement of national development objectives, long-term sustainability and success.

Birchler, K. and K. Michaelowa (2013). 'Making aid work for education in developing countries: An analysis of aid effectiveness for primary education coverage and quality'. WIDER Working Paper 2013/021. Helsinki: UNU-WIDER.

This paper examines the effect of education aid on primary enrolment and education quality. Using the most recent data on aid disbursements and econometric specifications inspired by the general aid effectiveness literature, we find some evidence that donors' increase in funding has substantially contributed to the successful increase in enrolment over the last 15 years. The most robust effect is obtained by aid for education facilities and training. In addition, we find complementarities between aid for primary and secondary education. Our qualitative comparative analysis of education quality also highlights the relevance of a balanced mix of educational expenditures.

Blanchet, N., M. Thomas, R. Atun, D. Jamison, F. Knaul, and R. Hecht (forthcoming). 'Global collective action in health: The WDR+20 landscape of core and supportive functions'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper discusses shifts in DAH since 1990 while analysing the nature of the current distribution of funding and reflecting on the future. In particular, the paper introduces an 'essential functions' framework, which provides a function-based taxonomy for global collective action in health. The paper discusses several prominent new actors and modalities for DAH, and attempts to map them onto the framework in order to analyse trends in the prioritization among essential functions. The paper briefly reviews major critiques of the current DAH landscape but also identifies several potential advantages. The paper concludes by discussing the main findings and their implications for the future division of labour, investment strategies, and governance of global collective action for health.

Bourguignon, F. and J.-P. Platteau (2012). 'Does aid availability affect effectiveness in reducing poverty?'. WIDER Working Paper 2012/054. Helsinki: UNU-WIDER.

This paper addresses the issue of the impact of aid supply on aid effectiveness. First, there is a review of research works that deal with the problem of governance in donor-recipient relationships and are susceptible of highlighting effects of aggregate aid availability. Second, a conceptual framework is provided that explicitly incorporates a tradeoff between considerations of needs and governance. The impact of aid supply on the manner in which a donor agency allocates the available money between countries differing in terms of both needs and domestic governance is analysed. The central conclusion is that a donor's utility function that embodies the need-governance trade-off and the associated optimization mechanism yield a meaningful rule to guide inter-country allocation of aid resources.

Bratton, M. (2013). 'Measuring government performance in public opinion surveys in Africa: Towards experiments?'. WIDER Working Paper 2013/023. Helsinki: UNU-WIDER.

In examining the study of government performance, this paper asks whether field experiments can improve the explanatory precision of results generated by public opinion surveys. Survey research on basic health and education services SSA shows that the perceived 'user friendliness' (or ease of use) of services drives popular evaluations of government performance. For the reliable attribution of causality, however, surveys and field experiments, combined in a variety of mixed research designs, are more rigorous and reliable than either method alone. The paper proposes a menu of such designs.

Cash, R.A. and J. Potter (forthcoming). 'International aid for diarrhoeal disease control: Effectiveness and potential for the future'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper provides an analysis of the role of the international development co-operation in facilitating the scalability transferability of preventive and curative health strategies against diarrhoeal diseases in developing countries. The paper discusses the state of affairs in global health initiatives and examines what policy strategies have (and have not) worked in developing countries. The analysis is based on quantitative analysis and a series of in-depth interviews with leading experts in the field.

Chiripanhura, B.M. and M. Niño-Zarazúa (forthcoming). 'Effectiveness of aid: Experiences from sub-Saharan Africa'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper contributes to the expanding literature on aid effectiveness. There is growing concern that despite decades of aid flows to some developing countries, there has been no significant change in growth and development. This paper contributes to possible explanations for this occurrence by exploring existing literature and highlighting the successes and challenges of aid. It identifies some of the main reasons for the success and/or failure of aid, including corruption and the multiplicity of objectives. Using an unbalanced panel of 51 African countries, with data spanning from 1980 to 2010, the paper argues, in line with mainstream research, that aid has positive impact on economic growth. Econometric analyses using fixed effects and the GMM models confirm the positive and significant impact of aid on economic growth. Fixed effects models suggest the existence of monetary pre-election stimulus effects, linked to political business cycles, on growth but GMM results do not confirm this.

Dehejia, R. (2013). 'The porous dialectic: Experimental and non-experimental methods in development economics'. WIDER Working Paper 2013/011. Helsinki: UNU-WIDER.

This paper provides a survey of six widely used non-experimental methods for estimating the impact of programmes in the context of developing economies (instrumental variables; regression discontinuity; direct matching; propensity score matching; linear regression and nonparametric methods; and difference-in-differences) and assesses their internal and external validity relative both to each other and to randomized controlled trials (RCTs). While RCTs can achieve the highest degree of internal validity when cleanly implemented in the field, the availability of large, nationally representative datasets offer the opportunity for a high degree of external validity using nonexperimental methods. Whereas these methods are often presented as competing alternatives, the authors argue that each method has merits in some context and that experimental and non-experimental methods are complements rather than substitutes.

DiCaprio, A. (2011). 'The demand side of social protection: Lessons from Cambodia's labour rights experience'. WIDER Working Paper 2011/81. Helsinki: UNU-WIDER.

In fragile states, social protection programmes are often a kaleidoscope of projects financed and implemented by a variety of donors, government agencies, and NGOs. Such an environment does not foster a strong sense of ownership by beneficiaries, which weakens the likelihood of sustainability in the absence of donor interest or government commitment. Loosening demand-side constraints may provide an incentive to sustain social progress, but it is unclear what political or social structures can effectively facilitate voice in fragile states. Cambodia's unusual social protection trajectory offers some insight by presenting an example where labour rights have made substantial progress while all other protections lag. The authors assess whether the changed external environment might facilitate activism in other areas of social protection. Their analysis suggests that using an island of excellence to build institutions that open political space for activism can be a successful strategy in states where governments are unable or unwilling to provide comprehensive social protection systems.

Friis-Hansen, E. and S.M.C. Ravnkilde (2013).\* 'Social accountability mechanisms and access to public service delivery in rural Africa'. DIIS Report: Copenhagen: Danish Institute for International Studies.

Social accountability can be broadly defined as citizen-led action to demand accountability from service providers. This study aims to generate evidence-based conclusions regarding experiences

supporting social accountability mechanisms, the focus being on rural Africa in the context of decentralization. The report reviews experiences in supporting social accountability mechanisms in rural Africa, including Public Expenditure Tracking Surveys, rights based approaches, participatory budgeting, community-based monitoring, participatory priority setting, and demand-driven service provision. The study finds that technical social accountability mechanisms in rural Africa are seriously under-institutionalized and would be more effective if anchored in district and sub-district level institutions and ignore the political context and power politics in which they take place. Training for the transformation of local government staff and sustained devolution of resources and powers can support an enabling environment for citizen realization of rights and participation in development and governance.

Garcia, F.M. and L. Wantchekon (2013). 'A graphical approximation to generalization: Definitions and diagrams'. WIDER Working Paper 2013/082. Helsinki: UNU-WIDER.

The fundamental problem of external validity is not to generalize from one experiment so much as to experimentally test generalizable theories. That is, theories that explain the systematic variation of causal effects across contexts. Here the authors show how the graphical language of causal diagrams can be used in this endeavour. Specifically, it is demonstrated how generalization is a causal problem, how a causal approach is more robust than a purely predictive one, and how causal diagrams can be adapted to convey partial parametric information about interactions.

Gelli, A., F. Espejo, J. Shen, and E. Kristjansson (forthcoming). 'How to move from measuring separate outcomes of school food provision to an integrated indicator related to learning? Aggregating impacts of school feeding health and programmes on education, nutrition. Two proposed methodologies'. WIDER Working Paper. Helsinki: UNU-WIDER.

Abstract forthcoming.

Gisselquist, R.M. and M. Niño-Zarazúa (2013). 'What can experiments tell us about how to improve governance?'. WIDER Working Paper 2013/077. Helsinki: UNU-WIDER.

In recent years, RCTs have become increasingly popular in the social sciences. In development economics, in particular, their use has attracted considerable debate in relation to the identification of 'what works' in development policy. This paper focuses on a core topic in development policy: governance. It aims to address two key questions: (1) What have the main contributions of RCTs been to the study of governance? And, (2) what could be the contributions, and relatedly the limits of such methods? To address these questions, a systematic review of experimental and quasi-experimental methods to study government performance was conducted. It identified 139 relevant papers grouped into three major types of policy interventions that aim to: (1) improve supply-side capabilities of governments; (2) change individual behaviour through various devices, notably incentives; and (3) improve informational asymmetries. We find that RCTs can be useful in studying the effects of some policy interventions in the governance area, but they are limited in significant ways: they are ill-equipped to study broader governance issues associated with macro-structural shifts, national level variation in institutions and political culture, and leadership. RCTs are best for studying targeted interventions, particularly in areas of public goods provision, voting behaviour, and specific measures to address corruption and improve accountability. However, they can provide little traction on whether the intervention is transferable and could work (and why) in other contexts, and in the longer run.

Gisselquist, R.M., M. Niño-Zarazúa, and J. Sajuria (forthcoming). 'Improving government performance in developing countries: A systematic review'. WIDER Working Paper. Helsinki: UNU-WIDER.

Government performance matters. How and how well public institutions provide programmes and services in areas, such as education, health, water and sanitation, as well as infrastructure, has farreaching impacts not only on quality of life, but also on relations between citizens and government and on economic development. This paper presents a model of quality of government performance that highlights three sets of factors: incentives that affect how individuals respond to and engage with government services, information asymmetries, and institutional capabilities. The paper then presents a systematic review of the literature and findings from this review with respect to these three key factors. Overall, the authors find that experimental and quasi-experimental studies show support for all three factors as drivers of change in government performance, but especially for incentives, which are usually in cash. However, we argue, this appears to be more a result of what can be straightforwardly studied with experimental and quasi-experimental methods, than a true reflection of the factors that most influence government performance. Factors that theory suggests may also be important, such as institutional reforms at the national level, and long-term feedback effects, are not generally considered in experimental and quasi-experimental studies because they are so difficult to study with these methods. We argue that the literature reviewed provides some useful findings about generally small-scale interventions that could work to improve government performance, but it does not get us very far in developing and testing a major theory of change.

Grawe, R. (2013). 'Innovation at the World Bank—selective perspectives over three decades 1975-2005'. WIDER Working Paper 2013/129. Helsinki: UNU-WIDER.

The World Bank is uniquely positioned to identify and disseminate innovative development practices. Based on his thirty-year experience as a World Bank staff member, the author takes an institutional perspective on the innovation climate at the World Bank focusing on dominant development paradigms, client and stakeholder relationships, as well as the organization's operational toolkit as key factors influencing the climate for innovation. The interaction and impact of these factors are illustrated through selective examples of innovative programmes or practices.

Green, E. (2013). 'The rise and fall of decentralization in contemporary Uganda'. WIDER Working Paper 2013/078. Helsinki: UNU-WIDER.

There has long been an emphasis on the importance of decentralization in providing better quality public services in the developing world. In order to assess the effectiveness of decentralization I examine here the case study of Uganda, which has seen major decentralization of power over the last quarter-century. Initial excitement about Uganda's decentralization programme has, however, tapered off in recent years due to a number of problems outlined here. The paper suggests that many of these problems are the consequence of broader problems of poor state capacity and institutions that are endemic in developing countries.

Heyneman, S.P. and B. Lee (2013). 'International organizations and the future of education assistance'. WIDER Working Paper 2013/018. Helsinki: UNU-WIDER.

Education began to be included as a component of foreign assistance in the early 1960s as it is a principal ingredient of development. A number of multi- and bi-lateral agencies were established around this time to implement various types of aid programmes, however, their effectiveness is constantly being questioned and challenged due to a variety of problems. This paper reviews the past and current activities of bi- and multi-lateral organizations as well as private donors in education aid, examines their effectiveness, discusses major problems in implementing educational programmes, and suggests ways to improve aid in education.

Humphreys, M. (forthcoming). 'The ethics of field experimentation'. WIDER Working Paper. Helsinki: UNU-WIDER.

Social scientists are increasingly engaging in experimental research in developing countries that carries risks for subject and others. They are doing so with few clear ethical guidelines; indeed the main principles of research ethics currently employed by social scientists were developed by and for medical researchers that were focused on a different set of questions than those facing field experimentalists in social science. This paper discusses research ethics as currently understood in this field, focusing especially on the problem of subject consent. It then describes a set of alternative consent procedures that meet many of the ethical goals of standard processes but that may be more operationalizable for policy experiments. Finally, it describes an argument—the spheres of ethics argument—that researchers can employ for policy experiments that are undertaken in partnership with governments or other third parties and in which attaining consent is not possible and suggest conditions that should be met to support this argument.

Jones, S. (2013). 'Class size versus class composition: What matters for learning in East Africa?'. WIDER Working Paper 2013/065. Helsinki: UNU-WIDER.

Raising schooling quality in low-income countries is a pressing challenge. Substantial research has considered the impact of cutting class sizes on skills acquisition. Considerably less attention has been given to the extent to which peer effects, which refer to class composition, also may affect outcomes. This study uses new micro-data from East Africa, incorporating test score data for over 250,000 children, to compare the likely efficacy of these two types of interventions. Endogeneity bias is addressed via fixed effects and instrumental variables techniques. Although these may not fully mitigate bias from omitted variables, the preferred IV results indicate considerable negative effects due to larger class sizes and larger numbers of overage-for-grade peers. The latter, driven by the highly prevalent practices of grade repetition and academic redshirting, should be considered an important target for policy interventions.

Kjertum, J. (forthcoming).\* 'Social protection in fragile situations'. DIIS Report. Copenhagen: Danish Institute for International Studies.

Given the little agreement on the meaning of social protection, the study starts out with a relatively thorough discussion of the concept and the various meanings attached to it. Subsequently, the report analyses experience with macro-level co-ordination of social protection measures in Afghanistan and Nepal, and finally, it turns to micro-level instruments, including cash transfers, food aid, school feeding, social funds, and community driven development programmes. The report concludes that measures will need to be promotive and transformative in their approach rather than only protective and preventing if they should go beyond temporary mitigation of adverse conditions. Moreover, interventions which build on the resilience of people and communities and make use of existing structures already in place are likely to be more successful than pre-defined programmes.

Lambright, G.M.S. (2012). 'Opposition politics and urban service delivery in Kampala, Uganda'. WIDER Working Paper 2012/051. Helsinki: UNU-WIDER.

Uganda, like other African countries, has implemented reforms to decentralize political authority to local governments and reintroduce multiparty elections. This combination creates opportunities for national partisan struggles to emerge in local arenas and influence local service delivery. This study explores how partisan politics affects urban service delivery in Uganda through an examination of service provision by Kampala city council and recent reforms to recentralize control over Kampala. The study finds that partisan politics undermines service delivery Kampala in several ways, including through financing, tax policy, and even direct interference in the policies and decisions made by the city council.

Leiderer, S. (2013). 'Donor co-ordination for effective government policies? Implementation of the new aid effectiveness agenda in health and education in Zambia'. WIDER Working Paper 2013/049. Helsinki: UNU-WIDER.

There is a growing interest in the debate on aid effectiveness for assessing the impact of aid not only on economic growth and poverty reduction, but also on intermediate outcomes, such as health and education. This paper reviews evidence from recent in-depth country work on the impact of government policies and service provision in health and basic education in Zambia, and examines to what extent new aid approaches have contributed to the observed outcomes. It finds that limited co-ordination and lax adherence to good aid principles undermine the effectiveness of these approaches. The discussion of the findings sheds light on the underlying political economy and incentive structures on both sides of the aid relation that lead to casual adherence to the principles for more effective aid in these new aid approaches. It argues that most of the observed co-ordination failures can be explained by collective action problems on the part of both donors and recipients. If the international aid effectiveness agenda is to move forward, it will have to devise adequate mechanisms to address these co-ordination disincentives.

Leite, I.C., B. Suyama, and M. Pomeroy (2013). 'Africa-Brazil co-operation in social protection: Drivers, lessons and shifts in the engagement of the Brazilian Ministry of Social Development'. WIDER Working Paper 2013/022. Helsinki: UNU-WIDER.

The Brazilian Ministry of Social Development's co-operation with SSA has shifted from an initial engagement in cash transfers to a recent engagement in food and nutritional security. This paper aims at understanding the main drivers for such shift considering lessons drawn from first initiatives and from growing involvement in South-South development co-operation, as well as changes in the mobilization of domestic coalitions in Brazil. By doing so this paper aims at contributing to the international debate on the effectiveness of South-South development co-operation, unpacking challenges and opportunities faced by developing countries when allocating growing domestic human and financial resources to promote international development.

Maitrot, M.R.L. and M. Niño-Zarazúa (forthcoming). 'What do we know about the impact of micro-finance on poverty? A systematic review'. WIDER Working Paper. Helsinki: UNU-WIDER.

Development partners and international agencies have promoted and expanded micro-finance interventions on the basis of its poverty reduction effects on households. 35 years after its institutionalization, there is no consensus on the impact that micro-finance has on poverty. Evidence so far reported from many developing countries using diverse types of impact evaluation methodologies and indicators provide mixed findings. This paper undertakes a systematic review of the literature on micro-finance impacts on poverty. It identifies that differences of reported impact can be due to (1) differences in availability/indicators and methods; (2) heterogeneity in the typology of micro-finance interventions; (3) heterogeneity in participants; and (4) diversity of the contexts and setting in which the study is conducted. The study finds that gender and socio-economic conditions of borrowers significantly affect the impact of micro-finance treatment on poverty. The review identifies differences in reported impact of microfinance according to the methodology used in the impact studies. Experimental studies unanimously report insignificant and/or significant negative impact of micro-finance on all the poverty dimensions and variables considered in this study while reports from quasi-experimental research are more mixed.

Margolies, A. and J. Hoddinott (2012). 'Mapping the impacts of food aid: Current knowledge and future directions'. WIDER Working Paper 2012/034. Helsinki: UNU-WIDER.

This paper provides an overview on the impacts of food aid. The authors consider its effects on consumption, nutrition, food markets, and labour supply, as well as the extent to which it exacerbates or mitigates conflict. They also consider the comparative evidence on alternatives to food aid including evidence on cost, impact, relative risks, and beneficiary preferences. Finally, it is noted that there are two

large gaps in the extant literature: the comparative effects of food and cash assistance at the household level, and the causal links between food aid and conflict.

Martínez Álvarez, M. and A. Acharya (2012). 'Aid effectiveness in the health sector'. WIDER Working Paper 2012/069. Helsinki: UNU-WIDER.

This paper explores the current evidence underlying the debate on aid effectiveness, with a specific focus on the health sector. It summarizes the history of aid and outlines the methodological challenges encountered when assessing its effectiveness. The current evidence on 'what works' in the different aid modalities is outlined, highlighting examples of success. The review finds that resource allocation, lack of predictability of funds, fragmentation, fungibility, and the system of relationships foreign aid generates all hinder its effectiveness. Furthermore, even when projects are successful, countries face constraints in scaling them up. The aid effectiveness debate is dynamic, however, and constantly influenced by new global policies and players. The paper ends with a discussion of the future of aid and how these new actors and policies are likely to shape the landscape of development co-operation.

Masino, S. and M. Niño-Zarazúa (forthcoming-a). 'Social service delivery and access to financial innovation: The impact of Oportunidades electronic payments in Mexico'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper follows a quasi-experimental research design to assess the impact of the introduction of electronic payments of Mexico's Oportunidades cash transfer programme. The switch from cash payment to electronic payment delivered via a bank account is found to have implications in terms of transaction costs, time allocation, as well as behavioural attitudes towards savings and financial innovation. The study shows that, following the intervention, participation in informal saving groups was reduced; the frequency of remittance reception increased as a result of lower transaction costs, and, when hit by idiosyncratic shocks, beneficiaries of bank accounts were more likely to cope by using savings rather than by contracting loans or reducing household consumption. The study also reveals impact heterogeneity between rural and urban household beneficiaries, with important implications for policy and replicability of similar innovations in other developing country contexts.

Masino, S. and M. Niño-Zarazúa (forthcoming-b). What works to improve education quality in developing countries? A systematic review'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper undertakes a systematic review of the literature to identify effective policy interventions that improve education quality in developing countries. Relying on a theory of change approach, the authors identify three main drivers of quality in the context of education policy: first, resource provision and capability-enhancing interventions that aim to provide or integrate infrastructure and/or organisational structure; second, individual or household incentives to alter preferences that govern school participation and outcomes; and third, participatory and management dimensions, including top-down reforms, such as government-led decentralisation policies, and bottomup reforms targeting community awareness and involvement in the school system management. Overall, our findings suggest that policy interventions are more successful when two or more of these typologies are combined. More specifically, supply-side interventions when complemented with participation-enhancing and/or behavioural incentives work better to improve education quality. Nonetheless, local characteristics and demand patterns of education services require careful examination prior interventions in order to maximise impact.

Mitullah, W.V. (2012). 'Decentralized service delivery in Nairobi and Mombasa: Policies, politics, and inter-governmental relations'. WIDER Working Paper 2012/092. Helsinki: UNU-WIDER.

In many African countries, decentralization has long been viewed as a means for improving local service delivery. Yet, despite various decentralization initiatives, poor service delivery continues to be problematic in two of Kenya's largest cities, Nairobi and Mombasa. various governance reforms enhance to decentralization process, backed up by constitutional provisions and legislation, this study highlights that a proliferation of actors with overlapping mandates, opaque development frameworks, and intra- and inter-party politics remain major obstacles to providing critical services in these two cities. It is concluded that the effective decentralization of service delivery in cities cannot occur without key accompanying policies, including the devolution of resources and amicable intergovernmental relations.

Petersen, B.L. (2013).\* 'Regaining a future? Lessons learned from education of young people in fragile situations'. DIIS Report 2013:16. Copenhagen: Danish Institute for International Studies.

This report analyses available impact documentation and lessons learned from educational programmes aimed at young people in fragile situations. It concentrates on secondary education, accelerated learning/second chance and technical and vocational training programmes. It shows that different forms of education directed at youth have enhanced local peace and stability; lead young people into productive activities, further work and community work; altered the

social status of youth and created strong hope which is the fundament for young people to act. The successful programmes have been holistic and incorporated both hard and soft skills adapted to the context and specific needs of youth. They have also prioritized content and quality to counter inequalities that underpinned conflict. Finally, they have aligned with communities as well as the government to ensure ownership and scale-up good experiences. The report concludes that there is a need to ensure immediate, long-term and sufficient financial support to youth education to meet the present challenges.

Quattri, M. and A. Kwasi Fosu (2012). 'On the impact of external debt and aid on public expenditure allocation in sub-Saharan Africa after the launch of the HIPC initiative'. WIDER Working Paper 2012/042. Helsinki: UNU-WIDER.

In the wake of the current financial and economic crises, the economies of SSA find themselves squeezed between likely reductions in ODA and the pressing challenge to eradicating poverty. Public expenditure allocation to the social sector and to public investment is constrained by the need to pursue fiscal discipline in order to avert debt distress. Within a framework of public expenditure choice, the paper investigates the impact of the external debt-servicing constraint, as well as external aid, on government expenditure allocation in SSA countries after the launch of the Heavily Indebted Poor Countries Initiative (HIPC). Among the findings are: the debt effect, while substantially lower than existing estimates for the pre-HIPC period, remains negative for the social sector, with education expenditure funding gaps, suggesting that appropriate measures must be undertaken in order to prevent the deleterious effects of debt, particularly on the social sector. Meanwhile, the additional finding that government effectiveness favours public investment as well as spending in the social sector suggests that increased attention on governance is called for.

Quattri, M. and M. Niño-Zarazúa (forthcoming). 'On the effectiveness of policy interventions against neglected tropical diseases'. WIDER Working Paper. Helsinki: UNU-WIDER.

This paper follows a systematic review methodology to assess 'what works' against neglected tropical diseases. The paper focuses on the causes and burden of disease of viral, bacterial, and parasitic diseases that affect poor people in developing countries, and discusses the main challenges in terms of environmental, social, and financial constraints. The paper pays particular attention to the effectiveness of policy interventions designed to address these diseases while reflecting upon the challenges for future research and policy.

Riddell, A. (2012). 'The effectiveness of foreign aid to education: What can be learned?'. WIDER Working Paper 2012/075. Helsinki: UNU-WIDER.

This paper reviews what has been learned over many decades of foreign aid to education. It discusses what works and what does not and in this discussion draws attention to the fact that even a simple assessment requires more than providing a uniform check-list of inputs. It shows the positive contribution that aid has made to education in aid-recipient countries, the most tangible outcome of which is the contribution that aid makes to expanding enrolments especially of basic education. But the paper also indicates that there is a considerable gap between what aid does and what it could potentially achieve, especially in relation to its contribution to improvements in educational quality. Perhaps the paper's most important conclusion relates to the contribution of aid to capacity development in education—on the one hand an issue of central importance, but on the other, one in which the record has been one of systemic weaknesses and failures and in which few lessons seem to have been learned. This review shows that many of the lessons of what works in foreign aid to education are known, but they are not implemented. This review demonstrates the distortions caused by focusing on enrolments and insufficiently on quality, on products, such as plans and educational management information systems (EMIS), and 'inputs', rather than processes and outcomes, what goes on in the classroom, what the students learn, whether the teachers' pay and status are sufficient to keep them in the classroom and continuing to teach. Sustainable education outcomes will not be achieved merely by reproducing yet more successful, but individual projects. Perversely, development agencies which focus only on demonstrable short-term impact may well be contributing, unwittingly, to an undermining of long-term impact on the education systems and their deepening development, to whose progress they are trying to contribute.

Sabates-Wheeler, R., A. Hurrell, and S. Devereux (forthcoming). 'Targeting social transfer programmes: Comparing design and implementation errors across alternative mechanisms'. WIDER Working Paper. Helsinki: UNU-WIDER.

Identifying the poorest individuals and households for selection into social transfer programmes is one of the major challenges facing programme designers and implementers. An innovative cash transfer programme in northern Kenya trialled three targeting mechanisms simultaneously to learn lessons about which approach is most effective in terms of minimising inclusion and exclusion errors, both in design and in implementation. This paper concludes that community-based targeting (CBT) was the most accurate of the three approaches, followed by social pensions (SP) for older persons and household dependency ratio (DR). However, targeting performance is strongly affected by implementation capacity and modalities. If DR targeting had been implemented perfectly, its performance would have been comparable to CBT. This paper also reports on a simulation exercise which found that combining several indicators in a proxy means test would have performed better than single categorical indicators based on individual age or household dependency ratios.

Seguin, M. and M. Niño-Zarazúa (2013). 'What do we know about non-clinical interventions for preventable and treatable childhood diseases in developing countries?'. WIDER Working Paper 2013/087. Helsinki: UNU-WIDER.

Preventable and treatable childhood diseases, notably acute respiratory infections and diarrhoeal diseases are the first and second leading causes of death and morbidity among young children in developing countries. The fact that a large proportion of child deaths are caused by these diseases is symptomatic of dysfunctional policy strategies and health systems in the developing world. Though clinical interventions against such diseases have been thoroughly studied, non-clinical interventions have received much less attention. This paper contributes to the existing literature on child wellbeing in two important respects: first, it presents a theory of change-based typology that emerges from a systematic review conducted on non-clinical interventions against preventable and treatable childhood diseases. Second, it pays particular attention to policies that have been tested in a developing country context, and which focus on children as the primary target population. Overall, we find that improved water supply and quality, sanitation and hygiene, as well as the provision of medical equipment that detect symptoms of childhood diseases, along with training and education for medical workers, are effective policy instruments to tackle diarrhoeal diseases and acute respiratory infections in developing countries.

Shepherd, A. and S. Bishop (2013). 'Aid and poverty: Why does aid not address poverty (much)?'. WIDER Working Paper 2013/020. Helsinki: UNU-WIDER.

Aid is not generally aimed at the poorest people, though most multi- or bi-lateral agencies would like to think they get included. However, donors' strategies are generally blind to differentiation among the poor, and have not improved in this respect. The special provisions for the least developed countries, where many of the poorest people live, have not worked well. Aid to conflict-affected countries is itself in crisis. Much greater and more integrated aid is called for in both cases. Middle-income countries are themselves becoming donors, but the poorest populations of these countries have benefited from international partnerships which draw attention to the poorest and help foster innovative policy responses. Equity is far from being a strong principle of aid givers, UNICEF being the exceptional agency. The human rights based approach to development, which would give much greater weight to the poorest, in practice languishes at the margins of development, though where this has been taken up in middle-income countries (e.g., India) donors have stood on the sidelines. Explanations of this fairly dismal state of affairs are offered in terms of political economy and organizational and profession incentives. Finally the paper sketches a set of issues which need to be incorporated into the post 2015 framework and its preparation if poverty is to be taken more seriously by donors.

Stren, R. (2012). 'Donor assistance and urban service delivery in Africa'. WIDER Working Paper 2012/049. Helsinki: UNU-WIDER.

SSA cities have been growing at historically unprecedented rates. Since the early 1970s, they have welcomed international assistance involving a succession of major thematic objectives. The main agency involved in urban assistance has been the World Bank. But as its goals have changed, it has been obliged to operate increasingly through a decentralized, more democratically structured local government system. Overall, the success of this international assistance regime has been positive but modest, given the overwhelming needs of African cities. Still, African cities are increasingly finding solutions both co-operatively and on their own.

## Appendix 4: Synthesis of evidence of aid effectiveness

Selected donor initiatives in the area of maternal and child healthcare channelled through recipient country governments

Country	Donor	Receiving agency	Donor funding	Programme/Initiative
Bangladesh	AusAID, CIDA, DFID, World Bank, and others	Government of Bangladesh	US\$639 million	Finances are given for implementation of the Health, Nutrition, and Population Sector Programme that is addressed towards the underutilization of basic services. It aims to ensure the provision of fundamental health services through improving the quality and dependability of antenatal care, by scaling up crucial emergency newborn and obstetric facilities, and by enlarging facility- and community-based integrated management of childhood illnesses services.
Bangladesh	GAIN, Dubai Cares	Ministry of Primary and Mass Education	-	Monetary support was given for a two-year school feeding plan to deliver fortified, healthy food to children from low-income homes attending primary school. This project is done in collaboration with local NGOs.
Bangladesh	DFID	Government of Bangladesh	GBP6 million	Funds were provided in order to improve community and maternal health practices, and the utilization of worthy maternal and neonatal healthcare facilities.
Egypt	GAIN, WFP	Government of Egypt	US\$13 million	A four-year national programme was devised to enrich subsidized cooking oil with vitamin A and D in order to safeguard the health of the population, especially women and children.
Ethiopia	DFID	Government of Ethiopia	GBP39 million	General budget support was provided to increase the coverage of vaccinations amongst children, training of health extension workers, procurement of contraceptives, insecticide-treated nets, and ambulances for transport of women for emergency obstetric care.
India	DFID, UNFPA, World Bank, and others	Government of India	GBP252 million	Support given to the Government of India's national Reproductive and Child Health programme that is targeted towards increasing contraceptive use, the number of deliveries by skilled birth attendants, and immunization status of children. The project aims to set up, and fully staff and equip RCH programme management units in all states and districts.
India	World Bank	Department of Health and Family Welfare	US\$215.2 million	A system of Comprehensive Emergency Obstetric and Neonatal Care Centres was set up in Tamil Nadu. It comprised of 80 hospitals—two in each district, which functioned 24 hours a day and offered trained doctors and nurses, as well as new equipment and better blood bank facilities. To provide free emergency transportation to patients, equipped ambulances were purchased through a public-private partnership.
Indonesia	AusAID, World Bank	Ministry of Public Works		Financial assistance has been given in support of PAMSIMAS, which is the government's national programme to deliver clean water, sanitation, and improved hygiene practices to rural areas.
Mozambique	Multiple donors	Ministry of Health	GBP38 million	Finances given to the health sector for implementation of the national health strategy. This is known as PROSAUDE.  Long lasting treated bed nets have been shipped through the GFATM, reagents were provided for malaria and HIV tests, mass campaigns for family planning were launched which increased the fraction of women using contraceptives and indoor residual spraying against malaria in multiple districts was funded.

Country	Donor	Receiving agency	Donor funding	Programme/Initiative
Nepal	Multiple donors	Government of Nepal	US\$1,500 million over five years	Sector budget support has been given by various donors to the Government of Nepal in order train health professionals as skilled birth attendants, set up health posts which function 24/7 to provide emergency obstetric care, immunize children against malaria and DPT, and procure essential goods.
Nepal	Micronutrient Initiative, UNICEF	Government of Nepal	1	The Government of Nepal launched the Iron Intensification Project to target maternal anaemia. In this, female community health volunteers provided iron and folate supplements to mothers, and educated them regarding their importance. They also encouraged antenatal care visits, delivered deworming medications, and post-partum vitamin A supplements.
Pakistan	AusAID, DFID	Government of Pakistan	GBP91 million	Finances have been given to the government in support of the national MNCH programme to improve emergency obstetric care, renovation of delivery units, and training of health facility staff.

Source: Bhutta and Aleem (2013a).

TABLE A4.2 Selected donor initiatives in the area of maternal and child healthcare channelled through NGOs

Country	Donor	Receiving Agency	Donor Funding	Programme/Initiative
Bangladesh	DFID, AusAID	BRAC	ı	Support is given through a Strategic Partner Arrangement to support development projects of the NGO called BRAC (Bangladesh Rehabilitation Assistance Committee) in order to provide children under-five with primary education, ensure that women give birth in the presence of skilled attendants, and make contraception widely available to couples.
Bangladesh	USAID	SSFP	1	Smiling Suns Franchise Programme (SSFP) if funded by USAID/Bangladesh and Chemonics International. Grants are given to 28 NGOs through this programme. These NGOs run 320 static clinics and 8500 satellite clinics to provide basic health services and emergency obstetric care.
Benin	USAID	Centre of Human Services	-	The Partnership for Community Management of Child Health trains and supports community health workers to provide preventive and curative treatment for malaria, diarrhoea, and ARIs, as well as promoting the use of maternal health services.
Ghana	DFID		GBP6.5 million	Funds are given directly to a procurement agency to purchase long lasting insecticide-treated nets, which UNICEF along with other local organizations will distribute.
India	DFID	36 local NGOs	GBP154,364	An innovative partnership with local NGOs was funded in order to decrease the impact of TB, malaria, HIV by heightening case detection, treatment, and patient support and education.
Kenya	DFID	International and local NGOs	GBP106.3 million	Finances are channelled through NGOs to work alongside the Ministry of Health's programmes without actually giving funds to them. The funding is to distribute free bed nets to children under-five and pregnant women, socially market the use of condoms to prevent HIV, and increase the use of family planning products.

Country	Donor	Receiving Agency	Donor Funding	Programme/Initiative
Malawi	DFID	Banja La Mtsogolo	GBP25.20 million	Support to the Programme of Work to deliver sexual and reproductive health facilities through community outreach services. It aims to increase awareness regarding HIV testing, counselling and treatment, and the use of condoms and other family planning services.
Myanmar	Multiple donors	UN agencies, international, and local NGOs	US\$136 million	The Three Development Fund was set up through which condoms and needles were distributed to prevent HIV, access was given to anti-retroviral therapy along with community home-based care, long lasting insecticide-treated nets were distributed, health workers were trained to perform rapid diagnostic tests for malaria, and treatment was provided for TB and malaria.
Nepal	AusAID	SNV	AUD564,540	Support has been given to SNV's (Netherlands Development Organisation in Nepal) existing WASH (Water, Sanitation, and Hygiene) programme. The purpose of this programme is to increase access of 4400 rural households to improved sanitary services, increase the awareness regarding hygiene practices by promotional strategies in the community, and improving district level WASH governance.
Nigeria	DFID	UNICEF and INGOs	GBP50 million	Funds given to deliver interventions in order to improve the nutritional status of children by community based treatment of acute malnutrition, integration of micronutrient supplementation into routine primary health services, and deworming. These interventions will be delivered by UNICEF and a group of international NGOs, such as Save The Children and Action Against Hunger.
Nigeria	DFID		GBP25 million	Women 4 Health is a programme underway through which local girls and women are educated and trained to become female health workers. This in turn will improve the antenatal care services, the number of births in the presence of skilled attendants, and the immunization coverage.
Pakistan	AusAID	Save The Children		Assistance has been given to Save The Children to improve the quality and coverage of health services for mothers and children in three districts of Balochistan.
Pakistan	DFID	Local NGOs	GBP30 million	Support will be provided to local implementing partners to deliver family planning products and information through clinics, pharmacies, and social workers. Vouchers will be used to allow underprivileged women and girls gain access to quality healthcare services.
Sri Lanka	AusAID	UNICEF		UNICEF is implementing the Water, Sanitation and Hygiene in Child Friendly Schools programme to improve the water and sanitary conditions in deprived, rural communities.
Tanzania	DFID and USAID	Marie Stopes Tanzania		DFID and USAID are supporting a family planning outreach programme implemented by Marie Stopes Tanzania. Family planning services are provided by health professionals through existing facilities in far-off areas with limited services.
Zambia	DFID	Population Council and local NGOs	GBP8.4 million	Safe Spaces is an initiative funded by DFID and implemented by the Population Council in collaboration with local youth NGOs, in order to empower young girls between the ages of 10 and 19 years. This project aims to increase knowledge, and improve access to reproductive and sexual health services, give the girls access to savings accounts, and increase their understanding about finances and money management.

Source: Bhutta and Aleem (2013a).

TABLE A4.3 Synthesis of evidence on 'what works' in aid policy against major poverty-related diseases (HIV/AIDS, TB, and malaria)

Authors	Study title	Setting	Study design	Sample size	Intervention	Policy outcome
Baird, Garfein, McIntosh, and Ozler (2012)	Effect of the cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomized trial	Rural (Malawi)	Cluster randomized trial	490 participants in combined intervention group and 799 participants in control group. Population were never-married women aged 13–22.	Cash transfer programme, which seeks to reduce the risk of sexually transmitted infections in young women; HIV and herpes simplex virus-2 (HSV-2).	Cash transfer programmes can reduce HIV and HSV-2 infections in schoolgirls in low-income settings. Moreover, structural interventions that do not directly target sexual behaviour change can be important components of HIV strategies.
Strobbe and Miller (2011)	Cash transfers in an epidemic context: The interaction of formal and informal support in rural Malawi	Rural (Malawi)	Randomized trial	749 rural households	Cash transfer to alleviate poverty, improve school enrolment, and reduce malnutrition.	Statistically significant reduction effect on the level of consumption expenditures for those households receiving cash transfers.
Lutge, Wiyosonge, Knight, and Volmink (2012)	Material incentives and enablers in the management of TB	Urban and rural (USA and Timor- Leste)	Randomized controlled trials (RCT)	1	Material incentives in patients investigated for TB, or on treatment for latent or active TB.	There is limited evidence to support the use of material incentives to improve return rates for TB diagnostic test results and adherence to anti-TB preventive therapy.
Krezanoski, Comfort, and Hamer (2010)	Effect of incentives on ITN use in SSA: A cluster randomized trial in Madagascar	Rural (Madagascar)	Cluster randomized trial	530 households (12 control and 12 intervention villages)	Financial incentives to own and use ITN at one month and at six months.	Provision of incentives increases the use of ITNs by 24 per cent in the immediate term. However, after six months net ownership had decreased in the intervention group, compared to the control group, with an adjusted risk ratio of 0.97.
Mutenje, Nyakudya, Katsinde, and Chikuvire (2007)	Sustainable incomegenerating projects for HIV-affected households in Zimbabwe: Evidence from two high-density suburbs	Urban (Zimbabwe)	Case study	200 households	Creation of micro- enterprises, and effect on household demographic data and income data change due to these activities.	Results show that all five income-generated projects were viable for these households, although some were not feasible for the most vulnerable HIV-affected households.
Sherer, Bronson, Teter, and Wykoff (2004)	Microeconomic loans and health education to families in impoverished communities:	Urban and rural (Guatemala, Malawi, and Thailand)	I	6,929 participants in Malawi, 4,333 in Guatemala and 925 in Thailand	Project HOPE's village health bank (VHB) programme, which combines integrated microcredit lending and health education	The VHB programme produces significant and sustainable economic improvements for individuals and groups, such as increases in personal income and family savings. This programme also improves health knowledge for community-level groups.

Authors	Study title	Setting	Study design	design Sample size	Intervention	Policy outcome
Pandit, Sirotin, Tittle, Onjolo, and Bukusi (2010)	Shamba Maisha: A pilot Rural (Kenya) study assessing impacts of a micro-irrigation intervention on the health and economic wellbeing of HIV patients	Rural (Kenya)	Longitudinal study	Longitudinal 30 households study	Micro-finance loan to purchase an irrigation pump.	At the 12-month follow-up visit, the mean annual family income increased significantly by US\$1,332.
Rocha et al. (2011)	The innovative socio- economic interventions against TB (ISIAT) project: An operational assessment	Rural (Peru)	Cross- sectional study	Eight contiguous The innovative socic shantytowns with high economic intervent levels of TB, Multidrug-against TB projects. resistant-TB, and poverty	The innovative socio- economic interventions against TB projects.	The socio-economic interventions were associated with increases in household contact TB screening (from 82 per cent to 96 per cent), successful TB treatment completion (from 91 per cent to 97 per cent), patient HIV testing (from 31 per cent to 97 per cent), preventive therapy (from 27 per cent to 87 per cent).

Promoting be	Promoting behavioural change					
Authors	Study title	Setting	Study design Sample size	Sample size	Intervention	Policy outcome
Guo, Li, and Sherr (2012)	The impact of HIV/AIDS Rural and Urban Systematic on children's (Tanzania, Kenya, literature educational outcome: A Zimbabwe, review critical review of global Uganda, Burkina literature Faso, Nigeria, Ethiopia, Ghana, Lesotho, and Malawi).	Rural and Urban Systemati (Tanzania, Kenya, literature Zimbabwe, review Uganda, Burkina Faso, Nigeria, Ethiopia, Ghana, Lesotho, and Malawi).		20 studies	Educational interventions among HIV-infected children.	Educational interventions The educational outcomes are the balanced results of various factors, among HIV-infected including both risky and protective factors. These factors include resource constraints (e.g. household poverty), orphanhood status (e.g. vulnerable children living with HIV-positive parent, maternal, paternal, or double orphans), living arrangements (e.g. relationship with the caregiver, gender of the household head), and external assistance (e.g. financial and policy supports from the government or NGOs).
Biswas, Hutin, Ramarkirshnan, Patra, and Gupte (2010)	Biswas, Hutin, Increased financial Ramarkirshnan, accessibility and Patra, and targeted education Gupte (2010) messages could increase ownership and use of mosquito nets in Purulia District, West Bengal, India	Rural (India)	Cross-sectional study	561 households in 33 clusters	Educational messages and financial resources as determinants of net ownership and frequency of use.	Household monthly income was the factor most strongly associated with ownership, in the multivariate analysis. Others factors that contributed to the model included knowledge that mosquito nets prevented malaria and perceptions that mosquito nets were costly or inconvenient. Wealthier households were more likely to own mosquito nets. In Purulia, the median monthly household income averaged INRZ,000 (US\$2.25), leaving little savings to invest in mosquito nets that cost INR100 (US\$2.25). In contrast, ownership of a mosquito net was not associated with education in this study.

Authors	Study title	Setting	Study design	lesign Sample size	Intervention	Policy outcome
Brooker et al. (2010)	Improving educational achievement and anaemia of school children: Design of a cluster randomized trial of school-based malaria prevention and enhanced literacy instruction in Kenya	Rural (Kenya)	RCT	101 schools	Effect of school-based malaria prevention and enhanced literacy instruction on the health and educational achievement of school children in Kenya.	The malaria intervention based on intermittent screening and treatment (IST) had no effect on health or education, and was found to be complex and costly. In contrast, the teacher training and support improved children's literacy and reduced dropout, and cost US\$8.29 per child. Children's literacy improved most when teachers focused instruction on letters and sounds, and when children were exposed to more text in the classrooms.
De La Cruz, Crookston, Gray, Alder, and Dearden (2009)	Micro-finance against malaria: Impact of Freedom from Hunger's Malaria education when delivered by rural banks in Ghana	Rural (Ghana)	Community randomized trial	213 micro-finance clients receiving malaria education, 223 receiving diarrhoea education, and 268 non-client controls.	Micro-finance and education	48.4 per cent of malaria clients were able to identify groups most vulnerable to malaria, compared with 39.2 per cent of diarrhoea clients and non-clients. Malaria clients were more likely than diarrhoea clients to report that ITNs provide the best protection against malaria, and there was the increase of ITN ownership/use among malaria clients. Participation in the malaria education was associated with some improvements in knowledge. At follow-up, malaria clients were significantly more likely than diarrhoea clients and non-clients to correctly identify groups most vulnerable to malaria and to report that ITNs provide the best protection against malaria.

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Authors	Study title	Setting	Study design Sample size	Sample size	Intervention	Policy outcome
Bor, Tanswer,	Bor, Tanswer, In a study of a population Urban (South	Urban (South	Longitudinal	Longitudinal 32,321 people aged 18— Provision of ART	Provision of ART	From 37 per cent at the baseline of three to five years before
Newell, and	Newell, and cohort in South Africa, HIV Africa)	Atrica)	study	59 between 2001 and		treatment initiation, employment fell by 14.1 percentage points, a
Barnighausen	Barnighausen patients on antiretrovirals			2010, who resided in		38 per cent relative decline. Four years after treatment began,
(2012)	had nearly full recovery of			the Africa Centre		employment among HIV patients was only 3.8 percentage points
	employment			surveillance area during		lower than in the baseline reference period, a 90 per cent relative
				the first six months of		recovery. Unemployment due to illness nearly doubled from 3.5 per
				2004. Of these 32,321		cent at baseline to 6.6 per cent in the six months before treatment
				cohort members, 2,027		initiation—that is, a 3.1 percentage point increment. Just prior to
				initiated ART in the		initiation, ten per cent of men and five of women were reported to
				Hlabisa HIV Treatment		be unemployed because of sickness or disability. After one year of
				and Care Programme by		ART, however, HIV patients (or their household proxies) were not
				December 31, 2010.		more likely to report that illness or disability was a barrier to
						employment than they were at baseline.

Authors	Study title	Setting	Study design	Sample size	Intervention	Policy outcome
Buonomo et al. (2012)	Nutritional rehabilitation of HIV-exposed infants in Malawi: Results from the drug resources enhancement against AIDS and malnutrition programme	Rural (Malawi)	Pilot intervention	36 HIV-exposed children. 26 males, with a mean age of 12 months ± 3.04.	Nutritional rehabilitation of HIV-exposed infants.	At six months, post-intervention slowing of linear growth was observed in patients with malaria, with a mean gain in 4.4 +/- 1.7cm, as compared to 5.6 +/- in children without malaria; dietary scores also increased. Our findings demonstrate that both nutritional status and diet improved significantly over the course of a short observation period. The most significant improvement was noted in the cases of acute malnutrition. Our results are consistent with those of other studies and highlight the complexity of nutritional rehabilitation efforts, in the early years of life, particularly in areas where chronic and moderate deficits abound, confounded by high rates of food insecurity and infectious diseases, such as HIV and malaria.
Moreki, Poroga, and Dikeme (2011)	Strengthening HIV/AIDS food security mitigation mechanisms through village poultry	Rural (Botswana)	Cross- sectional study	46 households randomly selected	BONEPWA+/SIDA food security project. Contribution of village poultry on nutrition, income generation, and household food security of People living with HIV/AIDS (PLWHA).	45 (97.8 per cent) out of the 46 respondents said they reared chickens. In addition, 44 (95.6 per cent) respondents said that they were unemployed, while two (4.35 per cent) were employed in the informal sector. 39 (84.8 per cent) respondents kept chickens for consumption and income, six (13.0 per cent) for income only, while only one respondent (2.17 per cent) kept chickens for consumption. In order of importance, money was used for chicken feeds; groceries and transport; groceries, transport and school fees; chicken feeds and transport; and feeds, groceries, and transport. The PLWHA used money from chicken sales for transport to the hospitals for medical check-ups and ARV therapy.
Thirumurthy et al. (2011)	Two-year impacts on employment and income among adults receiving ART in Tamil Nadu, India: A cohort study	Urban (India)	Cohort study	1,238 HIV-infected patients (515 patients initiated ART during the study period and a comparison group of 723 patients were pre-ART).	Economic impact of ART	At six months, after initiation of ART, patients were ten percentage points more likely to be economically active, and worked 5.5 additional hours per week. These were higher rates than experienced by the comparison group. At 24 months, the impact represented a doubling of patients' employment levels at baseline. Effects were almost twice as large for men compared with women.
Ama and Seloilwe (2010)	Estimating the cost of caregiving on caregivers for people living with HIV and AIDS in Botswana: A cross-sectional study	Rural and Urban (Botswana)	Cross- sectional study	169 primary and volunteer caregivers	Community home-based care/cost of care for HIV	This study showed that caregivers' monthly mean earning was US\$66.00 $\pm$ 5.98, yet the mean explicit cost incurred in providing care was US\$65.22 $\pm$ 7.82. This implies that the caregivers spent almost their entire income on caregiving and must have sustained themselves in their caregiving activities, with support from government (nine per cent) and donations from other people, including relatives and community members (five per cent).

Authors	Study title	Setting	Study design	Sample size	Intervention	Policy outcome
Beard, Feeley, and Rosen (2009)	Economic and quality of life outcomes of ART for HIV/AIDS in developing countries: A systematic review	Rural and urban (developing countries, mostly SSA)	Systematic literature review	21 publications were reviewed (14 full-length papers, six conference abstracts, one presentation), representing 16 studies selected from a total of 1,187 potentially relevant citations.	Provision of ART	For the most part, research on the economic and quality of life outcomes of ART in developed, transitional, and developing countries presents positive findings. Nevertheless, maintaining high levels of adherence over the possible decades that ART can extend life, will remain challenging for both patients and those providing therapy. The difficulty of sustaining improvements over long periods of time, found in developed countries, is likely to influence quality of life and adherence in low-resource contexts as well.
Larson et al. (2009)	Do the socio-economic impacts of ART vary by gender? A longitudinal study of Kenyan agricultural worker employment outcomes	Rural (Kenya)	study study	97 HIV-infected workers (56 women and 41 men) and a comparison group of 2,485 workers (1,691 men and 794 women).	97 HIV-infected workers Increasing access to ART (56 women and 41 men) and a comparison group of 2,485 workers (1,691 men and 794 women).	The female index group worked 30 per cent fewer days and 87 per cent more days on non-plucking assignments than the comparison group, during the final nine months pre-ART. Post-ART the monthly gap narrowed, with the female index group working 30 per cent fewer days and 100 per cent more than the comparison group on non-plucking assignments. We found that male index workers were able to maintain a similar pattern of work as the male comparison group, until the month they initiated therapy and then returned to a similar work pattern by their seventh month on ART. For women, we found evidence of substantial differences in employment outcomes, mainly through being less productive while plucking, working fewer days plucking tea, and shifting to non-plucking work assignments.
Onwujekwe et al. (2009)	Examining catastrophic costs and benefit incidence of subsidized ART programme in southeast Nigeria	(Nigeria)	Cohort study	Data was collected from 301 consenting patients attending the ART clinic.	Subsidized ART effect on catastrophic costs and benefit incidence.	Almost all costs, associated with ART, are catastrophic to almost all the patients who attended the clinic, no matter the geographic location, sex or socio-economic status (SES), although the level of catastrophe varied and was inequitable. The fact that people paid mostly using out-of-pocket spending resonate the argument that people, particularly people in poor households, can be protected from catastrophic expenditures by reducing a health system's reliance on out-of-pocket payments, and providing more financial risk protection.  Even assuming that the patients overstated their expenditures and lowering the total expenditures by 100 per cent, the costs were still catastrophic. It was very catastrophic for rural dwellers and females. The level of catastrophe increased as SES class decreased, and this could possibly lead to increased incidence of poverty, deprivation, vulnerability and adverse coping mechanisms.

Authors	Study title	Setting	Study design	Sample size	Intervention	Policy outcome
Smith et al. (2011)	Accessibility, availability, and affordability of antimalarials in a rural district in Kenya after implementation of a national subsidy scheme	Rural (Kenya)	Longitudinal study	In total, 130 staff members representing 97 shops, private clinics, and 13 public/mission facilities were included in the analysis.	Affordable Medicines Facility-malaria (AMF-m).	The mean price of any brand of artemether-lumefantrine (AL), the recommended first-line drug in Kenya was U\$\$2.7. Brands purchased under the AMF-m programme cost 40 per cent less than non-AMF-m brands. Artemisinin monotherapies cost on average more than twice as much as AMF-m-brand AL. On average, households travel twice the distance to attend a public health facility than to reach a malaria medicine retailer. Most public health facilities do not offer weekend opening hours.
Yao, Wei, Liu, Zhao, Hu, and Walley (2008)	Evaluating the effects of providing financial incentives to TB patients and health providers in China	Rural (China)	Cohort study	A control group of 51 non-project counties in Shanxi Province was selected for comparison with the 50 project counties.	Transport incentives to poor patients for their first visit to TB clinics.	No improvement on TB case finding and case holding was found in the intervention group, compared with the control group. At baseline, the intervention group had a significantly higher case notification rate. Travel incentives did not reduce patient and doctor delays in the intervention group, compared with the control group. During the project period, the intervention group increased their case notification rates by 70 per cent, while that of the control group increased by 99 per cent. The treatment success rates in the control group were lower than the intervention group at baseline; however, they reached the level of the intervention group after 1 year. Default rates were reduced in both groups, with no significant differences observed at baseline or during the project period. No additional benefit for TB-case detection was identified in the intervention.
Kemp et al. (2007)	Can Malawi's poor afford free TB services? Patient and household costs associated with a TB diagnosis in Lilongwe	Urban (Malawi)	Cross- sectional, stratified survey	The total sample was 179 patients, split almost evenly between women and men (n = 87 and 92 respectively).	Free access to TB services.	In this setting, TB services are, in theory, universally available, as they are accessible within six km and provided free of charge, but the actual cost of diagnosis for the patient is high, averaging U\$\frac{5}{2}29, or 41 days' income. The cost to the poor is staggering; 244 per cent of their total monthly income, which rises to 574 per cent, when essential expenditures on food are excluded. This cost reflects the burden on patients who accessed a TB diagnosis, but is also likely to be a barrier for people with TB, particularly the poor, who do not access care at all. This suggests that scaling-up TB services to reach the poor needs to go beyond removal of or exemptions from user fees, and instead transform the way TB diagnostic services are delivered.

Authors	Study title	Setting	Study design	Sample size	Intervention	Policy outcome
Lonnroth, Aung, Maung, Kluge, and Uplekar (2007)	Social franchising of TB care through private general practitioners (GPs) in Myanmar: An assessment of treatment results, access, equity, and financial protection	Urban and rural (Myanmar)	Longitudinal study	A total of 253 patients receiving treatment by a 'Sun Quality Health' (SQH) GP were included.	Social franchising of TB care through private GPs.	Cost and cost burden were significantly lower among patients who had turned directly to a SQH GP, compared with other patients. The SQH franchise seems to have protected patients from heavy additional financial burden by providing drugs free of charge, tests, and consultation fees at highly subsidized rates, as well as flexible case management at a location, which for the majority, was close to the household.  Through these mechanisms, the median cost burden during treatment was kept at three per cent among those with low SES, while the mean burden was 11 per cent. The costs of tests and consultation fees during treatment were negligible. Costs related to transport, lost wages, and drugs other than TB drugs were the main
Sadoh and Oviawe (2007)	The economic burden to families of HIV and HIV/TB co-infection in a subsidized HIV treatment programme	Urban and rural (Nigeria)	Cohort study	61 families consisting of 128 family members met the study criteria and were then analysed. There were 41 families (96 family members) for the HIV-Toonly cohort, 14 families (24 family members) for the six families (eight family members) for the TB-only cohort.	Subsidized HIV programme.	The mean cost of treatment was significantly higher in families in the HIV/TB cohort than in families in the HIV-only or TB-only cohorts. The mean percentage of income spent on treatment was significantly different in the three cohorts. When subjected to multiple comparison tests, the mean percentage of income spent on treatment was highest in the HIV/TB cohort compared to HIV only and TB only, and the percentage of income spent on treatment by the TB-only cohort was significantly greater than that spent by the HIV-only cohort. Although the difference in the mean cost of transportation in the various cohort was not significant, the mean percentage of income spent on transportation monthly was significantly higher in the HIV/TB cohort compared to the TB only and HIV only. In the HIV/TB cohort, six (42.86 per cent) families spent more than their monthly income on treatment. Mothers were affected in 75 per cent of the families.
Habib and Baig (2006)	Costs of directly observed treatment, short-course (DOTS) for TB patients	Urban and rural (Pakistan)	Cross- sectional study	220 patients	DOTS	37 per cent (81/220) of the TB patients belonged to those families where total family members were between eight to ten living under one roof. 61 percent (135/220) of patients spent PKR41 to PKR60 on traveling. The mean daily expense was PKR42 and for two months intensive therapy it was PKR2520. 44 per cent (96/220) of patients stated that more than four hours were spent—including traveling both ways and waiting in the outpatient department (OPD)—on DOTS practice, mean time spent was three hours and 15 minutes.

Source: Amaya and Niño-Zarazúa (forthcoming).

Synthesis of evidence on 'what works' in aid policy against preventable and treatable childhood diseases TABLE A4.4

Study	Setting	Study design	Study size	Intervention	Outcome
Alam et al. (1989)	Bangladesh (rural)	Non-blind RCT	623 children aged 6–23 months.	Enhanced water supply and quality through handpumps, and health education for mothers.	The use of handpump water for drinking and washing, removal of child's faeces from the yard, and maternal handwashing before handling food and after defecation of self and child, observed together, decreased yearly diarrhoea incidences in children by more than 40 per cent, compared to children living in households where none or only one of these practices was observed.
					On average, a child in the intervention area had 3.4 diarrhoea episodes in a year, while a child in the control area had 4.1 episodes. The difference was statistically significant.
					The impact of the educational intervention on maternal hygiene behaviour could be assessed only indirectly by comparing distributions of hygiene practices in two areas. Significant differences have been found, which may indicate success of the health education programme in promoting hygiene among the noneducated mothers of young children.
Aziz et al. (1990)	Bangladesh (rural)	Non-blind RCT	The sample of children ranged from a low of 6,922	Water, sanitation, and hygiene education.	Children in the intervention area experienced 25 per cent fewer episodes of diarrhoea than those in the control area.
			to a high of 8,527 from 1984 to 1987, respectively, in the intervention group, and from a low of 6,603 to a		An impact on diarrhoea was seen in each age group, except for those aged 0–5 months. The incidence density ratios showed that the impact appeared to increase with age, with the greatest effect in the 36–59 months age group.
			high of 8,210 from 1984 to 1985, respectively, in the control group.		Within the intervention area diarrhoea increased as distance from the household to the handpump increased. The use of a pit latrine, either directly by the child or for disposal of its faeces, was associated with lower diarrhoea incidence.
Azurin and Alvero (1974)	Philippines (per urban)	(peri- Non-blind RCT	527 children aged 0–4 years.	Safe water and sanitary facilities for human waste disposal.	Improvement of either water supply or toilet facilities, or both, was effective in significantly reducing the incidence of cholera in the corresponding study communities as compared with the control.
					The greatest improvement was observed in the community in which both water supply and toilets were improved, than in the communities in which either water or toilets were improved.
					The rate of cholera infection among those aged 0–4 was 193.1 per 1,000 in the group which received toilets and water, 213.7 per 1,000 in the group which received improved water, 321.1 per 1,000 in the group which received toilets, and 542.2 per 1,000 in the group which received no intervention.

Study	Setting	Study design	Study size	Intervention	Outcome
Clasen et al. (2004)	Bolivia (rural)	Non-blind RCT	50 households comprised of 280 persons, of which 32 were children less than five years of age.	Household-based ceramic water filters.	Risk of diarrhoea for children less than five years, controlled for clustering within households, was reduced by 83 per cent.  The risk of diarrhoea decreased by 0.97 for each year of life.  The mean reduction in diarrhoea prevalence during the six-month trial was 64 per cent.  The reduction was highest among children less than five years old (72 per cent) and lowest among adults (57 per cent).  Prevalence of diarrhoea in the intervention group showed a statistically significant upward trend over the course of the study.
Daniels et al. (1990)	Lesotho (rural)	Case-control	The sample consisted of children less than five years presenting at a participating health facility.  A total of 803 cases of diarrhoea and 810 controls were recruited.	The Rural Sanitation Pilot Project, which promoted and constructed ventilated improved pit latrines, as well as provided health education, directed at improving standards of personal and domestic hygiene practices.	Cases were significantly less likely than controls to come from latrine-owning houses.  Children under-five, from households with a latrine, may experience 24 per cent fewer episodes of diarrhoea than such children from households without a latrine.  The impact of latrines on diarrhoea was greater in those households that used more water, practiced better personal hygiene, and where mothers had a higher level of education or worked outside the home.
Duke et al. (2008)	Papua New Guinea Quasi- (unknown) experi interru series	Quasi- experimental interrupted time series design	A total sample of 11,291 children, consisting of 7,161 children in the preintervention group, and 4,130 in the post intervention group.	Introduction of oxygen concentrators and pulse oximeters into hospitals.	The case fatality rate of the pre-intervention group was 4.97 per cent compared to the post-intervention group case fatality rate of 3.22 per cent.  After the system was introduced, the risk of death for a child with pneumonia was 35 per cent lower than it was before the project began.
Garrett et al. (2008)	Kenya (rural)	Quasi- experimental non-blind RCT	960 children under-five in 556 households in 12 randomly selected intervention villages and six randomly selected control villages.	The Safe Water System: point- of-use chlorination, safe water storage, sanitation, and rainwater harvesting.	Chlorinating stored water, latrine presence, rainwater use, and living in an intervention village were independently associated with lower diarrhoea risk. Diarrhoea risk was higher among shallow well users.
Graf et al. (2010)	Cameroon (urban)	Non-blind RCT	738 and 2,193 randomly selected households.	Solar water disinfection.	A decrease in diarrhoea prevalence, among children under-five, was observed in the intervention group from 34.4 per cent prior to the intervention to 22.8 per cent after the intervention.  The prevalence in the control group remained stable at 34.4 per cent and 31.8 per cent before and after the intervention, respectively.

Study	Setting	Study design	Study size	Intervention	Outcome
Han and Hlaing (1989)	Myanmar/Burma (urban)	Non-blind RCT	494 children aged less than five years in 350 households.	Handwashing promotion.	The diarrhoeal incidence among children in the handwashing households was significantly lower than that among those in the control households.  The percentage reductions in diarrhoea incidence for the 0–4 years, younger than 2, and 2 or greater than 2 age groups were 30 per cent, 31 per cent, and 33 per cent respectively.
					Though there was a 40 reduction in dysentery incidence in children under-two, there was no impact in older children. $$
Hoque et al. (1996)	Hoque et al. Bangladesh (rural) (1996)	Cross sectional survey follow-up of non-blind control trial	Cross sectional 500 randomly selected survey follow-up households drawn from of non-blind intervention and control control trial groups of a previous intervention study. A total of 645 children under-five were included, 375 in the intervention area, and 270 in the control area.	Water, sanitation, and hygiene education.	In the original intervention study, children in the intervention area experienced 25 per cent fewer episodes of diarrhoea than those in the control area.
Jensen et al. (2003)	Pakistan (rural)	Non-blind RCT	226 children aged less than five years.	Chlorination of drinking water.	The intervention was not associated with a decrease in the incidence diarrhoea.
Khan (1982) Bangladesh (unknown)	Bangladesh (unknown)	Non-blind RCT	The study group (who received both the soap and water) contained 65 children aged four and younger, and the control contained 79 children.	Handwashing with soap intervention. Individuals were provided with soap and water pitchers, only water pitchers, only soap, or neither.	Just over ten per cent of children in the control group subsequently became infected with shigellosis, after a family member was diagnosed, compared to over 50 per cent of children in the control group (those who received no soap or water).
Kolahi and Sohrabi (2009)	Iran (urban)	Non-blind RCT	4,179 children 60 months or younger.	Household access to an urban sewerage system.	The incidence of diarrhoea among children decreased.

Study	Setting	Study design	Study size	Intervention	Outcome
Lockwood et al. (2001)	Nicaragua (rural)	Quasi- experimental interrupted time series design	Eight departments of the country and 37 individual municipalities. The hygiene promotion aspect of the programme was carried on a subsample comprised of 169 communities that included 1,183 individual households, with sample sizes ranging from 10 per cent to 15 per cent, depending upon the absolute size of the community.	Nicaragua Rural Water Supply, Sanitation, and Environmental Health Programme, which improved people's access to safe sources of drinking water and excreta disposal facilities, promoted hygiene, and conducted capacity-building activities.	The percentage of households where children aged four or under have had diarrhoea, during the two weeks prior to the survey was 20 per cent at baseline, 20 per cent at the first follow-up survey, and then dropped to 15 per cent, and then to 13 per cent in the second and third follow-up surveys, respectively.
Luby et al. (2004)	Pakistan (urban)	Cluster RCT	The intervention group was comprised of 300 households (1523 children), one control group of 300 households (1640 children), and a second control group of 306 households (1528 children).	The Karachi Soap Health Study, a handwashing promotion intervention.	Infants living in households that received handwashing promotion and plain soap had 39 per cent fewer days with diarrhoea versus infants living in control neighbourhoods.  Severely malnourished children younger than five years, living in households that received handwashing promotion and plain soap, had 42 per cent fewer days with diarrhoea versus severely malnourished children in the control group.  Similar reductions in diarrhoea were observed among children in households receiving anti-bacterial soap.
Luby et al. (2006)	Pakistan (urban)	Cluster RCT	47 households consisting of 1,340 individuals.	Point of use water disinfectant treatment, along with handwashing with soap promotion.	Diarrhoea prevalence was consistently lower among infants and children from one year to two years, who lived in intervention neighbourhoods compared to control neighbourhoods. However, the magnitude of the reductions were less than the overall reduction for all ages, and many of the individual age and intervention specific reductions, were not statistically significant.  Infants less than one year old, in the 'bleach water treatment', experienced a diarrhoea prevalence of 8.30 per cent (20 per cent less than control); 'soap and handwashing promotion', a prevalence of 7.86 per cent (24 per cent less than control); and 'flocculent-disinfectant water treatment', a prevalence of 6.20 per cent (40 per cent less than control). However, none of these differences are statistically significant and yielded extremely large confidence intervals.
Nanan et al. (2003)	Pakistan (rural)	Case control study	control 803 children aged five and younger.	Water and sanitation extension programme project, aimed at improving potable water supply, sanitation facilities, and awareness and practices about hygiene behaviour.	Children, in control villages, had a 33 per cent higher adjusted odds ratio for having diarrhoea than children living in intervention villages. Boys had 25 per cent lower odds of having diarrhoea than girls.

Study	Setting	Study design	Study size	Intervention	Outcome
Oberhelma n et al. (2006)	Peru (peri-urban)	Non-blind RCT	137 children aged five or younger with diarrhoea episodes.	Corralling free-range chickens.	For children aged three and under, the intervention group experienced 3.16 episodes per person per year, compared to 2.61 episodes per person per year, in the control group. The difference was not significant in a student's t-test. The intervention had little impact, which suggests that diarrhoea incidence, among this sample, is due to infections acquired outside the home.
Quick et al. (1999)	Bolivia (peri-urban)	Non-blind RCT	127 households consisting of 791 persons divided into intervention and control groups. The intervention group consisted of 64 households with 400 persons, and the control of 63 households with 391 persons. The intervention group included 16 infants aged less than one year, and 53 children aged one to four years. The control group included 27 infants and 64 children aged one to four years.	Point-of-use treatment of contaminated water with disinfectant, safe storage of treated water, and community education.	Intervention households had 44 per cent fewer diarrhoea episodes than control households. Infants less than one year old and children aged 5–14 years in intervention households had significantly less diarrhoea than control children. Diarrhoeal incidence was reduced 53 per cent among infants and 59 per cent among children 5–14. However, the intervention had an insignificant effect on diarrhoeal episodes for children aged one to four.
Rana (2009)	Bangladesh (rural)	Interrupted time- series experimental study	17,101 children aged four or younger.	Promotional activities including the installation of tubewells and sanitary latrines, and health education for improving hygienic behaviour.	Among children under-five the incidence of waterborne diseases was reduced from 22 per cent to 13 per cent.
Rasella, Aquino, and Barreto (2010)	Brazil (unknown)	Ecological study	2,601 Brazilian municipalities.	The Family Health Programme (FHP), a strategy for reorganization of primary healthcare in Brazil.	Mortality rates, for diarrhoeal diseases, decreased from 0.81 to 0.46 per 1,000 live births (a 43 per cent reduction), as did mortality from lower respiratory infections (from 1.39 to 0.96 per 1,000 live births, a 31 per cent reduction). Reductions of 31 per cent and 19 per cent in mortality rates due to diarrhoeal diseases and lower respiratory infections, respectively, were observed in municipalities with the highest FHP coverage.

Study	Setting	Study design	Study size	Intervention	Outcome
Reller et al. (2003)	Guatemala (rural)	Non-blind RCT	12 villages consisting of 492 households, totaling 2,982 persons of which 522 were children one year or younger.	Household-based drinking water disinfectant and a storage vessel.	Children in households which received flocculant disinfectant and a storage vessel experienced significantly fewer episodes of diarrhoea than the control group.  Infants in households who received flocculant disinfectant plus a storage vessel had 30 per cent fewer episodes of diarrhoea compared to infants who received flocculant disinfectant alone.  Children less than five years of age, who lived in households with water treatment, had fewer episodes of severe diarrhoea than controls, but they did not have fewer episodes of prolonged diarrhoea.
Roberts et al. (2001)	Malawi (refugee camp)	(refugee Non-blind RCT	500 Mozambican refugee households (100 interventions, 400 controls).	Water storage improvement programme.	There was 31 per cent less diarrhoeal disease in children under-five among the group who received the intervention.
Semenza et al. (1998)	Uzbekistan (urban)	Cluster randomized intervention study	344 children under-five.	Home chlorination of drinking water for a sample lacking access to piped water.	The home chlorination intervention group had the lowest diarrhoeal rate (28.8 per 1,000 subjects per month), compared to those with piped water, and those receiving no intervention.  The relative risk of diarrhea among children in the intervention rather than control (no access to piped water, received no intervention), was 0.33 points. The relative risk of children who received the intervention versus those who received piped water was 0.50points. The relative risk of children, in the control group versus those who received piped water, was 1.5 points.
Shahid et al. (1996)	Bangladesh (peri- urban)	(peri- Non-blind RCT	The intervention area had 44 children aged 0–11 months, 19 aged 12–23 months, and 68 aged 24–59 months.  The control group had 33 children aged 0–11 months, 27 aged 12–23 months, and 79 aged 24–59 months.	Handwashing and education programme.	Diarrhoea incidence was reduced 61 per cent among those aged 0–11 months, 47 per cent among those aged 12–23 months, and 56 per cent among those aged 24–59 months.
Sircar et al. (1987)	India (urban)	Non-blind RCT	340 children younger than the age of five.	Handwashing promotion and education programme.	The difference in the incidence of diarrhoea between those under-five in study and control groups was not significantly different. This was due to the inability to enforce handwashing practices in this younger age group.

Study	Setting	Study design	Study size	Intervention	Outcome
Sobsey et al. (2003)		Bangladesh and Non-blind RCT Bolivia (peri-urban)	Approximately 140 households in Bolivia and about 275 households in Bangladesh.	Chlorination and safe storage of household drinking water.	Chlorination and safe storage of In Bangladesh, the mean diarrhoea incidence rates for children under-five were significantly lower in intervention households (20.8 episodes/1,000 days) than in control households (24.3 episodes/1,000 days).  However, in Bolivia, the mean rates in children under-five were only slightly lower in the intervention group than in the control group.
Tonglet et al. (1992)	onglet et Zaire (rural) al. (1992)	Non-blind concurrent cohort study	906 children under-four at the commencement of the study.	906 children under-four at Installation of a piped-water the commencement of the network.	Median diarrhoea incidence per two weeks proved to be significantly lower in the two intervention villages than in the control village. Within intervention villages, the median diarrhoea incidence per two weeks was halved in children who lived in households located less than a five-minute walk from the public standpipe, or in households using more than 50 litres of water a day.

Promoting	Promoting behavioural change	nge			
Study	Setting	Study design	Study size	Intervention	Outcome
Ahmed et al. (1993)	Bangladesh (rural)	Non-blind control trial	Bangladesh (rural) Non-blind control Intervention and control Educational messages to trial groups were each composed improve hygiene practices, of 185 households with surveillance of households children aged 0–18 months. Intervention areas to asses household cleanliness and adherence to hygiene mess	in the s sages.	At the time of the first of three surveys, diarrhoea was more prevalent in the intervention site. Mid-way through the intervention, the prevalence in the intervention site was consistently lower than that of the control site. At the end of the intervention, the difference between the sites in diarrhoeal rates disappeared.  Diarrhoea prevalence was correlated with mother's understanding and knowledge, food hygiene score, all adoption score, and cleanliness score.
Bang et al. (1994)	Bang et al. India (rural) (1994)	Non-blind RCT	An intervention sample of 58 villages and a control sample of 44 villages with populations of 48,377 and 34,856, respectively.	Educational intervention training 30 paramedical workers, 25 village health workers, and 86 traditional birth attendants to diagnose and treat childhood pneumonia.	Educational intervention training Neo-natal mortality due to pneumonia was reduced by 44 per cent in the 30 paramedical workers, 25 intervention versus control area. village health workers, and 86 radiitional birth attendants to diagnose and treat childhood pheneumonia.

Study	Setting	Study design	Study size	Intervention	Outcome
Bateman et al. (1995)	Bangladesh (rural)	Non-blind cluster trial	400 children under-five.	Model 1: Education sessions with the tubewell caretakers, their spouses, and tubewell users.  Model 2: Model one intervention, plus outreach activities, including school programmes, child-to-child activities, and activities with key influencers in the community.	In both models, there is a dramatic reduction in the intervention areas compared to control areas, with an overall reduction of about two thirds in the former. The per cent of children with diarrhoea within the two weeks before the survey are 23 per cent versus 65 per cent for Model 1 intervention and control, and 20 per cent versus 57 per cent for Model 2 intervention and control groups respectively.
English et al. (1997)	Vietnam (unknown )	Non-blind RCT	Preschool children aged five and under in the project commune (average 469 children) and the control commune (average 251 children).	Nutrition improvement programme based on household food production and nutrition education.	The project commune showed a significant reduction in the incidence of respiratory infections (from 49.5 per cent to 11.2 per cent), and diarrhoeal infections (18.3 per cent to 5.1 per cent). The incidence of pneumonia and severe pneumonia was also significantly reduced in the intervention commune. There was no significant change in the incidence and severity of respiratory disease, or the incidence of diarrhoeal disease in the control commune. No significant differences were identified between boys and girls, either for the incidence or severity of respiratory infections, or the incidence of diarrhoeal disease.
Fauveau et al. (1992)	Bangladesh (rural)	Non-blind RCT consisting of two interventions implemented consecutively.		Two consecutive interventions.  The first consisted of a community-based family planning and health services project, which involved village community health workers administering vaccines for childhood diseases, promoting oral rehydration therapy for diarrhoea, distributing vitamin A capsules, providing nutritional information, and detecting and referring seriously ill or malnourished children.  The second targeted ALRI-related mortality, through case detection and management by community health workers, backed by medical support.	During the second phase, the ALRI mortality was 32 per cent lower in the intervention area than during the preceding phase, while there was no significant difference for the comparison area (a reduction of six per cent).  During the first phase, the ALRI-specific death rate, in the intervention area, was half that in the comparison area for children aged 1–4 years. Although it was halved again during the second phase, the reductions in the ALRI-specific death rates, in the two areas, were not significantly different between the two phases. Among infants aged 1–11 months, the ALRI-specific death rate, during the first phase, was not significantly lower in the intervention than in the comparison area, but in the intervention area the rate was 30 per cent lower during the second phase than during the first. The difference in the reduction between the two areas was of border-line statistical significance.

Study	Setting	Study design	Study size	Intervention	Outcome
Froozani et al. (1999)	Iran (urban)	Quasi- experimental non-blind RCT	120 pairs of mothers and infants.	Educational intervention to promote breastfeeding.	The mean number of days of diarrhoea, among infants in the study group, was significantly lower than in the control group.
Haggerty et al. (1994)	Zaire (rural)	Non-blind RCT	Baseline information on diarrhoeal morbidity of 2,082 children. Structured observations were made on 300 families. At follow-up, a subsample of 293 families was randomly selected.	Hygiene education	During the post-intervention period, diarrhoeal morbidity was greatly reduced, relative to the previous year, among all children in both study groups. Diarrhoeal incidence rates declined by approximately 50 per cent in each group, and the reductions were highly significant within each age category in both groups.  One year after baseline, overall, children in intervention sites had a reported mean of 0.85 episodes of diarrhoea, while children in control sites had 0.90 episodes.  There was no discernible evidence of a trend towards fewer episodes of diarrhoea in intervention, compared to control children after the intervention.  Nevertheless, proportionately fewer children in intervention sites were reported to have diarrhoea than at control sites.
Khan et al. (1990)	Pakistan (rural)	Cluster non-blind RCT followed by a time-interrupted series study.	Children aged five years or younger residing in 38 villages (population, 37 245) in three distinct clusters.	Case management by village- level community health workers, backed up by local health centre staff. The intervention consisted of active case-finding and maternal health education. The programme also includes maternal health education.	The ALRI-specific mortality rate among children under-five in intervention villages was 6.3 deaths per 1,000 children per year, compared with 14.4 in seven control villages, a difference of 56 per cent. Within one year of the interventions being extended to the control villages, the ALRI specific mortality rate in these villages dropped by 55 per cent to 6.5 per 1,000 children per year. The ALRI-specific infants' (less than one year old) mortality rate in the intervention villages was 15.5 per 1,000 live births per year in 1985-86, compared with 32.5 per 1,000 per year in the control villages, a 52 per cent difference. After interventions began in the control villages in 1987, the ALRI-specific infant mortality rate dropped to 15.0 per 1,000 per year.
Lye et al. (1996)	Malaysia (unspecified)	Non-blind RCT	A sample of 1,315 to 1,458 and a control sample of 1,042 to 1,205 children under-five.	Health education and training	The reduction in the incidence of severe acute respiratory infection cases in the intervention area was significantly greater than in the control area.
Mtango and Neuvians (1986)	Mtango and Tanzania (rural) Neuvians (1986)	Cluster non-blind RCT	8,028 and 9,099 children in the intervention area, and 8,098 and 9,915 in the control area in the first and second round, respectively.	Health service outreach programme consisting of village health workers visiting households and providing education, as well as providing treatment for acute respiratory infections.	The total under-five mortality was reduced by 27.2 per cent, from 40.1 to 29.2 per 1,000 children.  The disease-specific mortality rate for pneumonia was reduced by 30.1 per cent, from 14.3 to 10.0 per 1,000 children per year, contributing 40 per cent to the overall mortality reduction.

Study	Setting	Study design Study size		Intervention	Outcome
Pandey et al. (1991)	Pandey et Nepal (rural) al. (1991)	Quasi- experimental interrupted time series design.	13,404 children under-five.	13,404 children under-five. Indigenous community health workers in Jumla district were trained to detect and treat pneumonia.	The programme led to a 28 per cent reduction in the risk of death, from all causes, by the third year since implementation. There was a significant trend toward lower mortality with the greater duration of the programme.
Stanton and Clemens (1987)	itanton and Bangladesh (urban) Non-blind RCT Jemens 1987)	Non-blind RCT	51 communities each comprising 38 families were randomized to receive (n = 25) or not receive (n = 26) treatment	5.1 communities each Educational intervention comprising 38 families were promoting hygienic behaviour. andomized to receive (n = 26)  15.5 or not receive (n = 26)  reatment	During the six months after the intervention, the rate of diarrhoea in children aged five and under was 4.3 per 100 in the intervention communities, and 5.8 in the control communities, yielding a protective efficacy of 26 per cent.

Source: Seguin and Niño-Zarazúa (2013).

TABLE A4.5 Synthesis of evidence on 'what works' in aid policy in education policy

		Spanish improved for students. When samples, poorest inly half that of less	results due to problems.	eased by 2.4 per cent	ct of about 0.11sd. only used computers orporating its use th classes.	ict, which had more id higher.
	Policy outcome	a) Rural sector: test scores in Spanish improved for all, but more so for less poor students. When pooling indigenous and rural samples, poorest students' scores increase by only half that of less poor students overall.	b) Urban sector: inconclusive results due to experimental implementation problems.	Math and reading scores increased by 2.4 per cent and 4 per cent, respectively.	Small average treatment effect of about 0.11sd. About a third of the students only used computers for IT training rather than incorporating its use into routine language and math classes.	Test scores in treatment district, which had more exposure to grant, were 0.42sd higher.
	Intervention	Supply-side education programme (PARE) aiming to reduce inequality and improve quality of primary education in four poorest Mexican states.		'Concession Schools' programme (publicly subsidized private schools).	Integration of computers into language teaching in public schools.	Government funded per-student capitation grant.
	Study size	897 (indigenous) 1,024 (rural) 1,480 (urban) 1,921 (pooled rural indigenous)		37,300	5,201	96 (districts)
	Study design	RCT		Foreign Aid and Quasi-experimental analysis Government (propensity score matching)	RCT	Quasi-experimental analysis (D-i-D)
ntions	Funding	1		Foreign Aid and Government	Government	Government
Supply-side capability interventions	Setting	Mexico (urban and Government rural) Primary (grade 6)		Barrera- Colombia (urban) Osorio (2007) Secondary (grade 10)	Barrera- Colombia (urban) Osorio and Primary and Linden (2009) Secondary (grade 3–9)	Uganda (nation- wide) Primary (grade 7)
Supply-side c	Study	Paqueo and Lopez- Acevedo (2003)		Barrera- Osorio (2007)	Barrera- Osorio and Linden (2009)	Bjorkmann (2004)

Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Glewwe et al. (2004)	Kenya (urban and rural) Primary (grade 6–8)	Foreign Aid	RCT	141,698	Flip chart provision in primary schools.	Flip chart provision did not result in any significant increase in test scores.
Vermeersch and Kremer (2004)	Kenya (rural) Pre-Primary	Foreign Aid	RCT	1,326–1,350	Subsidized school meals provision.	Test scores increased by 0.40sd only in schools with better trained teachers. No effect on cognitive abilities suggesting no nutritional effects from programme, but increased attendance incentives explain score gains.
Glewwe et al. (2009)	Kenya (rural) Primary (grade 3–8)	Foreign Aid	RCT	7,354–12,663	Textbook provision.	Textbooks did not increase the average scores, but only test scores of the strongest students. Weaker students could not read the books as English is most often their third language.
Evans et al. (2009)	Kenya (rural) Primary (grade 1-4)	Foreign Aid	RCT	582	School uniforms provision.	Students' test scores increased on average by 0.25sd.
Duflo et al. (2012a)	Kenya (rural) Primary (grade 1)	Foreign Aid	RCT	6,531	Extra-contract teacher hired by parent-teacher associations to reduce class size.	Test scores only increased for children assigned to a new-contract teacher. For the remaining children, in consequently reduced (by half) classes, no gains took place.
Burde and Linden (2012)	Afghanistan (rural) Primary (grade 1-8)	Foreign Aid	RCT, complemented by IVs estimation	1,374	Effect of village-based community- schools' provision on test scores, and (indirect) effect of reducing distance to school on test scores.	Attending village-based schools raises test scores by 0.51sd overall (with stronger impact on girls and children who would not attend village-based schools without treatment). Reducing school distance by one mile improves scores by 0.15sd (boys) to 0.24sd (girls).
Asadullah (2005)	Bangladesh (nation-wide) Secondary (grade 11)	Government	Quasi-experimental analysis (regression discontinuity design)	2,165	Effect of class-size reduction (following discontinuous rule) on student test scores.	Smaller class size does not affect test scores, possibly due to secondary school students being less sensitive to this. Or because class size only matters, when coupled with adequate infrastructure and teacher quality.
Banerjee et al. (2007)	India (urban) Primary (grade 3–4)	Foreign Aid	RCT	a) 21,936 b) 5,523	a) Remedial education in basic literacy and numeracy skills. b) Computer assisted learning targeting math skills.	a) Average test scores increased by 0.28sd, results driven by lowest performing children. b) Math test scores increased by 0.47sd.

Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Linden (2008)	Linden (2008) India (urban and rural) Primary (grade 2– 3)	Foreign Aid	RCT	524 (in school experiment) 1114 (out of school experiment)	Computer Assisted Learning (CAL), as substitute (in school experiment) or complement for teacher (out of school experiment).	CAL lowered math scores by 0.57sd when implemented as a substitute for teachers, but improved them by 0.28sd when used as a complement (the result is driven by weaker students, whose scores increased by 0.40sd).
He et al. (2008)	India (urban and rural) Primary (grade 1– 5)	Foreign Aid	RCT	4,882–5,327	New teaching methods (PicTalk computer machine and flashcard games) to improve teaching of foreign language (English).	Scores are raised by 0.25–0.35sd by both games and computer-assisted learning. When students' own teachers delivered the interventions, positive spillover raised math scores too, and weaker students benefited the most. Stronger students benefited more from the self-paced computer assisted learning method.
He et al. (2009)	India (urban) Pre-primary and primary (grade 1)	Foreign Aid	RCT	1,267–2,824	Literacy skills school programme (three types: in school, out of school, and preschool).	Preschool and out-of-school interventions, generated higher gains (0.55sd and 0.70sd respectively), compared to the in-school setting. Highest gains where for ex-ante lowest performing students.
Muralidharan and Sundararama n (2010a)	India (rural) Primary (grade 1– 5)	Foreign Aid	RCT	48,791	Provision of low-cost diagnostic feedback to teachers on students' performance.	A supply-side intervention, to provide feedback diagnostic, was not enough to generate teacher incentives to improve students' exam scores (companion paper shows that coupled with pay incentives, diagnostic feedback provides valuable input).
Muralidharan and Sundararama n (2010b)	India (rural) Primary (grade 1– 5)	Foreign Aid	RCT	20,878 (math) 21,049 (language)	Provision of extra contract teachers.	Test scores increased by 0.15sd in math and 0.13sd in language. Intervention is particularly beneficial for students in first school year and in remote schools.
Muralidharan and Sundararama n (2011)	India (rural) Primary (grade 1– 5)	Foreign Aid	RCT	12,255–14,797 (math) 12,410–14,963 (language)	Provision of an extra contract teacher and extra schooling materials.	Provision of extra resources raised test scores by 0.10sd on average, which is 0.13sd lower than the average increase in test scores caused by the pay incentive scheme.

study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Angrist et al. (2001)	Colombia (urban) Secondary (grade 6–8)	Foreign Aid and Government	RCT	282	PACES vouchers funding low-income students' private secondary education (grant renewal conditional on students' performance).	Lottery winners scored on average 0.20sd higher on standardized tests. With larger disaggregated effects for girls than boys.
Angrist et al. (2006)	Colombia (nation- wide) Secondary (grade 10)	Foreign Aid and Government	Natural experiment (censored Tobit, non- parametric bounds)	3,541	PACES vouchers funding low income students' private education (grant renewal conditional on performance).	Math and reading scores increased by 0.20 sd. Positive effects go beyond the incentive not to fail tests; gains are also reflected in increased school choice incentives.
Contreras (2001)	Chile (nation-wide) Secondary (grade 10)	Government	Quasi-experimental analysis (two stage least squares)	56,200 (male), 62,900 (female)	School Voucher System (publicly subsidized private schools).	Average (language-math) increase of 102 test points for male and 86 test points for female students.
Hsieh and Urquiola (2003)	Chile (nation-wide) Primary and Secondary (grade 4 and 8)	Government	Cross-sectional and IV Analysis	84 (schools)	Government voucher scheme, allowing any student wishing to do so, to move from a public to a private school.	The reform did not translate in positive achievement gains: math test scores decreased. The only tangible result has been a middle class exodus from public schools.
Anand et al. (2009)	Chile (urban) Primary (grade 4)	Government	Quasi-experimental analysis (propensity score matching)	14,036	Scholarship provision to low-income students attending private voucher school, which charge fees on top of the voucher.	Low-income students attending fee-charging private schools, thanks to a scholarship, scored 0.20sd higher than those attending public schools, but score no higher than low-income students attending free private-voucher schools.
Rau and Contreras (2009)	Chile (nation-wide) Primary and Secondary (grade 4, 8, 10)	Government	Quasi-experimental analysis (regression discontinuity design and D-i-D matching)	955–1,740	Teacher-pay incentives to raise test scores (assessment of tournament competition vs. 'gift-exchange' effect).	Competing in a tournament for pay incentive assignment raised test scores. But after winning, teachers do not act upon reception of the bonus in a way that maintains the score gains (e.g. out of gratitude).
Behrman et al. (2012)	Mexico (nation- wide, mostly rural) Upper Secondary (grade 10–12)	Government	RCT	11,300–17,800	ALI: Individual student and teacher pay incentive schemes; and combined incentive scheme to students, teachers, and school administrative staff, for both individual and group performance improvement.	Teacher-incentive pay schemes were not effective on their own, while student-pay incentive schemes were (0.2–0.3sd gain). The biggest impact was, however, that of the combined incentive scheme, which rewarded not only individual performance, but also increased performance of groups (0.3–0.6sd gain). Estimates are adjusted as cheating proved to he substantial

Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Das et al. (2004)	Zambia (urban and rural) Primary (grade 5– 6)	Government	Natural experiment and IV analysis	164 (schools)	Anticipated vs. unanticipated cash transfers for school attendance.	Math and language test scores increase more when cash transfers are unanticipated by households. This is because anticipated grants lead to substitution effect of resources.
Nguyen (2008)	Madagascar (rural) Primary (grade 4)	Foreign Aid and Government	RCT	11,659 (students)	Provision of statistic information on education earning returns and/or role models.	Providing statistics raises scores by 0.20sd, on average, with an impact as high as 0.37sd for students underestimating returns prior to RCT. Role models only increased scores when of lowincome background (0.17sd); with a higher impact on poorer students (0.27sd).
(2009)	Kenya (rural) Primary (grade 5– 6)	Foreign Aid	RCT	1,153–3,602 (pooled sample) 768–2,106 (Busia) 385–1,496 (Teso)	Merit-based scholarship award to fund secondary school progression for girls.	Girls' test scores increased by 0.20–0.30sd in Busia district. There is inconclusive evidence with regards to Teso. The impact also had spillover effects on the increase of boys' scores, and on test scores of girls who were not awarded the scholarship.
Glewwe et al. (2010)	Kenya (rural) Primary (grade 4– 8)	Foreign Aid	אכן	15,641	Teacher-pay incentive scheme tied to students' performance in exams.	Test scores increased ad-hoc to achieve pay rise (ability to answer Multiple Choice Questions (MCQs) and filling the gaps questions). Thus, only test taking skills improved, but no impact on content learning.
Baird et al. (2010)	Malawi (urban and rural) Secondary (grade 5–8)	Foreign Aid	RCT	2,057	Conditional vs. Unconditional Cash Transfer Schemes.	Test scores are 0.14sd higher in English, 0.12sd higher in math, and 0.17sd higher in overall cognitive abilities for girls who received the conditional cash transfer.
Kingdon and Teal (2007)	India (urban ) Secondary (grade 8)	Government	Cross-sectional and quasi- experimental analysis (IV)	360-542	Teacher-pay incentive in private vs. public schools.	A 22 per cent increase in test scores follows an increase in teacher pay from 1sd below to 1sd above the mean. This is only found in private schools. As public school contracts are mostly permanent in India, pay incentives do not generate effort increases in that context.
Duflo et al. (2012b)	India (rural) Informal learning centres (primary)	Foreign Aid	RCT	1,760–1,893	Teacher-pay incentive and monitoring scheme to reduce absenteeism.	A year after the intervention, test scores were 0.17sd higher. Gains are the results of both incentives and increased monitoring.

Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Muralidharan and Sundararama n (2011)	India (rural) Primary (grade 1-5)	Foreign Aid	RCT	12,255–14,797 (math) 12,410–14,963 (language)	Individual teacher pay incentive scheme and group teacher pay incentive scheme (school-level)	The individual incentive scheme improved test scores by 0.27sd in math and 0.17sd in language. The group scheme increased scores by 0.22sd in math and 0.09sd in language. Spillovers raised scores in non-incentive subjects too (from 0.11 to 0.18sd).
Knowledge	Knowledge enhancing and participation-based interventions	rticipation-bas	ed interventions			
Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Jimenez and Sawada (1999)	El Salvador (rural) Primary (grade 3)	Foreign Aid and Government	Quasi-experimental (structural equation modelling and IV)	905	EDUCO's Community Involvement and Decentralization Programme.	Language test scores increased as a result of the decentralization and community involvement.
Palomer and Paredes (2010)	Chile (urban) Primary (grade 4)	Government	Quasi-experimental analysis (propensity score matching and structural equation modelling)	225,206 (structural equation) 546 (PSM)	Low-income students' attendance to private subsidized School Improvement Plan (SIP) schools, which implement best practice and management standards.	Math test scores increased by about 32 points in SIP schools, as a result of good management practices.
Di Gropello and Marshall (2004)	Honduras (rural) Primary (grade 3)	Government	Quasi-experimental analysis (structural equation model)	975	Community school participation programme (PROHECO).	Ten per cent point average increased in the percentage of correct answers for Spanish, math, and science exams.
King and Ozler (2005)	Nicaragua (nation- wide) Primary and Secondary (grade 4 and 10)	Government	Cross-sectional and IV Analysis	945 (primary) 911 (secondary)	Decentralization of school- management reform.	While official autonomy as a status does not improve learning, when de facto autonomous practices are considered, an increase in math test scores is recorded.
Galiani et al. (2008)	Argentina (nation- wide) Secondary (grade 10)	Government	Quasi-experimental analysis (D-i-D)	3,273	Decentralization of secondary school system.	Test score increased by 3.5 per cent for math and 5.4 per cent in language, but the gains did not reach the poorest students.

Study	Setting	Funding	Study design	Study size	Intervention	Policy outcome
Lassibille et al. (2010)	Madagascar (urban Government RCT and rural) Primary (grade 3– 5)	Government	RCT	22,000	Improvement of school management practices at various levels of decentralization.	Improvement of school management management practices were improved only practices at various levels of when the intervention was implemented at all decentralization.  Here implementation complemented district and sub-district implementation), but the impact on test scores was insignificant.

Source: Masino and Niño-Zarazúa (forthcoming-a).

TABLE A4.6 Synthesis of evidence on maternal and child health policies

What works (and does not work)?	ork)?			
What?	Where?	How and why?	To whom?	What impact?
School feeding programme (Afridi 2010)	Rural India	The impact of a school feeding programme on participant nutrient intake was assessed through fixed effects and difference-indifference estimation techniques in a fixed effect model.	Children at risk of malnutrition in rural India	Programme participants' total nutrient intake during school hours increases by almost the full amount of the transfer from school meals, especially in the preferred specifications that control for endogenous programme placement and individual fixed effects. In the short run the programme has a substantial effect on reducing hunger at school and protein-energy malnutrition.
Enhanced water supply and quality through handpumps, and health education for mothers (Alam et al. 1989)	Rural Bangladesh	The policy was likely implemented as a pilot project, as a non-blind RCT.	Children aged 6-23 months	The use of handpump water for drinking and washing, removal of child's faeces from the yard, and maternal handwashing before handling food and after defecation of self and child, observed together, decreased yearly diarrhoea incidence in children by more than 40 per cent compared to children living in households where none or only one of these practices was observed. On average, a child in the intervention area had 3.4 diarrhoea episodes in a year while a child in the control area had 4.1 episodes. The difference was statistically significant (p<0.01). The impact of the educational intervention on maternal hygiene behaviour could be assessed only indirectly by comparing distributions of hygiene practices in two areas. Significant differences have been found (X2 = 113.3, p<0.001) which may indicate success of the health education programme in promoting hygiene among the non-educated mothers of young children.

What?	Where?	How and why?	To whom?	What impact?
Educational intervention training a variety of health workers (Bang et al. 1994)	Rural India	The project was implemented in order to better train various types of health workers to lower mortality among young children due to pneumonia, as assessed through a nonblind RCT.	Paramedical workers, village health workers, and traditional birth attendants benefited from the training, and young children benefited as well through their care	Neonatal mortality due to pneumonia was reduced by 44 per cent in the intervention versus control area (p<0.001).  Post-intervention the total neonatal mortality rates were 78.7 and 62.8 per 1,000 in the control and intervention areas respectively (p<0.01).
Two interventions were given. Model 1: Education sessions with the tubewell caretakers, their spouses, and tubewell users. Model 2: Model 1 plus school programmes, child to child activities, and activities with key community actors (Bateman et al. 1995).	Rural Bangladesh	The project was implemented to decrease the incidence of diarrhoea among children, as assessed through a non-blind cluster trial.	Communities, through the educational component, as well as children specifically, who benefited from the health impacts	In both Models, there is a dramatic reduction in the intervention areas compared to control areas, with an overall reduction of about two thirds in the former.  The per cent of children with diarrhoea within the two weeks before the survey are 23 per cent versus 65 per cent for Model 1 intervention and control, and 20 per cent versus 57 per cent for Model 2 intervention and control groups respectively.
Nutritional intervention of HIV- exposed infants (Buonomo et al. 2012)	Rural Malawi	This pilot intervention examined the impact of nutritional rehabilitation on HIV-exposed children.	HIV-exposed infants	At six months post-intervention slowing of linear growth was observed in patients with malaria with a mean gain in 4.4 +/- 1.7 cm, as compared to 5.6 +/- in children without malaria; dietary scores also increased. Our findings demonstrate that both nutritional status and diet improved significantly over the course of a short observation period. The most significant improvement was noted in cases of acute malnutrition. Our results are consistent with those of other studies and highlight the complexity of nutritional rehabilitation efforts in the early years of life, particularly in areas where chronic and moderate deficits abound, confounded by high rates of food insecurity and infectious diseases, such as HIV and malaria.
Pension scheme (Duflo 2000)	Rural and urban South Africa	Duflo assessed the impact of a pension scheme given to pension-aged citizens on child health. Non- parametric methods were used.	Children with relatives eligible for a pension scheme	The extension of the Old Age Pension programme in South Africa has led to an improvement in the health and nutrition of children, especially for girls. This effect is entirely due to pensions received by women. The findings reported here are important because they show that an exogenous increase in income can improve child health in developing countries. The results also provide a clear example of the difference in the effects of income in the hands of men and in the hands of women. The identity of the transfer recipient affects its impact. If the programme was not naturally biased in favour of women, it would not improve child health as much. In the context of the increasing prevalence of AIDS, the evidence that money given to grandparents can reach young children becomes of critical importance.

What?	Where?	How and why?	To whom?	What impact?
The introduction of oxygen concentrators and pulse oximeters into hospitals (Duke et al. 2008)	Papua New Guinea	The initiative was implemented in order to reduce the risk of death for children presenting with pneumonia at a health facility	Children with pneumonia	The case fatality rate of the pre-intervention group was 4.97 per cent (95 per cent CI: 4.5–5.5) compared to the post-intervention group case fatality rate of 3.22 per cent (95 per cent CI: 2.5–3.8). After the system was introduced, the risk of death for a child with pneumonia was 35 per cent lower than was before the project began.
Integrated maternal and child health project (Edwards and Saha 2011)	Rural Bangladesh	The project was undertaken in order to make progress toward MDGs 4 and 5, as assessed in a nonexperimental study.	Pregnant women	The study found that women living in the catchment area of the project have much better outcomes than the national average. The authors attribute this to the integrated system of care, providing a continuum of care between the hospital and the home, the provision of health worker training, and community involvement. However, the study acknowledges that the model is very resource-intensive and would not be replicable by the government, hence being aid-dependent and potentially unsustainable.
Nutrition improvement programme based on household food production and nutrition education (English et al. 1997)	e Vietnam	The project was implemented in order to reduce the incidence of respiratory infections and diarrhoeal infections among children, as assessed through a non-blind RCT.	Children without access to nutritious food	The project commune showed a significant reduction (p<0.00001) in the incidence of respiratory infections (from 49.5 per cent to 11.2 per cent) and diarrhoeal infections (18.3 per cent to 5.1 per cent). The incidence of pneumonia and severe pneumonia was also significantly reduced in the incidence of pneumonia (p<0.0001). There was no significant change in the incidence and severity of respiratory disease or the incidence of diarrhoeal disease in the control commune.  No significant differences were identified between boys and girls either for the incidence or severity of respiratory infections, or the incidence of diarrhoeal disease.
Two consecutive interventions. The first consisted of a community-based family planning and health services project, which involved village community health workers administering vaccines for childhood diseases, promoting oral rehydration therapy for diarrhoea, distributing vitamin A capsules, providing nutritional information, and detecting and referring seriously ill or malnourished children.  The second targeted ALRI-related mortality, through case detection and management by community health workers, backed by medical	Bangladesh	The project was implemented in order to decrease the mortality among young children due to respiratory infection, as assessed through a nonblind RCT.	Children in need of enhanced medical services, and/or those at risk of mortality due to respiratory infection	During the second phase, the ALRI mortality was 32 per cent lower in the intervention area than during the preceding phase, while there was no significant difference for the comparison area (a reduction of six per cent).  During the first phase, the ALRI-specific death rate in the intervention area was half that in the comparison area for children aged 1–4 years. Although it was halved again during the second phase, the reductions in the ALRI-specific death rates in the two areas were not significantly different between the two phases (X2 test for heterogeneity = 0.6). Among infants aged 1–11 months, the ALRI-specific death rate during the first phase was not significantly lower in the intervention than in the comparison area, but in the intervention area it was 30 per cent lower during the second phase than during the first (p<0.05). The difference in the reduction between the two areas was of border-line statistical significance (X2 test for heterogeneity = 3.4, p = 0.06).

What?	Where?	How and why?	To whom?	What impact?
Educational intervention to promote breastfeeding (Froozani et al. 1999)	Urban Iran	This project was implemented in order to decrease the incidence of diarrhoea among newborns, as assessed through a quasiexperimental non-blind RCT.	Mothers and newborns	The mean number of days of diarrhoea among infants in the study group was significantly lower (P≤0.004) than in the control group.
Skilled care initiative project (Hounton et al. 2009)	Rural Burkina Faso	The aim of the project was to increase the proportion of babies delivered at health facilities, thereby decreasing pregnancy-related mortality, as assessed through a quasiexperimental study.	Pregnant women with limited access to health facilities	The study found that the Skilled Care Initiative project increased the number of babies delivered at health facilities (the aim of the project); however, it had no effect on pregnancy related mortality. The authors also found a low rate of caesarean sections, which they interpret to mean that substantial barriers still exist to service delivery, which may explain the lack of impact on health outcomes.
Case management by village-level community health workers, backed up by local health centre staff, all engaged in active case-finding. The programme also includes maternal health education (Khan et al. 1990)	Rural Pakistan	This project was implemented in order to decrease the incidence of respiratory infection among children, through active case finding among health workers and enhanced maternal education. A cluster non-blind RCT followed by a time-interrupted series study was conducted.	Health workers benefited from better- organized triage system, mothers and children benefited from this as well, and from maternal education	The ALRI-specific mortality rate among children under-five in intervention villages was 6.3 deaths per 1,000 children per year, compared with 14.4 in seven control villages (p = 0.0001), a difference of 56 per cent.  Within one year of the interventions being extended to the control villages, the ALRI specific mortality rate in these villages dropped by 55 per cent to 6.5 per 1,000 children per year (p = 0.06).  The ALRI-specific infant (less than one year old) mortality rate in the intervention villages was 15.5 per 1,000 live births per year in 1985–86, compared with 32.5 per 1,000 per year in the control villages, a 52 per cent difference (p = 0.006).  After interventions began in the control villages in 1987, the ALRI-specific infant mortality rate dropped to 15.0 per 1,000 per year (p = 0.12).
Health education and training (Lye et al. 1996)	Malaysia	The project was aimed at reducing the incidence of respiratory infections among children.	Children at risk of developing respiratory infections, health workers in receipt of education and training	The reduction in the incidence of severe acute respiratory infection cases in the intervention area was significantly greater than in the control area (p<0.05).

What?	Where?	How and why?	To whom?	What impact?
Egypt's National Control of Diarrheal Diseases Project (NCDDP) (Miller and Hirschhorn 1995)	Egypt	The NCDDP included efforts to increase the production and distribution of ORS packets, nation-wide education, and mass media programmes, as well as the integration of rehydration into the existing public and private healthcare networks. The programme was funded by USAID between 1981 and 1991.	Persons at risk of diarrhoeal disease (children are particularly vulnerable)	Not discussed by this author in the Egyptian context. Egypt was successful at integrating the programme into the national health system.
Improving maternal and newborn health (Mize et al. 2008)	Rural Timor- Leste	The project was aimed at increasing women's access to antenatal and postpartum health services, to birth attendants, and promotion of breastfeeding during first months.	Pregnant women with limited access to health services during pregnancy, delivery, and post-partum	The project met and exceeded its objectives. The evaluation attributes the success of the project to the technical ability of its staff and the investments made on their skills, accepting leadership from government, research, and community consultations carried out before designing the project, and the use of video and photographic materials for health promotion.
Health service outreach programme consisting of Village Health Workers visiting households and providing education and treatment for acute respiratory infections (Mtango and Neuvians 1986)	Rural Tanzania	The project was implemented in order to decrease child mortality from all causes, as assessed by a cluster non-blind RCT.	Children at risk of dying due to diseases	The total under-five mortality was reduced by 27.2 per cent from 40.1 to 29.2 per 1,000 children.  The disease-specific mortality rate for pneumonia was reduced by 30.1 per cent from 14.3 to 10.0 per 1,000 children per year, contributing 40 per cent to the overall mortality reduction.
Corralling free-range chickens (Oberhelman et al. 2006)	Peri-urban Peru	The pilot project was aimed at reducing incidence of diarrhoea among young children, assessed through a non-blind RCT.	Children residing in close proximity to freerange chickens	For children aged three and under, the intervention group experienced 3.16 episodes per person per year, compared to 2.61 episodes per person per year in the control group. The difference was not significant in a students' t-test.  The intervention had little impact, which suggests that diarrhoea incidence among this sample is due to infections acquired outside the home.
Indigenous community health workers in Jumla district were trained to detect and treat pneumonia (Pandey et al. 1991)	Rural Nepal	The project was implemented in order to decrease childhood mortality, as assessed through a quasiexperimental interrupted time series design study.	Children at risk of mortality due to diseases	The programme led to a 28 per cent reduction in the risk of death from all causes by the third year since implementation.  There was a significant trend toward lower mortality with the greater duration of the programme.

Provide concrete examples of relevant developing the innovation and why is it innovation in the bean the role of aid in developing the innovation and why is it innovation in the form of aid in developing the innovation and why is it innovation in the family health programme scaled to national level overcome.  What is scalable?  When is scalable?  When is scalable?  When is scalable?  When is scalable?  Who have been the main constraints (financia).  Who have been the main organization of pringene operation of pringene operation in grant (financia).  Who have been the main constraints (financia).  Who have been the main one with has been the inspact of policy scalability at aggregate (regional overcome).  It is unknown how these constraints were the main winners.  What is a calegory or coopality and political bears and political bears (financia) and political bears (financia).  Who have been the main winners (financia) and political bears (financia) and political bears (financia) and political bears (financia).  Who have bear the main winners (financia) and political bears (financia) and political bears (fi	What could work?			
ructed ventilated innovation is unclear. It is relevant for sanitary latrines, and/or development as it decreases burden of without sufficient knowledge development as it decreases burden of of the impact of hygiene on health.  How the main constraints (financial, who have been the main administrative, and political) were process of scalability were covercome  BRAC was partially funded by Swiss Aid. Citizens (especially children) were the main winners. It is unknown how these constraints were the main winners are those residents in municipalities without the reorganization of services.	Provide concrete examples of relevant innovations funded by aid	What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit from the innovation	If known, what could be the impact if implemented
f policies that have How the main constraints (financial, who have been the main administrative, and political) were winners (and losers) in the overcome administrative, and political) were the main winners.  Iled to the national BRAC was partially funded by Swiss Aid. Citizens (especially children) were the main winners. It is unknown how these constraints were Judged on the outcomes shown by Rasella et al. (2010), the winners are those residents in municipalities where this programme was implemented in residents in those residents in those municipalities without the reorganization of services.	The Rural Sanitation Pilot Project (RSPP) promoted and constructed ventilated improved pit latrines, and provided health education directed at improving standards of personal and domestic hygiene practices (Daniels et al. 1990).	The role of aid in developing the innovation is unclear. It is relevant for development as it decreases burden of disease due to diarrhoea, especially among young children.	Residents in areas without sanitary latrines, and/or without sufficient knowledge of the impact of hygiene on health.	An evaluation of the pilot in rural Lesotho (Daniels et al. 1990) revealed that cases of child diarrhoea were significantly less likely than controls to come from latrine-owning houses (p<0.01, OR = 0.76, 95 per cent CI = 0.62–0.93). Children under-five from households with a latrine may experience 24 per cent fewer episodes of diarrhoea than such children from households without a latrine (OR = 0.76, 95 per cent CI = 0.58–1.01). The impact of latrines on diarrhoea was greater in those households that used more water, practiced better personal hygiene, and where mothers had a higher level of education or worked outside the home.
How the main constraints (financial, administrative, and political) were overcome  BRAC was partially funded by Swiss Aid.  It is unknown how these constraints were Ludged on the outcomes shown by Rasella et al. (2010), the winners are those residents in municipalities where this programme was implemented, and losers are recorganization of services.	What is scalable?			
BRAC was partially funded by Swiss Aid. Citizens (especially children) were the main winners.  It is unknown how these constraints were Judged on the outcomes shown by Rasella et al.  (2010), the winners are those residents in municipalities where this programme was implemented, and losers are residents in those municipalities without the reorganization of services.	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners (and losers) in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional- national level)
It is unknown how these constraints were shown by Rasella et al. overcome. (2010), the winners are those residents in municipalities where this programme was implemented, and losers are residents in those residents in those recognization of services.	ORT programme scaled to the national level in Bangladesh by BRAC, and NGO (Cash and Potter, forthcoming).	BRAC was partially funded by Swiss Aid.	Citizens (especially children) were the main winners.	BRAC succeeded in scaling up the ORT programme so that over a ten year period they trained over 13 million care givers nationwide and made some of the most impressive advances in national treatment rates.
	The Family Health Programme (FHP), a strategy for reorganization of primary healthcare in Brazil, was implemented in 2,601 municipalities (Rasella et al. 2010).	It is unknown how these constraints were overcome.	Judged on the outcomes shown by Rasella et al. (2010), the winners are those residents in municipalities where this programme was implemented, and losers are residents in those municipalities without the reorganization of services.	Mortality rates for diarrhoeal diseases decreased from 0.81 to 0.46 per 1,000 live births (a 43 per cent reduction), as did mortality from lower respiratory infections (from 1.39 to 0.96 per 1,000 live births, a 31 per cent reduction).  Reductions of 31 per cent (95 per cent CI: 20 per cent-40 per cent) and 19 per cent (95 per cent CI: 8 per cent CI: 9 per cent) in mortality rates due to diarrhoeal diseases and lower respiratory infections, respectively, were observed in municipalities with the highest FHP coverage.

What is transferable?			
Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy tranferability
The NCDDP programs, implemented in several countries including Egypt (see above), the Philippines (Baltazar et al, 2002) and Mexico (Gutierrez et al. 1996).	The NCDDP was funded by USAID in Egypt; unsure of the role of aid in its implementation elsewhere.	Citizens of countries which have received the programme	An analysis of the impact of Mexico's program reveals that ORT as well as water and sanitation were the two largest contributors to decreased child mortality during the 80's and early 90's (Gutiérrez, et al. 1996).
The intervention which introduced oxygen concentrators and pulse oximeters into hospitals (see Duke et al. 2008 above) could likely make a positive difference in areas beyond Papua New Guinea, where that intervention occurred.	Unknown	Unknown	Unknown
Some aspects of The Family Health Programme (FHP) (Rasella et al. 2010) described above may Unknown be transferable to other settings.	Unknown	Unknown	Unknown
Conceivably, the breast-feeding intervention assessed by Froozani et al. (1999) in urban Iran could be transferred to other areas, but no evidence exists that this has occurred.	Unknown	Unknown	Unknown

Source: Author.

TABLE A4.7 Synthesis of evidence on general health aid policies

What?	Where?	How and why?	To whom?	What impact?
Public health interventions to reduce the economic impact of HIV/AIDS, tuberculosis, and malaria (Amaya and Niño-Zarazúa, forthcoming)	Developing countries	Examine the economic impact of public health interventions to combat poverty-related diseases, namely HIV/AIDS, tuberculosis, and malaria in developing countries, through a systematic literature review.	Residents in developing countries, policy makers in developing countries, and global health actors	Cash transfer incentives for HIV, tuberculosis, and malaria have positive short-term effects. However, these benefits do not usually translate into long-term results. The uptake of micro-loans showed positive economic results for households, yet these interventions did not become widespread, with in some cases, a small number of eligible individuals requesting loans. Initiatives which provide greater access to treatment for these diseases have been shown to have important effects on employment and productivity, yet they must be coupled with support measures to avoid the secondary costs associated with seeking this treatment, such as transportation.
Cash transfer programme to reduce prevalence of HIV and herpes simplex type 2 in young women (Baird et al. 2012)	Rural Malawi	Determine effect of a cash transfer programme for schooling on the prevalence of HIV and herpes simplex type 2, as assessed through a cluster randomized trial.	School-aged girls who may be at risk of contracting HIV and/or herpes simplex type 2	Cash transfer programmes can reduce HIV and HSV-2 infections in schoolgirls in low-income settings. Moreover, structural interventions that do not directly target sexual behaviour change can be important components of HIV strategies.
Impact of cash transfer programme on women's BMI and obesity (Forde et al. 2012)	Rural and urban Columbia	Measure the impact of a cash transfer programme on women's BMI and obesity, using a double difference methodology.	Poor women at risk of high BMI and obesity in Columbia	Multivariate analysis demonstrates a statistically significant association between exposure to the programme and increasing BMI. Logistic Regression on Odds of overweight did not demonstrate a statistically significant relationship with exposure to the programme.
Conditional Cash Transfer programme to promote HIV/AIDS prevention (Kohler and Thornton 2012)	Rural Malawi	Examine the impact of a conditional cash transfer on sexual behaviour, as assessed through pooled regression analysis.	A sample of ever- married women and their husbands, as well as female and male adolescents	The authors found no overall significant or substantial effects of being offered the reward on subsequent self-reported sexual behaviour. This finding speaks to the design of future CCTs related to sexual transmitted diseases. It seems plausible that rewards offered in more frequent intervals over the year might be more effective in affecting sexual behaviour than a one-time reward offered in one year. In addition, it might be useful targeting individuals who are in less stable sexual relationships or who are more at risk such as unmarried adolescents. This study finds large and significant effects approximately one week after receiving the incentives money.
Financial incentives to encourage use of insecticide-treated bed nets to reduce incidence of malaria (Krezanoski et al. 2010)	Rural Madagascar	Examine impact of incentive provision on the possession and use of ITNs, as assessed through a cluster randomized trial.	Residents at risk of contracting malaria	Provision of incentives increases the use of ITNs by 24 per cent in the immediate term. However, after six months net ownership had decreased in the intervention group compared to the control group with an adjusted risk ratio of 0.97.

What?	Where?	How and why?	To whom?	What impact?
A World Bank funded project averted 30,000 cases of tuberculosis per year (Levine 2004)	China	The project's success was associated with high levels of political commitment at all levels of government and the use of creative incentives to both patients and providers.	Chinese residents at risk of contracting tuberculosis	30,000 cases were averted per year.
Rehabilitation of Dar es Salaam's health services facilities. Improved system capacity to deliver health services. Implementation of government's decentralization reforms (Munishi 2003)	Urban Tanzania	Aim was to reduce constraints through health sector reform, as assessed through a nonexperimental case study.	Residents of Tanzania	The Dar es Salaam Urban Health Project succeeded in creating an organized health system, introducing the minimum health services package, strengthening monitoring and evaluation, and improving community participation. Key in achieving this was the sequencing of activities, such as the provision of drugs. Despite these achievements, the study highlights the lack of political support and the reliance on donor funding as concerns, particularly with respect to project sustainability.
Socio-economic interventions for households affected by tuberculosis and poverty (Rocha et al. 2011)	Rural Peru	Measure the impact of socio- economic interventions (microcredit schemes) on TB screening, treatment, HIV testing, and completion of preventive therapy, as assessed through a cross- sectional study.	TB patients at risk of poverty and poor health outcomes	Socio-economic interventions were associated with increases in household contact TB screening (from 82 per cent to 96 per cent); successful TB treatment completion (from 91 per cent to 97 per cent); patient HIV testing (from 31 per cent to 97 per cent), and completion of preventive therapy (from 27 per cent to 87 per cent). Still, less than a quarter of households initiated microcredits. The principal barrier was reluctance by microcredit organizations to offer high-risk loans to the very poor, especially participants living in informal, unregistered housing or who had bad credit histories.
Sector Budget Support (Visser- Valfrey and Umarji 2010)	Mozambique	This assessment was initiated in order to measure the extent to which sector budget support met the objectives of partner countries (in this case Mozambique) and donors.	Residents of Mozambique, as well as the Health Sector in Mozambique	The study found an increase in the number of donors engaging in sector budget support, better co-ordination, and a positive influence on sector management; policy and monitoring; and evaluation. However, it also found that more progress is needed in improving the budgeting process, systems for financing de-centralized services, as well as technical assistance and capacity development.
Transport incentives (Yao et al. 2008)	Rural China	Examined the impact of transport incentives on poor tuberculosis patients in need of health services, as assessed through a cohort study.	Poor tuberculosis patients in rural China	No improvement on TB case finding and case holding was found in the intervention group compared with the control group. At baseline, the intervention group had a significantly higher case notification rate ( $P < 0.01$ ). Travel incentives did not reduce patient and doctor delays in the intervention group compared with the control group ( $P > 0.05$ ). During the project period, the intervention group increased their case notification rates by 70 per cent, while that of the control group increased by 99 per cent. The treatment success rates in the control group were lower than the intervention group at baseline ( $P < 0.05$ ); however, they reached the level of the intervention group after 1 year ( $P > 0.05$ ). Default rates were reduced in both groups, with no significant differences observed at baseline or during the project period ( $P > 0.05$ ). No additional benefit for TB case detection was identified in the intervention.

What could work?				
What?	Where?	How and why?	To whom?	What impact?
Better track DAH according to a functional framework, such as that presented in Blanchet et al. (2013). These authors recommend analysis of trends in expenditure on core and supportive functions, the efficiency of spending, and the trade-offs between investing in various functions	Rather than innovation examples, this paper makes recommendation s on how aid organizations are currently structured.		Policy makers and those in charge of making decisions about funding allocation could benefit from the recommendations suggested by Blanchet et al. (2013).	A clearer link between funding and desired outcomes. A better understanding of the impact and processes of DAH.
Sector-wide approach in the implementation of an essential health package (Bowie and Mwase 2011)	The authors assessed whether the SWAp invests in more costeffective interventions than governments acting alone.	Aid did not assist in developing this innovation; rather, the way that aid is delivered is the innovation in this case.		This study found that the SWAp invested in more cost-effective interventions than donor governments acting on their own. This leads the authors to conclude that the SWAP has resulted in an improvement in health service delivery at low cost.
Some authors explore factors which constrain governments from assuming a more active role in aid management, and factors hindering the co-ordination of aid (Buse 1999).	No particular innovation explored, as this paper is about the deliver and co-ordination of aid.	Aid did not assist in developing this innovation; rather, the way that aid is delivered is the innovation in this case.		The study found that the SWAp did not succeed in allowing the government to play a leading role in aid management. This is in part due to donors not trusting country systems and in part because of the politics and power associated with aid coordination and particularly with having a leading role.
Some authors argue that SWAp funding modalities are superior to project-based aid funding (Chansa et al. 2008).	Chansa et al. (2008) assessed whether a SWAp—level project in Zambia improved administrative, technical, and allocative efficiency.	Aid did not assist in developing this innovation; rather, the way that aid is delivered is the innovation in this case.		The SWAp was not found to have achieved the expected improvements in efficiency. The authors attribute this to the partial implementation of the SWAp or the fact that it had not been embraced by all donors. Although they do not classify the SWAp approach as unsuccessful, the authors find it ineffective in its current form.

vilat is scalable:				
General comments on what is scalable	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
1	Scale up of private medicine retailers in three districts in Kenya (Abuya et al. 2010)	Technical support and sufficient resources were essential for successful scale up, although not enough.	Unknown	This paper compares the scale up processes of private medicine retailers in three districts in Kenya. It found that technical support and sufficient resources were essential for successful scale up, although not enough. The paper found that an effective strategy for managing relationships and strong, transparent management systems are also needed.
The aid influx into some countries, particularly to African and some of smaller South East Asian countries has increased the overall public expenditure on health dramatically. Consequently, scaling up of public activities around health has been observed for many of these countries (Alvarez and Acharya 2012).	Unknown	Financial and non-financial barriers have been encountered when trying to scale up aid-funded health programmes (Hanson et al. 2003). A review by Mangham and Hanson (2010) highlighted absorption capacity and health system needs as key constraints to scaling up health interventions. Concerns regarding absorption capacity arise due to micro- and macro-economic constraints countries face in using additional aid resources effectively. There are worries regarding the effect increased development assistance may have on the partner governments' ability to plan, manage, and budget these resources, and their impact on service delivery (De Renzio 2005, De Renzio 2007; International Monetary Fund 2007). There are also concerns about diminishing returns of increased aid, although studies have shown that these levels of funding have not yet been reached (Bourguignon and Sundberg 2006; Feeny and McGillivray 2011). Nonfinancial barriers to scaling up aid-funded health programmes can be encompassed as health system needs. These include the capacity of health workers and the appropriate policy and institutional framework that need to be in place for additional assistance to be used effectively (Mangham and Hanson 2010). Two further concerns are quality and equity (Mangham and Hanson 2010). There are worries that scaling up health sevices will decrease the quality of those services, particularly if health systems needs for the scale up are not in place. For this to be prevented, it is important that additional expenditure on health infrastructure is accompanied by increased recurrent spending to support the additional health sector supply. There is some evidence that this is happening, with the Global Fund funding the construction of facilities, training healthcare personnel, as well as improving the availability of medicines (Yu et al. 2008; Schwartlander et al. 2006). Moreover, there may exist a trade-off between efficiency and equity when scaling up health programmes. This is because it would the more resources to reach the p	Unknown	Unknown

General comments on what is scalable	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
		the interventions had achieved wider coverage, this tended to be focused on the upper quintiles, with the poorer populations still experiencing the most acute shortages of medicines (Battistella Nemes et al. 2006; Cohen et al. 2010). Work undertaken by Hanson et al. (2003) identified five levels at which the above constraints can operate, and to which interventions to address them should be aimed. The first is at the level of the community and household, where the key constraints are lack of demand and use of interventions. The second is at the level of health services delivery, which includes health systems issues, such as the quantity and quality of human resources, availability of drugs and medical supplies, etc. The third level of constraints is at the level of health sector policy and strategic management, where constraints include lack of adequate policies and incentives, as well as over-reliance on donor funding. The final level includes public policies cutting across sectors, and environmental and contextual characteristics, such as governance and the overall policy framework.		
1	The Millenium Village Project (Buse et al. 2008), which describes the transition from rural investments to national plans in order to reach MDGs. A description of sustaining and scaling up the Millenium Villages.	The success of the project is linked to the concentration of resources at the community level and the priority given to low-cost, effective interventions. There are concerns, however, about the scalability of the project to the national level, as the budget is too limited to address upstream investments, rural-urban linkages, as well as infrastructure and institutional constraints.	Winners and losers in the scalability are unknown. Rural areas in Ethiopia, Ghana, Malawi, and Uganda were focused on.	The villages taking part in the project have achieved huge gains in all of their health indicators, although some differences are observed across countries and indicators.
	The Millenium Village Project (Buse et al. 2008), which describes the transition from rural investments to national plans in order to reach MDGs. A description of sustaining and scaling up the	The success of the project is linked to the concentration of resources at the community level and the priority given to low-cost, effective interventions. There are concerns, however, about the scalability of the project to the national level, as the budget is too limited to address upstream investments, rural-urban linkages, as well as infrastructure and institutional constraints.	Winners and losers in the scalability are unknown. Rural areas in Ethiopia, Ghana, Malawi, and Uganda were focused on.	The villages taking part in the project have achieved huge gains in all of their health indicators, although some differences are observed across countries and indicators.

	General Provide examples comments on of policies that what is scalable have been scaled to national level	How the main constraints (Tinancial, administrative, and political) were overcome	Who have been the main winners in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
	Millenium Villages.			
1	Subsidy for artemisinin-based combination therapies (ACTs) for malaria treatment (Cohen et al. 2010).			This study assesses the effectiveness of a pilot subsidy for artemisinin-based combination therapies (ACTs) used for malaria treatment in two districts of Tanzania. The study consisted of a baseline and four follow-up surveys in the form of exit interviews over a period of 1.5 amonths. The results from the study indicate that although sales of ACTs increased substantially, there were significant geographical variations with shops closer to towns, main roads, and accessed by individuals of higher socioeconomic status experiencing higher stocking and sales of ACTs. The study concludes that additional efforts are needed to achieve equity as this subsidy is capled up arross different countries.
1	Assessment of factors associated with effective scaleup of programmes (Medlin et al. 2006).			This series of 17 case studies found that country ownership, strong leadership and management, and realistic financing were all associated with effective scale up of programmes.
1	Assessment of constraints to scaling up health programmes (Rao 2003).	It finds that in order to be successfully scaled up, programmes need clear objectives and information systems for monitoring progress, strong evidence-based technical design, and innovative approaches to address constraints at the policy and management level.		This study analyses the constraints phased by two Indian states when scaling up health interventions.
1	School-based reproductive and sexual health programme for adolescents (Renju et al. 2011).			This study reports on the scale up of a school-based reproductive and sexual health programme in Tanzania. The study found that the 10-fold scale up achieved a high coverage, which the authors attribute to the structured nature of the process. However, the authors express worries that this may have come at the cost of quality of the intervention. The study recommends higher levels of supervision and incentives to improve on this.
1	Antiretroviral scale up in three South African provinces	The paper concludes by highlighting the importance of the managerial process for successful scale up of programmes.	The scale-up was more successful in some areas	This study compares the operational and strategic management of the antiretroviral therapy (ART) scale up in three provincial governments in South Africa, which

General comments on what is scalable	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
	(Schneider et al. 2010).		than others.	had achieved different levels of coverage. The findings of the study reveal that although similar approaches were adopted for chronic disease care amongst the three provinces, differences were observed on political and managerial leadership, programme design, monitoring and evaluation systems, and the nature and extent of external support and partnerships.
1	Availability and use of HIV programmes, as well as management and support structures (Scott et al. 2005).	Unknown	The study concludes that the scale up of HIV services is exacerbating inequalities in service delivery and calls for policy makers to take into consideration equity issues as these may lower the effectiveness of interventions.	This study reports on the findings of a cross-sectional descriptive study on the availability and use of HIV programmes, as well as management and support structures, in three districts of South Africa. The findings from the study reveal inequalities in service delivery between the richer, urban site, and the poorer rural ones.
1	Scale up of tuberculosis Direct Observed Treatment services in China (Seymour 2004).	The author credits the success of the scale up with political commitment and the use of creative incentives.		This study was part of a series of case studies demonstrating successful health programmes. It reports on the scale up of tuberculosis Direct Observed Treatment services from 0 to 90 per cent in five years.
1	Steketee and Eisele (2009) assessed the scalability of a malaria intervention in African countries.	Unknown		Review of Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and Malaria Indicator Surveys in African malaria-endemic countries in the time period of 2006-08. The study found great variation between levels of coverage of insecticide-treated mosquito nets (ITNs), treatment rates, and intermittent preventive treatment (IPTp). Furthermore, the authors found that 52 per cent of the countries studied had an equitable distribution of ITNs, 30 per cent of treatment coverage,

General comments on what is scalable	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
				and IPTp in pregnant women was higher in urban and richer households. This study shows that equitable scale up of malaria programmes is possible, although only two countries achieved equity in all three areas, with distribution of mosquito nets achieving higher coverage levels. The study found that countries with higher coverage did not necessarily achieve higher levels of equity. Furthermore, they conclude that two factors are associated with higher equity: the policies and delivery strategy, and the quality of delivery systems available.
1	Campaign to scale- up ownership of ITNs (Wolkon et al. 2010).	Distributing bed-nets free of charge was key in achieving high coverage.		This study analyses the coverage of a campaign to scale up ownership of ITNs by integrating ITN delivery with the vaccination campaign in six regions of Togo. The authors conducted community-based cross-sectional surveys one and nine months after the campaign to assess coverage, equity, and use of ITNs. The study found that the intervention achieved high levels of coverage and equity, even nine months post-campaign. Despite high levels of coverage, however, the study found low levels of use of ITNs. The authors of this study conclude that integrated campaigns are an effective way to scale up coverage, and therefore recommend this strategy to other countries.
1	Wyss et al. (2003) reports on an assessment of the barriers to scaling up health interventions in Chad.	Community engagement is necessary in order to integrate their needs and perceptions, and to effectively manage human resources and infrastructure.		This paper reports on an assessment of the barriers to scaling up health interventions in Chad. It highlights the importance of addressing demand and supply issues by engaging with the community to integrate their needs and perceptions, and managing human resources and health infrastructure.

Wildt is tie	what is transferable?			
General comments	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
:	General budget support (GBS) was tested in seven countries (Burkino Faso, Malawi, Mozambique, Nicaragua, Rwanda, Uganda, and Vietnam) to test GBS relevancy, and efficiency and efficiency and effectiveness in achieving a sustainable impact in poverty reduction and growth promotion (Lister et al. 2006).	The role of aid in transferability in this particular case is unknown. This study focused more on the impact of aid, delivered in a certain mode within different countries.	The beneficiaries are residents in those countries where the GBS was found to have positive effects (five out of the seven included in the study).	The impact of the transferability itself is unknown. However, the impact of the transferred approach on the different countries was explored. Partnership GBS (PGBS) was found to improve harmonization, alignment, and policy development on all countries reviewed, as well as having a positive influence on allocative and technical efficiency of public financial management in five of the countries. However, the study also found that unpredictability and volatility of PGBS were a problem.
1	The impact of budget support was tested in three countries (Mali, Tunisia, and Zambia) (Caputo et al. 2011).	The role of aid in transferability in this particular case is unknown. This study focused more on the impact of aid, delivered in a certain mode within different countries.	Residents of these countries seemed to have benefited in terms of health outcomes. However, the study also highlights concerns with respect to the quality of health services.	The study found that budget support had resulted in better budget management, although its design, harmonization, and alignment are not optimal. In addition, the authors found that budget support was associated with increased public expenditure on social services, which resulted in improvements in health. For instance, in Zambia increased health service provision was associated with a decrease in the incidence of tuberculosis, malaria, diarrhoea, and maternal and child mortality. However, the study highlights concerns with respect to the quality of these services.

Source: Author.

TABLE A4.8 Synthesis of evidence on education policies

What?	Where?	How and why?	To whom?	What impact?
School feeding programme (Afridi 2011)	Rural India	Examined the impact of a school feeding programme on daily school attendance by gender, average monthly school attendance rate, and school enrolment rate, via a difference-in-difference estimation strategy with school level panel data.	School-age children at risk of discontinuing studies.	This paper evaluates the impact of a school feeding programme on school attendance. DID estimates shows that there is a positive but insignificant effect of implementation of cooked meals programme on overall attendance rates. However, there is a significantly negative point estimate show that the schools which are transformed in cooked meal programme very late, their attendance falls. Considering the small sample caveats, the paper concluded that the transition to the cooked school meal programme may not have improved the enrolment level over and above the effect, which has been induced by the preexisting programme of distributing raw food grains to the primary students in rural areas. However, the transition to provision of cooked meals did lead to an increase in the attendance rate for girls in lower grades.
Teacher professional development in literacy instruction (Aguirre Division, JBS International Inc. 2006)	St. Lucia, Jamaica, Dominican Republic, Guatemala, Honduras, Bolivia, and	Qualitative and quantitative analysis of classrooms observations, and principal and teacher interviews.	Nine first-grade teachers, three multi- grade teachers, nine second-grade teachers, and 19 third- grade teachers.	Teachers who received the training did better than those who had not received it. Duration of training was found to be an important factor; teachers with two or more years of training compared with teachers who had only one year of training were more often categorized as being at or near mastery in most best practices sought. The newly trained teachers were more likely to teach fluency effectively, use resources well, to work with others to improve instruction, and they were more reflective about their practice.
Providing school and child test-scores on educational markets (Andrabi et al. 2009)	Rural Pakistan	RCT	112 villages randomly selected, 823 public and private schools, 12,000 Grade 3 children, 5,000 teachers, and a sample of 1,800 households.	Initially bad (below median baseline test scores) private schools responded by increasing quality-showing learning gains of 0.34 standard deviations or shutting down, but show limited fee changes. In contrast initially good (above median) private schools show no learning gains, but drop fees substantially. Government schools see a tenth of a standard deviation increase in learning. Report card provision improves learning by 0.10 standard deviations and decreases private school fees by 21 per cent, with very small changes in school switching and moderate increases in overall enrolment.
Cash transfer programme to encourage enrolment, and discourage sexual activity and early marriage (Baird et al. 2010).	Rural and urban Malawi	Determine the impact of the programme on sexual behaviour and school enrolment, using a difference-in-difference approach.	Girls at risk of discontinuing studies.	As girls and young women returned to (or stayed in) school, they also significantly delayed the onset (and for those already sexually active reduced the frequency) of their sexual activity. The programme also delayed marriage—which is the main alternative for schooling for young women in Malawi—and reduced the likelihood of becoming pregnant. As the treatment/control differences in schooling become starker during the second year of the programme, the treatment impacts on marriage, fertility, and risky sexual behaviour are likely to become stronger. The evidence presented in this article provides impetite for the expansion of CCT programmes (which already

What?	Where?	How and why?	To whom?	What impact?
				cover much of Latin America) to sub-Saharan Africa.
Cash Transfer Programme to encourage school attendance (Baird et al. 2011)	Rural and urban Malawi	To estimate effect of the programme on school enrolment, attendance, test scores, marriage, and pregnancy, as assessed by a linear probability model.	Youth at risk of discontinuing school.	Conditions attached to cash transfer programmes are effective in increasing enrolment, but the size of this effect is likely to be smaller than suggested by earlier studies, at least for poorer countries like Malawi. Although CCTs were more cost-effective than UCTs in increasing school enrolment and attendance, they had little effect on reducing the likelihood of teenage pregnancies or marriages. Not only is school enrolment significantly improved in the CCT arm over the UCT arm, but the evidence presented shows that CCTs are more cost-effective in raising enrolment than UCTs in this context. This study found that schooling CCTs are much more cost-effective means of reducing dropouts than UCTs.
Remedial education programme (Banerjee et al. 2005)	India	Impact of the programme on average test scores, as assessed through randomized experiments.	School-aged children in India.	The programme increased average test scores of treatment schools and a computer assisted learning programme focusing on math increased children's math scores.
Various cash transfer schemes (Barrera-Osorio et al. 2008)	Urban Columbia	RCT	17,000 children were randomly selected to receive one of three cash transfer programmes.	On average, the combined incentives increased attendance, pass rates, enrolment, graduation rates, and matriculation to tertiary institutions. Taken together, all of the cash incentive treatments generate significant changes in the behaviour of students directly treated by the programme. Students are more likely to attend school (2.8 per cent), more likely to remain enrolled (2.6 per cent), more likely to matriculate to the next grade (1.6 per cent), more likely to graduate (4.0 per cent), and more likely to matriculate to a tertiary institution (23 per cent). For daily attendance, the effect is much stronger for students who would not have met the attendance target without the programme. Simply changing the timing of the transfer with the savings incentive increases enrolment in both secondary and tertiary institutions over the basic treatment (by 3.6 per cent and 3.3 per cent, respectively) while not reducing the daily attendance rates of students despite the lower monthly transfers. Compared to the basic treatment, the tertiary treatment encourages higher levels of daily attendance (3.5 per cent more for students least likely to attend), and higher levels of enrolment at the secondary (3.3 per cent) and tertiary levels (46 per cent). Important spillover effects of the programme were observed within families and peer networks (Barrera-Osorio et al. 2008).
School subsidy programme (Behrman et al. 2005)	Rural Mexico	The authors assess the impacts of PROGRESA on various aspects of education: age at time of matriculation, grade repetition, dropout rates, school re-entry rates among dropouts across male and female, and both in short run and long run.	Students at risk of discontinuing schooling.	Participation in the programme appears to foster grade progression and reduce grade repetition for the primary school children. There were substantial programme impacts for children aged 12–15. For the treated group the drop out rate is lower and school re-entry rate is higher across all grades. The impact is more pronounced in high school among the treated due to large marginal increase in benefit level. There is no such spill over effect on the not eligible children even in the treated communities, and even after some quality improving educational subsidies to the schools under the programme. Following

What?	Where?	How and why?	To whom?	What impact?
				a simulation exercise, study reveals that there is a substantial difference in impacts in terms of educational attainments between treated and control groups. For girls, the programme is effective in reducing dropout behaviour in primary grades and in first year of secondary education, but for boys it has greater impact in higher secondary grade level. Simulation estimates somewhat larger long-run impacts for boys, even though benefit levels in secondary grades are slightly higher for girls.
Conditional cash transfer and nutritional supplements (Behrman et al. 2009)	Rural and Urban Mexico	The impact of the programme on educational outcomes as assessed by difference-in-difference comparisons between treatment and control groups.	Students at risk of discontinuing schooling.	Those aged one to two years in 1997 (seven years in 2003) show a reduction in the age at entering school, which may indicate the effect of the nutritional supplements. The age group three to five years in 1997 most likely did not benefit from the early nutritional intervention and also by 2003 would have only recently begun to be eligible themselves to receive scholarship grants.  Nevertheless, the matching estimates show important increases in grades of completed schooling and progressing on time, consistent with families anticipating the receipt of grants for these children or possible income effects through programme receipt. As expected, those aged six to eight years in 1997 (12 to 14 years in 2003) show the largest increases in schooling indicators. This group was eligible to receive grants for a majority of the programme's duration and it is likely this and the conditionality aspect of the grants that explain the larger impacts of the programme for this age group.
Screening and treatment of malaria, and teacher training and support (Brooker et al. 2010)	Rural Kenya	Examined the impact of school- based malaria prevention and enhanced literacy instruction on the health and educational achievement of school children in Kenya, as assessed by an RCT.	Students at risk of illiteracy and contracting malaria.	The malaria intervention based on intermittent screening and treatment (IST), had no effect on health or education and was found to be complex and costly. In contrast, the teacher training and support improved children's literacy and reduced dropout, and cost US\$8.29 per child. Children's literacy improved most when teachers focused instruction on letters and sounds, and when children were exposed to more text in the classrooms.
Though education aid in the form of SWAps has been heralded as superior to project aid, there have been serious problems arising from the former. Many donors have not changed their earlier practices in giving aid, while institutional management constraints and capacity development and political hurdles have held back the potential of SWAps to make a greater difference to education in aidrecipient countries. Few evaluators who have assessed the impact of SWAps would challenge the view that the gap between what SWAps have done and what they	Unknown	Unknown	Unknown	Unknown

What?	Where?	How and why?	To whom?	What impact?
could do, remains both large and still far too wide (Cambridge Education 2010; Netherlands Ministry of Foreign Affairs 2003).	,			
Cash transfer programme impact on girls' schooling (Chaudhury and Parajuli 2010)	Rural and urban Pakistan	Impact of programme on absolute school enrolment and percentage change in school enrolment between 2003 and 2005, as assessed by difference-and-difference (DD), triple differending (DDD), and regression-discontinuity design (RDD), drawing on school-level census data.	Girls at risk of discontinuing studies.	The average programme impact between 2003 and 2005 was an increase of six girl students per school in terms of absolute change and an increase of nine per cent in terms of relative change. The stipend is effective in enhancing the enrolment of females in public schools in Punjab. The stipend programme is also effective in promotion of school enrolment from the poor households.
Innovative maths and literacy programmes through in-service teacher training in reading and mathematics; governance and leadership training for schools, communities, and parents; parent education and training; selective nutritional programmes; reading and mathematics materials; establishing computer use in schools and training teachers in educational technology; training resource teachers; integrating databases and improved school management using EMIS (Chesterfield et al. 2002).	Jamaica	A multi-method design, consisting of inventories, checklists, classroom observation forms, and focused interviews to measure the conditions in place for effective learning. Special indices were created to measure complex issues, such as teaching quality.	A stratified sample of 35 per cent of project schools was drawn from the universe of 72 schools.	Mixed results, over three years: In Language Arts project, girls out-performed comparison group girls by 3.3 per cent; project boys out-performed non-project boys by 0.4 per cent. In Math, non-project girls out-performed project girls by 4.0 per cent, non-project boys out-performed project boys by 4.4 per cent. NHP has been most successful in improving the near mastery levels of Mathematics. NHP students have improved over the baseline in 1998 in both third and sixth grade, and the improvement has been greater than that for children in the system as a whole. NHP students also have higher mean scores in Mathematics in 2002 than a matched comparison group of schools. Language Arts mastery appears to be a problem for the Jamaican primary education system as a whole. There is a general decrease in Language Arts performance in 2002 at both third and sixth grade levels. This follows a decline in the percentage of students reaching at least near mastery in 2001. The success of NHP in improving student performance is questionable. Although NHP students have improved in their mastery of Language Arts and Mathematics over the baseline in1998 to 2002, this improvement is only slightly higher than that of similar schools without the NHP programme over the same time period.
Primary education aid (Christensen et al. 2010)	109 LMICs from 1975– 2005	Examined the impact of education aid on enrolment, using ODA and non-ODA data, completing a latent growth model and panel regression.	School-age children in LMICs.	Primary education aid is not related to primary enrolment rates in a statistically significant way.
Continuous Assessment (CA) Head Teacher Management Training, Management Information Systems, Organizational Development, Student Career Guidance	Swaziland	Structured, semi-structured, and open-ended interviews; focus group discussions; direct observations; and analysis of case	2,410 Grade 1 Maths students in 1992 down to 97 students in 1995.	Suggestive findings (No significance reported) Grade 1 Maths, increase of three per cent in mean score over two years, with number of students achieving 80 per cent mastery increasing from 36 per cent (1992) to 40 per cent (1993) to 51 per cent (1994). Grade 1 English, mean scores rise from 19 (1992) to 24 (1994)

What?	Where?	How and why?	To whom?	What impact?
(Clark and Pearson 1996).		study material (Project documents), Project-produced classroom and teacher materials, GOS documents and reports, commissioned studies, and general background material relevant to education in Swaziland.		while the per cent of students scoring in the two highest categories increases from 12 per cent (1992) to 29 per cent (1993) to 34 per cent (1994).  Grade 2 Math and English show similar increases in mean scores and in proportions of student score distribution.
Cash Transfer Programme (de Brauw and Hoddinott 2011)	Rural and Urban Mexico	The study used probit and nearest neighbour matching methods. The sample consisted of households, some of which knew that their receipt of cash transfers depended on their child's school attendance and some who did not know this.	Poor residents in Mexico with school- age children.	We exploit the fact that some beneficiaries did not receive the forms needed to monitor the attendance of their children at school. We show that on average the absence of these forms reduced the likelihood that children attended school, and the likelihood was severely reduced when children were making the transition to lower secondary school. For children making the transition to lower secondary school. For children making the transition to lower secondary school, the impact of the transfer on school enrolment can roughly be wholly attributed to conditionality. The debates over 'to condition or not to condition' are overly simplistic. In this case, there is little benefit to conditioning transfers based on enrolment in primary school. However, there are large benefits associated with conditioning at entry into lower secondary school.
Conditional cash transfer (de Janvry and Sadoulet 2006).	Rural Mexico	Examined the impact of the programme on child's enrolment, as assessed through a linear probability model.	School-age children at risk of discontinuing studies.	Achieving efficiency gains by targeting and calibrating conditional transfers requires focusing on children who have a high probability of not enrolling in school without a conditional transfer and who have a high response to the amount offered, within the overall programme budget constraint. Implementing this programme requires predicting school enrolment as a function of the conditional transfer offered and of child, household, and community characteristics. Heterogeneity in responses shows that age, ethnicity, and presence of a school in the community lead to large differences in enrolment.
Increasing aid to education to one per cent of GDP (Dreher et al. 2006).	96 LMICs from 1970–2004	Analysed impact of aid over several decades using a production function approach.	Children in LMICs.	On average, increasing aid to education by one per cent of GDP produces an increase in primary enrolment of 2.5–5 per cent. Neither democracy nor government expenditure on education significantly increased enrolment (Dreher et al. 2006).
Primary school expansion (Duflo 2001)	Indonesia	Impact of expansion on educational attainment and wages post-graduation.	Children in Indonesia.	The author found substantial increases in educational attainment and higher wages for the graduates.
Financial incentive programme to reduce teacher absenteeism (Duflo and Hanna 2005)	Rural India	RCT	60 randomly selected teachers formed the intervention group, and a further 60 formed the control.	The absence rate changed from an average of 42 per cent in the comparison schools to 22 per cent in the treatment schools; +1 year: test scores in programme schools were 0.17 standard deviations higher than in the comparison schools and children were 40 per cent more likely to be admitted into regular schools (Duflo and Hanna 2005).
Conditional cash transfers (Duryea and Morrison 2004).	Urban Costa Rica	Examine the impact of conditional cash transfers on school	School-age children at risk of discontinuing	The authors find strong evidence that the programme achieves its goal of improving school attendance and much weaker evidence regarding school

What?	Where?	How and why?	To whom?	What impact?
		attendance, performance in school, and child labour as assessed through simple comparison of mean outcomes, regression analysis, and propensity score matching.	studies.	performance. The programme does not reduce the likelihood that youth will work.
Scholarships for poor female students (Ferreira et al. 2009)	Rural Cambodia	Two-period schooling decision partial equilibrium regression discontinuity model.	3,800 scholarships to randomly selected female students.	The programme resulted in increased attendance, but no better achievement. Scholarship recipients were more than 20 percentage points more likely to be enrolled in school and 10 percentage points less likely to work for pay (Ferreira et al. 2009).
Cash transfer programme impact on girls' schooling (Filmer and Schady 2008)	Rural and urban Cambodia	Impact of programme on enrolment and attendance at a Japan Fund for Poverty Reductions School, as assessed through ordinary least squares and biased adjusted matching estimators.	Girls beginning seventh grade, selected to receive US\$45 each.	Enrolment and attendance rates among scholarship recipients were approximately 30 percentage points higher than they would have been in the absence of the programme. The effects we estimate are remarkably insensitive to different ways of 'controlling for' observable differences between scholarship recipients and non-recipients.
Cash Transfer Programme (Filmer and Schady 2011)	Rural and urban Columbia	Examine impact of cash transfer programme on school attendance, using regression.	Youth at risk of discontinuing school.	1. We find evidence consistent with sharply diminishing marginal returns to transfer size.  2. CCT programmes have a variety of objectives, including redistribution and promoting investment in human capital. Insofar as they seek to increase school attendance rates, however, our results raise the possibility that they could accomplish this goal at a fraction of the cost.
Development of a national school health and nutrition policy, and the integration of health interventions and education in Zambian schools (Freund et al. 2005)	Rural Zambia	Impact assessment through 'phased roll in methodology' over three years.	80 schools.	Significant increase in cognitive assessment scores for 2,017 pupils. Children who received treatment improved significantly more than children in control schools. When the Zambian Cognitive Assessment Instrument (ZCAI) was administered in 2001 and 2002, after one year (2002), children who received interventions performed significantly better than those who did not (p<0.001). Further in 2003 children who had received interventions for two years (2001 and 2002) were found to perform better than those who had received only one (2002 only). The results show that the impact of deworming is cumulative. Regular deworming has a greater impact on children's educational ability than one time activities. The results also showed that the interventions acted to help correct the gender imbalance: the cognitive scores of girls receiving interventions increased significantly more than those of boys (p<0.05).
				Among children who had received deworming for one (2002 only) or two years (2001 and 2002), the prevalence of infection (number of children infected) with parasitic worms was approximately one quarter of the rate at baseline and was much lower than that of children in the control group (p<0.001) when data were controlled for differences, such as age and sex. The overall 2-CAI scores of

Increased buggetary resources to primary Increased the supply of Increased the supply of Increased the supply of Increase the supply of Increasing and to education or Increase the supply of Increasing and to education or Increasing and to education or Increasing and to education or present a committee. Increase the supply of Increasing and to education or present a companient or and or of openses. Increase the supply of Increasing and to education or present a companient or and or of openses. Increase the supply of Increase the supply of Increasing and to education in the public works under Increase the supply of Increasing and to education in the public works under Increasing and to education in the public works under Increasing and to education in the public works under Increasing and to education in the public works under Increasing and to education in the public works under Increasing and to education in the public works under Increasing and to education in the public with the control of shown or of openses. Increase the supply of the same of increasing and to education to no per Increase the supplies the supplies the public with the control of sh	What?	Where?	How and why?	To whom?	What impact?
loin and begretary resources to primary a fural Malawi Longitudinal, repeated measures als sale line and follow-on als; implement a community school and the supply of grachers are the number of teachers in training, increase the supply of describing prove the number of teachers are the supply of describing and planing prove the analytical and planing planing prove the analytical and planing prove the analytical and planing prove the analytical and planing planin		,			children at baseline (2001) in control and intervention groups were much the same.
tive Safety Net Programme (Hoddinott et al. 2010) (PSNP) on schooling (i.e. child Ethiopia. School attendance) and child school attendance) and child abour hours devoted to farm work or domestic work) using matching estimation drawing on household-level data.  (Maldonado and Rural Bolivia Examined the impact of School-aged children microcredit programme on at risk of discontinuing schooling gap (number of years studies. Here child, versus expected level of schooling according to the age of the child), as estimated through a Random Utility model.  (GDP (Michaelowa and Weber middle-income expenditure on education and aid countries (Michaelowa and Weber 2006)	Increased budgetary resources to primary education and to primary level learning materials; implement a community school system; increase the number of teachers and their training; increase the supply of learning materials in primary schools, and increase the supply of classrooms; reduce repetition and late entry in all standards and improve the analytical and planning capacity of the Ministry of Education (MOE); and improve the relevance of primary education for girls through gender appropriate teacher training, gender appropriate curricula, a scholarship programme for secondary school girls, and the introduction of improved classroom techniques to enhance girls' achievement (Hebert et al. 2002).		Longitudinal, repeated measures design with matched comparison group of schools as control.	Baseline and follow-on data collection in six schools in each of the three target Districts in 1999. Data from five matched schools added to the longitudinal study as a control measure in 2000. 122 teacher surveys, 27 classroom observations in schools within the QUEST Districts, and 24 in the five control schools in Salima.	Grade 3: Results favoured project schools in all three subjects.  Grade 4: Project schools out-performed non-project schools in Maths, only marginally outperformed comparison schools in English, underperformed comparison schools in Chichewa.  Grade 5: Project schools outperformed in Maths, only slightly outperformed in English, essentially comparable in Chichewa.  For Mathematics, pupils in the QUEST Schools consistently performed, on the average, 17.4  percentage points higher than pupils in non-QUEST schools. (No significance reported, nor SDs).
finance (Maldonado and Rural Bolivia Examined the impact of School-aged children microcredit programme on at risk of discontinuing schooling gap (number of years difference between the highest level of schooling completed by the child, versus expected level of schooling according to the age of the child, as estimated through a Random Utility model.    Random Utility model.   Children in LMICs.	Productive Safety Net Programme (PSNP) (Hoddinott et al. 2010)	Rural Ethiopia	Impact of participation in the Productive Safety Net Programme (PSNP) on schooling (i.e. child school attendance) and child labour (i.e. child labour hours devoted to farm work or domestic work) using matching estimation drawing on household-level data.	Poor school-aged children in rural Ethiopia.	Participation in the public works under PSNP had no beneficial effects on school attendance on average. There are no improvements in average attendance rates for boys and attendance rates fall for girls age 6–10. However, there was a significant reduction in child labour hours for public work participant households on average.
ing aid to education to one per 120 low- and Comparison between government Children in LMICs.  GDP (Michaelowa and Weber middle-income expenditure on education and aid countries (Michaelowa and Weber 2006)	Micro-finance (Maldonado and Gonzalez-Vega 2008).	Rural Bolivia	Examined the impact of microcredit programme on schooling gap (number of years difference between the highest level of schooling completed by the child, versus expected level of schooling according to the age of the child), as estimated through a Random Utility model.	School-aged children at risk of discontinuing studies.	The authors completed a regressions test for differences in gap between households that have had access to the programme for some time versus households that recently joined the programme. The children of old clients have about half a year or a quarter of a year less schooling gap than children from new client households. They concluded that participation in microfinance programme matters for schooling.
	Increasing aid to education to one per cent of GDP (Michaelowa and Weber 2006a)	120 low- and middle-income countries	Comparison between government expenditure on education and aid (Michaelowa and Weber 2006)	Children in LMICs.	Primary completion rate increased 2.5 points as aid to education increased to one per cent of GDP (from 0.3 per cent). Regressions reveal negative aid impact in countries with extremely oppressive regimes and show that government

What?	Where?	How and why?	To whom?	What impact?
	(LMICs) from the early 1970s to 2000, and 2006			expenditure had no greater impact on educational outcomes than aid (Michaelowa and Weber 2006).
Aid for education (Michaelowa and Weber 2006b)	80 low-income countries	Examined the impact of aid for education on primary enrolment rates over time in 80 low-income countries.	School-age children in Iow-income countries.	They conducted a dynamic panel analysis using primary school enrolment, ODA, and other country level data from the World Bank. Their results were presented in two data sets: a long-term structural panel (five year averages, 1975–2000) and a short term annual panel (1993–2000). They find a positive overall effect of development assistance on primary enrolment; however, educational aid was more effective when coupled with good governance.
Aid for education (Michaelowa and Weber 2008)	LMICS	Examined the impact of aid for education on primary, secondary, and tertiary education enrolments, using annual survey data.	School-age children in low-income countries.	Their study showed some positive effect of aid at all three levels, primary, secondary, and tertiary levels of education; however, the overall effects are bound to be quite low.
Deworming (Miguel and Kremer 2004)	Rural Kenya	Group-level randomization and probit estimation with non-experimental method for decomposing direct and withinschool indirect externality effects.	30,000 students in 75 schools.	Deworming increased school participation in treatment schools by at least seven percentage points, a one-quarter reduction in total school absenteeism. Within school participation externality benefits were positive and statistically significant (5.6 percentage points) for untreated pupils in the treatment schools in the first year of the programme. The average school participation gain for treatment schools relative to comparison schools across both years of the project is 5.1 percentage points. The estimated differences in test scores between pupils in treatment and comparison schools are -0.032 standard deviations for the first year post-treatment and 0.001 standard deviation for the second year, neither of which is significant, nor are the within school externality effect estimates statistically significant (Miguel and Kremer 2004).
Strengthen school committees through grants plus one or combination of: training, democratic election, and/or linkage of school committee members with village committee (Pradhan et al. 2011).	Rural Indonesia	Two-stage sampling, pairwise impact evaluation and qualitative research.	420 treatment schools.	Only linkage has significant results: test scores in Indonesian improve by 0.17 standard deviations and 0.22 for linkage plus election of committee members (Pradhan et al. 2011).
In-service teacher professional development including: professional development of district level trainers; school based INSETs; and residential professional development for teachers, head teachers, and circuit supervisors (The QUIPS Programme Evaluation Team 2005)	Ghana	Project schools were matched with control schools with pre- and post-testing of same children 3x to measure learning growth; ANCOVA: static achievement performance of grades 4 and 6 in project and control schools investigated for residual effects of project on learning outcomes.	16 schools in eight districts.	Slope coefficients for project (pupil achievement growth): Gr5: Maths 4.02 English (reading) 3.89 (spoken) 3.93 Gr3: Maths 5.48 English (reading) 3.94 (spoken) 4.4 (All significant at pc.05). Static achievement gains: The shifts in achievement in Grades 4 and 6 were approximately 3.2 per cent in math, 2.2 per cent in English reading, and 1.2 per cent in spoken English narrative (all significant). Final achievement gains of pupils in QUIPS compared to control schools were statistically significant (pc.001) for Grades 4 and 6 mathematics and English reading, but not for Grade 4 or 6 in spoken English. In the first year of the project, in both English and Math, students in project schools outperformed students in comparison schools by about two to four per cent. Over

	Where?	How and why?	To whom?	What impact?
	,			two years that achievement gain for project students grew to 38 per cent in Maths and 15 per cent in English. Moreover, the rate of learning was faster in project schools than in non-project schools. In most situations, students in project schools maintained or even improved on achievement gains made as a result of project interventions even after leaving the programme.
The Global Partnership for Education (GPE) (Riddell 2012)	Countries in receipt of GPE aid (Riddell 2012)	Unknown	Countries in receipt of GPE aid (Riddell 2012).	The GPE claims that countries in receipt of their funds perform better in all basic education indicators than countries receiving no funding (Riddell 2012). However, a recent assessment of the impact of the GPE has found no robust evidence that countries in receipt of GPE funding outperform those without GPE funding (Cambridge Education 2009)
Helping countries to create reliable and robust data on issues such as enrolments, transition rates, and assessing teacher training needs. Such accumulated data has led to interventions such as girls scholarships to address gender disparity in school access and completion (Riddell 2012)	Unknown	Unknown	Unknown	Unknown
Conditional cash transfers (Skoufias and Parker 2001)	Rural Mexico	This study follows a quasi- experimental design to evaluate the impact of PROGRESA on schooling, work, time allocation among boys and girls. In the first part of this study a double- difference estimator has been used for impact evaluation. In the second part this study used a module of time use to examine the impact of the programme on leisure.	Schoolchildren at risk for discontinuing studies.	After one year of the programme, the programme accounts for a reduction of 21 per cent in labour force participation rate. For age group of 12 to 17, it accounts for a reduction of 12.4 to 8.5 percent in the probability of their working. The programme increased the school attendance rate of boys of primary school age by 1.3 percentage points after one year and 1.8 percentage points after second year. But this effect is larger in the secondary school age, student ranging from 7.6 to 10.2 percentage point. There was an insignificant impact on boys but for girls the programme reduces leisure about 0.2 hours per day or 1.4 day in a week and this negative impact is 2.8 days per week for the girls aged 12 to 13 years.
The Education for all Global Monitoring Report (UNESCO 2011)	Developing countries		Children living in developing countries.	There has been an increase of 52 million children in developing countries entering primary school between 1999 and 2008, along with reductions in children out of school, and improved gender parity in primary enrolment (UNESCO 2011).

What could work?				
General comments on what could work	Provide concrete examples of relevant innovations funded by aid	What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit from the innovation	If known, what could be the impact if implemented
	A pilot programme in rural India provided bonus payments to teachers whose students' test scores improve (Muralidharan and Sundararama 2009).	The bonuses were funded by aid money.	Teachers and students could benefit from this innovation.	An evaluation of the pilot revealed that after two years, students in incentive schools performed significantly better than those in control schools by 0.27 and 0.17 standard deviations in math and language tests respectively (Muralidharan and Sundararama 2009).
For aid to education to have a sustainable impact on educational systems, approaches are needed which focus beyond the short-term and beyond particular or specific interventions. If aid is to have a lasting effect, it needs to be provided longer term time-frame, and with much greater attention paid to the educational system as a whole, including the institutions, organisational practices, and incentives with sufficient understanding of the political, economic, and social context which underpins it and with which it has a critically important interface. In short, if aid to education is to 'work', what is needed is something quite different from the typical 'aid project', a type of intervention which does not lend itself easily to short-term impact assessments. Thus, even if project evaluations are positive (and this includes methodologically rigorous ones), when viewed from the perspective of long-term sustainability, their wider impact will remain in doubt' (Riddell 2012).	Unknown	Unknown	Unknown	Unknown
Needs of formal educational systems must be determined not only by the education sector, but also by the political economy and sociology of education systems, and by non-formal education systems (Riddell 2012). Riddell (2012) further states: (The education system) will include the obvious basic inputs of teachers, classrooms, and instructional materials, but will also need to include or take stock of the status, salary scales, and deployment of teachers who themselves have been educated, the curricula and design and use of examinations, the mentoring, supervision and support of teachers, the policy analysis and targeting of resource allocation to embrace systemic and specific needs, including meeting ethnic, locational, and gender requirements; and advancing increased access for those with disabilities, with sufficient attention paid to quality improvement so as not to create a second-class system provided for those without alternative choices. This is a far cry from the simple approach of an aid agency building classrooms or providing textbooks alone, and points to the need for agencies to face the far more challenging agenda of	Unknown	Unknown	Unknown	Unknown

General comments on what could work	Provide concrete examples of relevant innovations funded by aid	What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit from the innovation	If known, what could be the impact if implemented
helping ministers and ministries of education address better the complexities of issues involved in building improved and sustainable education systems.'				
Four sets of key variables are important in designing education interventions (Riddell Unknown 2008). They are categorised as follows: (1) supporting inputs; (2) enabling conditions; (3) school climate; and (4) the teaching/learning process. Supporting inputs include textbooks and instructional materials, class size, distance (to school), classroom/school amenities, pre-school education, children's health and nutrition, parental and community involvement in the school, teacher supervision and development, and standards or institutional guidelines. Enabling conditions include teachers and principals, as well as 'time', which typically include annual teaching hours, student absenteeism, etc. School climate aspects include issues about the local community; its relationship to the school; and its professional staff, teachers' commitment, incentives, and status. Finally, the category 'teaching/learning process' includes many of the variables on which so many education interventions are based, namely: time on task, pedagogy, mother tongue, reading, homework, assessment and feedback, and multi-grade classroom approaches (Riddell 2008).	Unknown	Unknown	Unknown	Unknown

## What is scalable?

General comments re scalability	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners (and If known, what has been the impact of losers) in the process of scalability policy scalability at aggregate (regional-national level)	If known, what has been the impact of policy scalability at aggregate (regional-national level)
-	The Primary Reading Programme It is unknown how the main (PRP) was niloted in Zambia in constraints were overcome	It is unknown how the main	It is unknown who the main winners	The success evident at the pilot level
	the mid-1990s. Based on the			level. A recent evaluation of the PRP
	successful pilot, it was taken up			did not find evidence of the same
	in the Zambian SWAp, the Basic			distinct success of the PRP over non-
	Education Sub-Sector			PRP approaches in learning outcomes
	Investment Programme (BESSIP)			(IOB Impact Evaluation 2008).
	(Riddell 2012).			

General comments re scalability	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners (and losers) in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national level)
Even when programmes was shown to have positive results, there is no guarantee that they will be embraced and scaled up to a national level by policy makers, especially if donor funds are not available for up scaling (Riddell 2012).	Unknown	Unknown	Unknown	Unknown
Political trade-offs often take precedence over programmes which are shown to be effective. Politicians are biased toward investments such as building schools, since they are better votecatchers than improving the quality of education which is both much more difficult to achieve and less rapidly observable (Grindle 2010).	Unknown	Unknown	Unknown	Unknown
-	Teacher's bonuses (Hanushek and Woessman 2007)	The scalability of teacher's bonuses is questionable (Hanushek and Woessman 2007).	The scalability of teacher's Presumably, teachers lose out since bonuses is questionable (Hanushek teachers' bonuses (which are shown to and Woessman 2007).  be effective) cannot be scaled up to the national level.	Unknown
What is transferable?				
General comments re transferability	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
	A professional development programme for teachers focused on literacy instruction was implemented in seven countries: St. Lucia, Jamaica, Dominican Republic, Guatemala, Honduras, Bolivia, and Peru (see Aguirre Division 2006).	Process of transferability unknown. The programme was supported by USAID.	Presumably the teachers receiving the training have benefited, as well as their pupils and pupils' families, and communities by extension.	Specific impacts on teacher's abilities to teach literacy are given above. Impacts of transferability are unknown.

General comments re transferability	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	Who have been the main beneficiaries If known, what has been the impact of of innovation transferability policy transferability
USAID commissioned an in-depth evaluation of its support to education over two decades (Gillies 2010). The Gillies (2010) study points to other factors beyond financial sustainability as being crucial for sustainable change. The integration of any intervention within the context of the long-term goals for the education system is a first priority—whether the interventions involve decentralisation, service delivery, policy dialogue, information and analysis, teacher training, workshops, textbooks, or testing. It is the context of the programmes that must be understood. This implies that 'best practices' cannot merely be transferred from one country to another.	Unknown	Unknown	Unknown	Unknown
	Conditional cash transfer programmes to encourage children to stay in school (Rawlings and Rubio 2005).	This is a review of six difference CCT programmes offered in Mexico, Colombia, Honduras, Jamaica, Nicaragua, and Turkey.	Unknown	Impact of transferability unknown, but the study shows that the first generation of these programmes in Colombia, Mexico, and Nicaragua show them to be an effective means for promoting human capital accumulation among poor households. The study concludes that the next generation of evaluations is building on the body of knowledge of CCT by providing evidence on the medium-term impact of the programmes, the value of new elements, and the impact of new CCT in Honduras, Jamaica, Turkey, and urban Mexico.

General comments re transferability	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	How the process of transferability Who have been the main beneficiaries If known, what has been the impact of has taken place, and the role of of innovation transferability policy transferability aid to support that process	If known, what has been the impact of policy transferability
	Sector-wide approaches (SWAps) as a means of providing aid to education were first piloted in Africa in the mid-1990s. This approach was taken up after the lack of sustainability characterizing previous single-focus interventions became apparent. Since the mid-1990s, SWAps have been widely adopted, both in education and other sectors (Riddell 2012).		As SWAps were transferred to new countries, different aid modalities were encompassed. This included were encompassed. This included were encompassed. This included project aid, so long as such projects were consistent with projects were consistent with wider educational goals and built creasing share of aid to increasing share of aid to many SWAps are sub-sectoral rather than sectoral.  SWAps involve a joint effort between donorand recipient countries, aimed and recipient countries at improving educational outcomes and local capacity for the latter (Riddell 2012). SWAps as an approach are meant to prioritize the aid recipient?  Dougle capacity or the latter (Riddell 2012). SWAps as an approach are meant to prioritize the aid recipient's objectives in their education plans. Though laudable, the reality is that many SWAps are sub-sectoral rather than recipient countries (Riddell 2012).	SWAps, as originally conceived, were meant both to address the weaknesses of stand-alone project aid and to try to capture the significant potential benefits of donors working more cooperatively in a joint enterprise with recipients aimed both at improving educational outcomes and strengthening recipient capacities (Riddell 2012).
'There is no 'set' and established blue-print of what to do that can be applied randomly to all countries' (Riddell 2012)	Unknown	Unknown	Unknown	Unknown

Source: Author.

TABLE A4.9 Synthesis of what works on water and sanitation policies

What?	Where?	How and why?	To whom?	What impact?
!	i	How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
Educational messages to improve hygiene practices, surveillance of households in the intervention areas to assess household cleanliness, and adherence to hygiene messages (Ahmed et al. 1993)	Rural Bangladesh	This project was aimed at reducing the incidence of diarrhoea among children, as assessed through a non-blind control trial.	Residents lacking knowledge in hygiene behaviours.	At the time of the first of three surveys, diarrhoea was more prevalent in the intervention site. Mid-way through the intervention, the prevalence in the intervention site was consistently lower than that of the control site. At the end of the intervention, the difference between the sites in diarrhoeal rates disappeared.
				Diarrhoea prevalence was correlated with mother's understanding and knowledge ( $r$ = -0.25, $p$ = 0.001), food hygiene score ( $r$ = -0.56, $p$ = 0.001), all adoption score ( $r$ = -0.64, $p$ = 0.0001), and cleanliness score ( $r$ = -0.78, $p$ = 0.0001).
Investments in hard infrastructure (engineering or physical construction and works) (Anand 2013)	Unknown	Unknown	Unknown	Unknown
Investments in soft infrastructure (Improving institutional environment of water governance through monitoring of water interventions, transparent pricing mechanisms and subsidies, better performance of water utilities through benchmarking, and better mechanisms for stakeholder participation) (Anand 2013).	Unknown	Unknown	Unknown	Impact is difficult to measure compared to hard infrastructure investments.
Water, sanitation, and hygiene education (Aziz et al. 1990)	Rural Bangladesh	This was likely a pilot project, implemented as a non-blind RCT. The programme was introduced in order to reduce diarrhoea incidence among children underfive.	Children under-five.	Children in the intervention area experienced 25 per cent fewer episodes of diarrhoea than those in the control area. An impact on diarrhoea was seen in each age group, except for those aged 0–5 months. The incidence density ratios showed that the impact appeared to increase with age, with the greatest effect in the 36–59 months age group. Within the intervention area diarrhoea increased as distance from the household to the handpump increased. The use of a pit latrine, either directly by the child or for disposal of its faeces, was associated with lower diarrhoea incidence.

What?	Where?	How and why?	To whom?	What impact?
-	-	How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
Safe water and sanitary facilities for human waste disposal (Azurin and Alvero 1974).	Peri-urban Philippines	The programme, likely a pilot, was implemented in order to reduce the incidence of cholera among children aged 0–4. It was implemented as a non-blind RCT.	Children aged four and younger.	Improvement of either water supply or toilet facilities or both was effective in significantly reducing the incidence of cholera in the corresponding study communities, as compared with the control. The greatest improvement was observed in the community in which both water supply and toilets were improved than in the communities in which either water or toilets were improved. The rate of cholera infection among those aged 0–4 was 193.1 per 1,000 in the group which received toilets and water, 213.7 per 1,000 in the group which received improved water, 321.1 per 1,000 in the group which received toilets, and 542.2 per 1,000 in the group which received toilets.
The provision of ceramic water filters for households (Clasen et al. 2004)	Rural Bolivia	The programme, likely a pilot, was implemented as a non-blind RCT in order to reduce the risk of diarrhoea among households.	Households in rural Bolivia.	Risk of diarrhoea for children under-five, controlled for clustering within households, was reduced by 83 per cent (estimated OR 0.17, 95 per cent Cl 0.06, 0.49, p 0.001). The risk of diarrhoea decreased by 0.97 (95 per cent Cl 0.96, 0.99, p<0.02) for each year of life. The mean reduction in diarrhoea prevalence during the six-month trial was 64 per cent (p<0.0001). The reduction was highest among children less than five years old (72 per cent) and lowest among adults (57 per cent). Prevalence of diarrhoea in the intervention group showed a statistically significant upward trend over the course of the study (p<0.02).
The Safe Water System: point-of-use chlorination, safe water storage, sanitation, and rainwater harvesting (Garrett et al. 2008)	Rural Kenya	The pilot programme was implemented in order to lower diarrhoea risk among children under-five. It was evaluated through a quasi-experimental non-blind RCT.	Residents without a safe water source, and/or water storage vessel, and/or poor sanitation practices, and/or knowledge of rainwater harvesting.	Chlorinating stored water (RR: 0.44, 95 per cent CI: 0.28–0.69), latrine presence (RR: 0.71, 95 per cent CI 0.54–0.92), rainwater use (RR 0.70, 95 per cent CI: 0.52–0.95), and living in an intervention village (RR: 0.31, 95 per cent CI: 0.23–0.41) were independently associated with lower diarrhoea risk. Diarrhoea risk was higher among shallow well users (RR 1.78, 95 per cent CI: 1.12–2.38).
A solar water disinfection programme (Graf et al. 2010).	Urban Cameroon	The pilot was implemented in order to reduce diarrhoea prevalence among children under-five.	Residents who do not have access to safe drinking water.	A decrease in diarrhoea prevalence among children under-five was observed in the intervention group, from 34.4 per cent prior to the intervention to 22.8 per cent after the intervention (x2 = 19.18, p = 0.001, OR = 1.77). The prevalence in the control group remained stable, at 34.4 per cent and 31.8 per cent before and after the intervention, respectively.

What?	Where?	How and why?	To whom?	What impact?
		How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
The Global Sanitation Fund (GSF) (GSF 2012)	As of early 2012, the GSF was implemented by Cambodia, India, Nepal, Madagascar, Malawi, Senegal, Uganda, Burkina Faso, Ethiopia, Nigeria, Tanzania, and Togo. The Fund plans to include up to 25 countries by 2016 (GSF, 2012)	The GSF aims to develop a collaborative and co-operative approach in each participating country, which reduces duplication of resources and administrative costs for donors, and also ensures community 'buy-in' for the programme.	Residents of countries with an urgent need for sanitation and hygiene education (GSF 2012).	The Annual Report claims that 102,970 persons now have access to improved sanitation with over 68,000 people living in cleaner environments free from defecation (named as 'open defecation free' or ODF communities) (GSF 2012)
Hygiene education intervention (Haggery et al. 1994).	Rural Zaire	The project was implemented in order to decrease the incidence of diarrhoea among children, as assessed through a non-blind RCT.	Residents who lack knowledge on the impact of hygiene on health outcomes.	During the post-intervention period, diarrhoeal morbidity was greatly reduced relative to the previous year among all children in both study groups. Diarrhoeal incidence rates declined by approximately 50 per cent in each group, and the reductions were highly significant within each age category in both groups (SND tests, p<0.0001 in every case).  One year after baseline, overall, children in intervention sites had a reported mean of 0.85 episodes of diarrhoea, while children in control sites had 0.90 episodes (NS).  There was no discernible evidence of a trend towards fewer episodes of diarrhoea in intervention compared to control children after the intervention. Nevertheless, proportionately fewer children in intervention sites were reported to have diarrhoea than at control sites.
A handwashing promotion pilot programme Urban Myanmar/ (Han and Hlaing 1989).	Urban Myanmar/ Burma	The promotion was piloted in order to decrease diarrhoeal incidence among children, in the form of a non-blind RCT.	Residents unaware of the impact of handwashing practices on health outcomes.	The diarrhoeal incidence among children in the handwashing households was significantly lower than that among those in the control households. The percentage reductions in diarrhoea incidence for the O–4, younger than 2, and 2 or greater than 2 age groups were 30 per cent, 31 per cent, and 33 per cent respectively.

What?	Where?	How and why?	To whom?	What impact?
-	1	How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
Water, sanitation, and hygiene education (Hoque et al. 1996).	Rural Bangladesh	This was a follow-up for a pilot, though there is no evidence that this was a 'scaling-up.' The intention of the project was to decrease episodes of diarrhoea among children. It took the form of a cross-sectional survey; a follow-up of a non-blind control trial.	Residents without sufficient knowledge of sanitation and hygiene, and safe water practices.	In the original intervention study, children in the intervention area experienced 25 per cent fewer episodes of diarrhoea than those in the control area.
Chlorination of drinking water (Jensen et al. 2003).	Rural Pakistan	This pilot was carried out in order to see the effects of chlorination on diarrhoeal incidence among children underfive. A non-blind RCT was conducted.	Residents without access to chlorinated drinking water.	This pilot did not result in a difference in diarrhoeal incidence among children between the intervention and control groups.
This was a handwashing with soap intervention. Individuals were provided with soap and water pitchers, only water pitchers, only soap, or neither (Khan 1982).	Bangladesh	The pilot was carried out to see if shigellosis transmission between family members was lessened by the intervention. A non-blind RCT was conducted.	Families affected by shigellosis infection.	Just over ten per cent of children in the control group subsequently became infected with shigellosis after a family member was diagnosed, compared to over 50 per cent of children in the control group (those who received no soap or water).
Household access to an urban sewerage system (Kolahi et al. 2009).	Urban Iran	The project was implemented to assess the incidence of diarrhoea among children, through a nonrandomized control trial.	Residents without access to a sewage system.	The incidence of diarrhoea among children decreased.
Nicaragua Rural Water Supply, Sanitation, and Environmental Health Programme, which improved people's access to safe sources of drinking water and excreta disposal facilities, promoted hygiene, and conducted capacity-building activities (Lockwood et al. 2001).	Rural Nicaragua	The project, likely a pilot, was implemented in order to decrease the incidence of diarrhoea among young children.	Residents without access to safe drinking water and/or excreta disposal facilities.	The percentage of households where children aged four or under have had diarrhoea during the two weeks prior to the survey was 20 per cent at baseline, 20 per cent at the first follow-up survey, and then dropped to 15 per cent and then 13 per cent in the second and third follow-up surveys, respectively.

What?	Where?	How and why?	To whom?	What impact?
		How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
The Karachi Soap Health Study, a handwashing promotion intervention (Luby et al. 2004).	Urban Pakistan	The project was implemented to assess the incidence of diarrhoea among infants and children. A cluster RCT was conducted.	Residents without access to soap.	Infants living in households that received handwashing promotion and plain soap had 39 per cent fewer days with diarrhoea versus infants living in control neighbourhoods. Severely malnourished children younger than 5 years living in households that received handwashing promotion and plain soap had 42 per cent fewer days with diarrhoea versus severely malnourished children in the control group. Similar reductions in diarrhoea were observed among children in households receiving antibacterial soap.
Point of use water disinfectant treatment, along with handwashing with soap promotion (Luby et al. 2006).	Urban Pakistan	The project, likely a pilot, was implemented in order to decrease the incidence of diarrhoea among young children.	Residents without access to clean drinking water, and/or soap, and/or knowledge of the benefits of handwashing.	Diarrhoea prevalence was consistently lower among infants and children one year to two years who lived in intervention neighbourhoods compared to control neighbourhoods. However, the magnitude of the reductions were less than the overall reduction for all ages, and many of the individual age and intervention specific reductions were not statistically significant. Infants less than one year old in the 'bleach water treatment' experienced a diarrhoea prevalence of 8.30 per cent (20 per cent less than control), 'soap and handwashing promotion' a prevalence of 7.86 per cent (24 per cent less than control), 'flocculent-disinfectant water treatment' a prevalence of 6.20 per cent (40 per cent less than control), Hocculent-disinfectant plus soap' 6.48 per cent (38 per cent less than control). However, none of these differences are statistically significant and yielded extremely large confidence intervals.
Water and sanitation extension programme (WASEP) project aimed at improving potable water supply, sanitation facilities, and awareness and practices about hygiene behaviour (Nanan et al. 2003).	Rural Pakistan	The project aimed to reduce diarrhoea incidence among children. A case control study was conducted.	Residents without access to clean drinking water, sanitation facilities, and/or knowledge of the impact of hygiene behaviour on health.	Children in control villages had a 33 per cent higher adjusted odds ratio for having diarrhoea than children living in intervention villages. Boys had 25 per cent lower odds of having diarrhoea than girls.
Point-of-use treatment of contaminated water with disinfectant, safe storage of treated water, and community education (Quick et al. 1999).	Peri-urban Bolivia	The project was aimed at reducing diarrhoeal episodes among children, assessed by a non-blind RCT.	Residents without access to clean drinking water, and/or safe storage containers, and/or a lack of knowledge about the health impacts of contaminated water.	Intervention households had 44 per cent fewer diarrhoea episodes than control households. Infants less than one year old and children aged 5–14 years in intervention households had significantly less diarrhoea than control children.  Diarrhoeal incidence was reduced 53 per cent among infants and 59 per cent among children 5–14. However, the intervention had an insignificant effect on diarrhoeal episodes for children aged one to four.

What?	Where?	How and why?	To whom?	What impact?
	1	How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
Promotional activities including the installation of tube wells and sanitary latrines, and health education for improving hygienic behaviour (Rana 2009).	Rural Bangladesh	The project was aimed at reducing the incidence of waterborne diseases, through an interrupted time-series experimental study.	Residents without tube wells and/or sanitary latrines, and/or lack of knowledge of the impact of hygiene behaviour on health.	Among under-five children the incidence of waterborne diseases was reduced from 22 per cent to 13 per cent.
Household-based drinking water disinfectant and a storage vessel (Reller et al. 2003).	Rural Guatemala	The project was aimed at reducing incidence of diarrhoea among children, as assessed through a non-blind RCT.	Residents without access to clean drinking water, and/or storage vessel.	Children in households which received flocculant disinfectant and a storage vessel experienced significantly fewer episodes of diarrhoea than the control group.  Infants in households who received flocculant disinfectant plus a storage vessel had 30 per cent fewer episodes of diarrhoea compared to infants who received flocculant disinfectant alone.
				Children under-five who lived in households with water treatment had fewer episodes of severe diarrhoea than controls, but they did not have fewer episodes of prolonged diarrhoea.
Water storage improvement programme (Roberts et al. 2001)	Refugee camp in Malawi	The project was aimed at decreasing the incidence of diarrhoea in children under-five residing in the camp, assessed through a non-blind RCT.	Children in refugee camps; residents without access to safe water storage.	There was 31 per cent less diarrhoeal disease in children under-five among the group who received the intervention.
Home chlorination of drinking water for a sample lacking access to piped water (Semenza et al. 1998)	Urban Uzbekistan	The project was aimed at decreasing the incidence of diarrhoea in children under-five, assessed through a cluster	Residents without access to clean drinking water, and/or piped water.	The home chlorination intervention group had the lowest diarrhoeal rate (28.8 per 1,000 subjects per month), compared to those with piped water and those receiving no intervention.
		randomized intervention study.		The relative risk of diarrhoea among children in the intervention rather than control (no access to piped water, received no intervention) was 0.33. The relative risk of children who received the intervention versus those who received piped water was 0.50. The relative risk of children in the control group versus those who received piped water was 1.5.
Handwashing and education programme (Shahid et al. 1996)	Peri-urban Bangladesh	The project was aimed at reducing the incidence of diarrhoea among children, through a non-blind RCT.	Residents lacking knowledge in hygiene behaviour.	Diarrhoea incidence was reduced 61 per cent among those aged 0–11 months, 47 per cent among those aged 12–23 months, and 56 per cent among those aged 24–59 months.

What?	Where?	How and why?	To whom?	What impact?
	1	How the policy was implemented, what was the role of aid in that process, and why it has been successful.	Who were the main beneficiaries	Impact is tangible compared to impacts from investments in soft infrastructure.
Handwashing promotion and education programme (Sircar et al. 1987)	Urban India	The project was aimed at reducing the incidence of diarrhoea among children, as assessed through a non-blind RCT.	Residents lacking knowledge in hygiene behaviours.	The difference in the incidence of diarrhoea and between those under-five in study and control groups was not significantly different. This was due to the inability to enforce handwashing practices in this younger age group.
Educational intervention promoting hygienic behaviour (Stanton and Clemens 1987).	Urban Bangladesh	The project was implemented in order to decrease the incidence of diarrhoea, as assessed through a non-blind RCT.	Residents lacking knowledge in hygiene behaviours.	During the six months after the intervention, the rate of diarrhoea in children aged five and under was 4.3 per 100 in the intervention communities and 5.8 in the control communities, yielding a protective efficacy of 26 per cent (p<0.0001).
Installation of a piped water network (Tonglet et al. 1992).	Rural Zaire	The project aimed at reducing diarrhoea incidence as assessed through a non-blind concurrent cohort study.	Residents without access to a piped water network.	Median diarrhoea incidence per two weeks proved to be significantly lower in the two intervention villages (0.084 and 0.088) than in the control village (0.091) (p<0.05). Within intervention villages, the median diarrhoea incidence per two weeks was halved in children who lived in households located less than a five-minute walk from the public standpipe, or in households using more than 50 litres of water a day.
MGD target 7c (UNICEF/WHO 2012).	The developing world (UNICEF/WHO 2012).	Since the adoption of the Millennium Development Goals, the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation has reported on progress towards achieving Target 7c: reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation (UNICEF/WHO 2012).	Residents of the developing world (UNICEF/WHO 2012).	The proportion of population in the developing world with access to improved sources of water increased from 70 per cent in 1990 to 86 per cent in 2010. These are global figures and some of the improvement may have occurred without any aid. It is difficult to isolate how much of this increment actually came from aid funded activities (UNICEF/WHO 2012).
Water access and sanitation policies (WHO 2012)	74 low- and middle- income countries comprised the sample (WHO 2012).	Unknown	Residents of low- and middle-income countries (WHO 2012).	Over 90 per cent of the samples countries reported that targets were in place and more than 70 per cent reported that policies had been adopted. However, only 22 per cent of countries perceived that financing was adequate. While 56 of 74 countries had water policies in place by 2011, only 46 had sanitation policies (WHO 2012)

What could work?				
General comments on what could work	Provide concrete examples of relevant innovations funded by aid	What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit from the innovation	If known, what could be the impact if implemented
Greater investments in soft infrastructure, which donors are typically reluctant to invest in due to difficulty in measuring results (Anand 2013)	Unknown	Unknown	Unknown	Unknown
Greater investments in sanitation to match the investments allotted to water supply (Jimenez and Perez-Foguet 2008)	Unknown	Unknown	Unknown	Unknown
Allocating more aid for water and sanitation to countries still far away from MGD goals (such as Haiti and Mauritania), as opposed to those countries which have made significant progress towards the goals (such as India, Vietnam, Turkey, and China) (OECD 2012).	Unknown	Residents in countries which have not made significant progress toward MDG targets (OECD 2012).	Unknown	Unknown

What is transferable?				
General comments on what is transferable	Provide examples of policy How the process of innovations that have transferability has t been replicated from one place, and the role country to another to support that pro	How the process of transferability has taken place, and the role of aid to support that process	Who have been the If known, what main beneficiaries of transferability innovation transferability	Who have been the If known, what has been the impact of policy main beneficiaries of transferability innovation transferability
!	An intervention which included chlorination and safe storage of household drinking water was implemented both in Bangladesh and Bolivia (in peri-urban areas) (see Sobsey et al. 2003).	It is unclear how the transferability occurred, nor if the project was implemented simultaneously or consecutively between the two sites. It is assumed that these projects were funded by aid money.	The programme appeared to have been more effective in Bangladesh than in Bolivia.	In Bangladesh, the mean diarrhoea incidence rates for children under-five were significantly lower (p = 0.029, t-test) in intervention households (20.8 episodes/1,000 days) than in control households (24.3 episodes/1,000 days).  However, in Bolivia, the mean rates in children under-five were only slightly lower in the intervention group (0.77) than in the control group (0.81).  The impact of the transferability itself is unknown.
Though the transferability has not been documented, it is probable that interventions such as those reviewed by Kolahi et al. (2009), who assessed the impact of household access to an urban sewer system, and Tonglet et al. (1992), who studied the impact of the installation of a piped water network, are likely transferable beyond the settings in which they were tested.	Unknown	Unknown	Unknown	Unknown

TABLE A4.10 Synthesis of evidence on aid-supported social protection policies

What?	Where?	How and why?	To whom?	What impact?
Self-Targeted Workfare Programme (Almeida and Galasso 2007).	Rural and urban Argentina	This study was interested in quantifying the effect of the programme on labour market outcomes. The study looked at individual's participation in labour market, total hours of work, total individual income and household income, and share of household members who are employed. This study used difference-indifference methodology to evaluate the impact of the project.	Those struggling with unemployment in Argentina	Despite the nationwide dissemination campaign implemented by the government, the programme had a relatively small take-up rate among participants. Moreover, a selected sample of workfare beneficiaries was attracted to this type of programme. Based on the empirical results this study concluded following three major points: Jump-starting selfemployment through start-up capital and business is not necessarily attractive option for all workfare beneficiaries, the programme increased the supply of total working hours, but fails to have significant effect on earned income (individual or household level), at least in the short run, and the intervention had a positive income and labour supply impact only among the younger and more educated beneficiaries.
Productive Safety Net Programme (PSNP) (Andersson et al. 2011).	Rural Ethiopia	This study investigated how PSNP has affected household's investment and disinvestment in productive assets, drawing on panel data gathered for three years.	The poor in rural Ethiopia	There is no proof that PSNP participation leads households to disinvest in livestock or trees Rather results suggested that increased forestry activity was taking place as result of PSNP.
Food and cash transfer programme (Attanasio et al. 2011).	Rural and urban Columbia	Impact of programme on consumption was measured using a difference-in-difference approach.	The poor in Columbia	After controlling for the endogeneity of total consumption and for the price variability across villages, our estimates imply that an increase in consumption by ten per cent would lead to a decrease of one per cent in the share of food. The introduction of the programme led to an increase in total consumption between 13 per cent and 15 per cent depending on the estimation strategy adopted.
Workfare Programme (NREGS) (Azam 2012)	Rural India	Measured impact of programme through public work participation (probability of participation in public work both for men and women), labour force participation (in probability of being in labour force), and real wages of casual workers (log of real wage). The study was nonexperimental, using Difference-In-Difference (DID) techniques.	The poor in rural India	The causal impacts of NREGS on the participation in public work, labour force participation, and average wages of casual workers are positive in treated districts compared to control districts.
Cash transfer and integrated anti-poverty strategy (Barrientos and Villa 2013).	Chile	Measured impact of programme on poverty levels and labour indicators, as assessed through quasiexperiments using secondary data.	The poor in Chile	Independent quasi-experiments using secondary data have found no effects of this intervention on poverty reduction (Galasso 2011). However, Guardia et al. (2011) detected positive effects on number of workers in the family and some other labour indicators.

The Old Age Pension Rur Programme (Bertrand urb et al. 2003) Afr			i moumor	What impact:
	Rural and urban South Africa	Regression analysis and IV regression analysis were used, drawing on a survey (n=9,000) in order to explore the labour supply of prime age individuals.	Pension-aged individuals in South Africa	1. Though the elderly in industrial countries may often live on their own, multigeneration households prevail in developing countries.  2. In practice at least some part of cash transfers targeted for the elderly ends up in the hands of a group that was not originally targeted; prime age men and women living with pensioner.  3. Africa household members 16–50 years old reduce their labour supply when they live with pension beneficiaries.  4. The different labour supply impact of money from male and female pensioners suggests that a common preference model of family labour supply cannot adequately describe the results that some amounts of bargaining take place within households.
Provision of Url antiretroviral Afri treatment (Bor et al. 2012)	Urban South Africa	Urban South Impact of provision of antiretroviral treatment on employment patterns of persons with HIV, as assessed in a longitudinal study.	РГWНА	From 37.0 per cent at the baseline of three to five years before treatment initiation, employment fell by 14.1 percentage points, a 38 per cent relative decline. Four years after treatment began, employment among HIV patients was only 3.8 percentage points lower than in the baseline reference period, a 90 per cent relative recovery. Unemployment due to illness nearly doubled from 3.5 per cent at baseline to 6.6 per cent in the six months before treatment initiation—that is, a 3.1-percentage-point increment. Just prior to initiation, 10 per cent of men and 5 per cent of women were reported to be unemployed because of sickness or disability. After 1 year of antiretroviral therapy, however, HIV patients (or their household proxies) were no more likely to report that illness or disability was a barrier to employment than they were at baseline.
Microcredit scheme Urk (Copestake et al. 2010) Zan	Urban Zambia	Measured impact of provision of microcredit scheme on participant's economic well-being as assessed through regression drawing on survey data.	Those at risk of poverty in urban Zambia	Main respondents reported transferring an amount equivalent to roughly one third of average business profits into the household budget. These monthly income transfers were significantly higher for borrowers than for pipeline participants. Overall quality of life had changed over the year; 52 per cent of borrowers and 57 per cent of pipeline participants said they felt better off. The Peri-Urban Lusaka Small Enterprise Project (PULSE) was not directed towards the poorest business operators, but they estimated that one-third of clients were below the national poverty line. Those who graduated from their first to a second loan, on average, experienced significantly higher growth in their profits and household income, as compared with otherwise similar business operators. There is scope for improving the cost effectiveness of impact assessment by basing it on routine impact monitoring that can serve a wider range of purposes.
Workfare (Dandekar Rur and Sathe 1980)	Rural India	Determine the success (or failure) of the programme to increase wages among those enrolled through survey data.	The poor in rural India	Two-thirds of the EGS workers' income increased by 33 per cent. In spite of this increase, nine-tenths of the participants were living below the poverty line even after five years of implementation of the programme. To elevate participants above the poverty line, EGS has to provide either higher wages for each person per day worked, or provide more working days per person.

What?	Where?	How and why?	To whom?	What impact?
Workfare Programme (Maharashtra EGS) (Dev 1995)	Rural India	To measure poverty impact, percentage of the EGS labourers to the total rural workers, days of employment, and women's participation through an exploratory data analysis based on secondary data, and a critical evaluation of the programme based on previous micro evidence based studies.	Those struggling with unemployment in rural India	This study concluded that this programme started with a modest beginning with 18.8 million Indian Rupees in 1972–73 and eventually expanded to 2350 million Indian Rupees in 1990–91. Provision of employment increased from 4.5 million person-days in 1972–73 to 190 million person-days in 1985–86. In 1987–88 percentage of EGS workers in 1972–73 to 190 million person-days in 1985–86. In 1987–88 percentage of EGS workers in 1972–73 to 190 million person-days in 1985–86. In 1987–88 percentage of EGS workers in 1972–73 to 190 million person-days in 1985–86. In 1987–89 percent of Maharashtra. Based on previous microevidence studies, this paper concluded that the impact on the employment on the programme to income of the EGS households is quite substantial. This paper also concluded that women's participation in this EGS was also very impressive. Based on the previous studies it varies between 39 to 51 per cent. Apart from this aspect, paper also discussed the general equilibrium effect of this EGS programme. In commenting on it, this paper discussed substantial impact on the agricultural growth and wages.
Microcredit (Develtere and Huybrechts 2005)	Rural and urban Bangladesh	A comparative overview of existing research findings on impact of microcredit institutions on society at large.	The poor in Bangladesh	The overall assessment of economic impact revealed that Grameen Bank and BRAC definitely succeed in reducing their members' vulnerability and by consequence, succeed at preventing them from falling even further into poverty. There was, however, no consensus on whether the two institutions also reduce poverty per se. On social impact several authors shared the opinion that Grameen Bank and BRAC have a positive influence on their female members, especially in regard to women's status and their involvement in family decisions. However, critics claimed that females are lacking the control over loan.
Workfare programme (National Rural Employment Guarantee Schemes) (Dey 2010)	Rural India	This was a non-experimental study using Probit, Logit, and IV estimation. 500 households over 13 Rural Municipalities were included. Outcomes included the impact on household wealth and psychological health.	Those struggling with unemployment in rural India	In respect of impact, the study found that the programme has insignificant difference in respect of the impact on the household level economic variable between the households who worked under this programme less and more. This implies that in absence of treatment, the household income will not fall significantly. So in the surveyed districts this workfare programme has appeared as a substitute source of livelihood not as an extra or complementary source of livelihood.
Workfare and Conditional Cash Transfer Programme (PJH) (Gasparini et al. 2009)	Urban Argentina	This study used non-experimental matching techniques to assess the impact of the CCT programme namely Programa Jefes de Hogar (PJH) on labour informality during a period of strong economic growth. This study investigated whether PJH participants were more reluctant to accept formal jobs in the economic boom than their non-participant counterparts. This study drew on the EPHC data set.	Those struggling to find employment in Argentina	Monetary incentives to look for formal jobs greatly increased between 2003 and 2005. Social organisations and NGOs had key roles in helping people successfully apply to the programme. Political contacts helped in finding formal jobs.

What?	Where?	How and why?	To whom?	What impact?
Productive Safety Net Programme (PSNP) (Gilligan et al. 2009)	Rural Ethiopia	This study evaluated the impact of PSNP and another food security programme. This study used two rounds of panel survey involving beneficiaries and nonbeneficiaries of PSNP.	Those struggling with poverty in rural Ethiopia	With the rising food prices and widespread drought, participation in the public works component of the PSNP had modest effects. PSNP has improved food security and increased growth in livestock holdings. It improved the resilience of households as measured by their ability to raise funds in an emergency. Programme impacts on asset accumulation are greater when higher levels of transfers are received and when participants have access to both the PSNP and another food security programme. These results provide a modestly positive view of the impact of public works transfers and access to the food security programme.
Productive Safety Net Programme (PSNP) (Gilligan et al. 2009)	Rural Ethiopia	This paper assessed whether, after 18 months of operation, the PSNP on its own or together with the OFSP (a food safety programme), reduced household food insecurity, raised consumption levels; encouraged households to engage in production and investment through enhanced access to credit increased use of modern farming techniques, and entry into non-farm own business activities; and whether it has led to sustained asset accumulation. It also investigated whether these programmes have had disincentive effects, measured in terms of reduced participation in the wage labour market or in the crowding out of private transfers. The assessment was completed through a non-experimental study, using propensity score matching and difference-in-difference to estimate the impact.	Those struggling with poverty in rural Ethiopia	The authors concluded that as assessment of the programme depends critically on how participation is defined. Matching estimates find little evidence of programme impact when participation is defined in terms of receiving any payment for undertaking work on PSNP-supported public works, although study find no evidence that asset levels shrank, which was a key programme objective. Somewhat stronger evidence of impact emerges when study define participation in terms of households receiving at least half of their intended transfers; here, one measure of household food security (caloric acquisition above a minimum threshold) is improved. A more positive picture emerges when participation in both the PSNP and Other Food Security Programme (OFSP) is considered. Relative to the comparison group, participants are more likely to be food secure, and are more likely to borrow for productive purposes, use improved agricultural technologies, and operate non-farm own business activities. For these households, there is no evidence of disincentive effects in terms of the reduced supply of labour to wage employment or private transfers.
South African Grant System (child support grant, old age pension, disability grant, care dependency grant, and the foster care grant) (Heinrich et al. 2012).	South Africa	Impact of the programmes through quasi-experimental methods.	South African citizens	The old age pension and child support grant are associated with positive effects on nutrition, school attendance, and child labour.
Job training programme for youths between 16- 24 years old (Jacinto and Gallart 1998)	Chile	Impact of the programme on youth joining the labour market, as assessed through a quasi-experimental evaluation with propensity score matching.	16–24 year old youth in need of job training	The programme improved the labour market insertion of 50 per cent of participating youth. The programme was phased out in 1999 after enrolling 170 youngsters. The Chilean government decided to integrate all job training programmes into one intervention so-called Programa Nacional de Becas—national scholarships programme.

What?	Where?	How and why?	To whom?	What impact?
Workfare programme (Jalan and Ravallion 2003)	Urban Argentina	To determine participants' average income gain and incidence of poverty, as assessed through propensity score matching.	The poor in urban Argentina	There was a 15 percentage point drop in the incidence of poverty due to the programme using a poverty line of US\$100 per month. Net gain from the programme as percentage of pre-intervention income for the full sample was 25.926 and the average net income gain due to the programme was US\$102.627. Programme participants were more likely to be poor than nonparticipants. Average gains are very similar for men and women, but were higher for younger versus older worker as the former had low foregone income.
Anti-poverty programme (Jha et al. 2009)	Rural India	To observe how effective the targeting of the programme is. (Are those defined as non-poor, in terms of land holding, being inappropriately captured by the programme?). This was assessed through a non-experimental study using probit estimation and exploratory data analysis.	The poor in rural India	The self-targeting aspect of the programme is working well. The authors also found that a strong complimentary relationship between workfare participation and the participation in the Public Distribution System of subsidised food grain.
National Rural Employment Guarantee Schemes (NREGS) (Jha et al. 2012).	Rural India	To determine transfer benefits from NREGS, this study used stochastic dominance comparisons of the percapita monthly consumption expenditure of participating household with and without 'Alternative Employment Option' in the absence of NREGS by examining the cumulative distribution functions of percapita monthly expenditure, and used the determinants of such outside opportunities.	The poor in rural India	Net transfer under NREGS was quite modest, and as a result, its poverty alleviating potential was also limited. However, the underlying reasons are remediable. Moreover, study concluded that in principle, such transfers have the potential for alleviating substantially the economic hardships in a poor agrarian economy in economically depressed periods.
Microfinance programme (Katsushi and Azam 2011).	Rural and urban Bangladesh	The authors assess the impact of a microcredit programme on per-capita household income, food consumption, and women's BMI, through panel data estimation methods (fixed effect [FE] model, FE model with propensity score matching (PSMI), FE with control for initial characteristics, difference in difference with PSMI).	The poor in Bangladesh	The main purpose of the paper was to see whether microfinance reduced poverty. The authors concluded that income poverty tends to be alleviated by offering productive loans for households and consumption poverty is likely to be reduced by non-productive loans. A 100 per cent increase in general loan size raises household income per capita only by 0.5 per cent and this impact is 0.69 per cent to 1.09 per cent in case of productive loan size for different estimation strategy. The general loan has a positive but insignificant effect on food consumption. The impact on women's BMI depended on the type of loan: the general loan had an insignificant impact: a ten per cent increase in non-productive loan increased BMI by 0.44 points.

where (56 women and 41 men) through a workers dy.  view on the global impact of and NGOs as they make choices about where best to allocate funding.	What?	Where?	How and why?	To whom?	What impact?
Low- and A systematic review on the global impact of microfinance programmes on poverty.  middle- microfinance programmes on poverty.  make choices about where best to allocate to allocate funding.	Increasing access to ART (Larson et al. 2009).	Rural Kenya			The female index group worked 30 per cent fewer days and 87 per cent more days on non-plucking assignments than the comparison group, during the final nine months pre-ART the monthly gap narrowed, with the female index group working 30 per cent fewer days and 100 per cent more than the comparison group on non-plucking assignments. We found that male index workers were able to maintain a similar pattern of work as the male comparison group until the month they initiated therapy, and then returned to a similar work pattern by their seventh month on ART. For women, we found evidence of substantial differences in employment outcomes, mainly through being less productive while plucking, working fewer days plucking tea, and shifting to non-plucking work assignments.
is a second of the second seco	Microfinance programmes (Maitrot and Niño-Zarazúa, forthcoming)	Low- and middle-income countries	A systematic review on the global impact of microfinance programmes on poverty.	Policy-makers and NGOs as they make choices about where best to allocate funding.	Microfinance overall (across continents and methodologies) has a significant positive impact on per capita income, non-land asset value, and poverty incidence but fails to bring positive change on the other five poverty dimension variables considered in the studies, namely, non-food expenditures, per capita monthly and daily food expenditures, medical expenditures, livestock, and poverty headcount. Overall, across countries and medical expenditures, livestock, and poverty headcount. Overall, across countries and medical expenditures, livestock, and poverty headcount. Overall, across countries and medical expenditures, livestock, and poverty more. It also appears that microfinance's impact on well-being variables can be questioned. The authors' hypothesis is that microfinance's impact on income and non-land asset value can be a short-term positive impact on income and non-land asset value can be a short-term positive impact on longer-effect of microfinance on households. These longer-term effects on welfare seem more difficult to achieve (and are also generally less often considered in impact studies). In Africa, microfinance has an overall insignificant impact on per capita income of clients and on their per capita monthly/daily food expenditure whilst having a positive impact on non-food expenditures and an insignificant or negative impact on medical expenditures. Microfinance in Africa appears to have a more positive impact on morotinent (in Bangladesh and China) (Khandker and Sanad 2013b; Li et al. 2011; Chemin 2008; Khandker 2009). This might indicate that lending to women is a better catalyst to longer-term welfare improvement than lending to men. Health, assets, food consumption, and education have been reported as the main variables which are positive impact on poor or extreme poor would some than on moderate poor ones (Khandker and Samad 2013e), other studies find that microfinance has on the poor. Whilst some studies find that microfinance has on the poor. Whilst some studies find that microfinance bea

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				experience longer-term positive impact from it, this would imply that the socio-economic condition (asset endowment, financial capital or savings, health status) influences the way in which households use and benefit from access to credit.
Child allowance programme (Maurizio and Vasquez 2012)	Urban Argentina	Examines the impact of a child allowance programme on adults' behaviour in the labour market (employment rate, activity rate, total family income) through difference-in-difference and propensity score matching.	Poor adults with children in Argentina.	The results suggest that no important disincentive to work has been generated by the programme given that it did not discourage adults from working or lead to a reduction in the number of hours worked.
Two Public Works Programmes (PWPs) in South Africa ('Gundo Lashu programme in Limpopo' and 'Zibambele programme in KwaZulu- Natal') (McCord and Wilkinson 2009)	Rural South Africa ee	To determine factors associated with PWP participation and income benefits of PWP participation, as assessed through propensity score matching drawing on census and survey data.	Those struggling with unemployment in rural South Africa.	The lower income bands were under represented in Gundo Lashu programme, relative to their share of the overall population, whereas in the Zibambele programme lower-income bands were over represented among participants, with the percentage of PWP households exceeding the percentage of members of the overall population in the lower-income band implying a greater degree of poverty targeting in Zibambele programme. However, after controlling for other household characteristics, household income appears not to have a significant impact on whether or not a household participates in PWP. In contrast to the targeting incidence, Gundo Lashu households appear, on average, to be better off across both the income distribution and a range of other socio-economic indicators than the overall population from which they are drawn, while on the same basis, the Zibambele households are much poorer than the overall population. Active poverty targeting, rather than reliance on the work conditionality, is required to promote the share of programme benefits transferred to the poor.
Microcredit (McKernam 2002)	Rural Bangladesh	Examined the impact of participation in a microcredit programme on later employability, with monthly profit as the main outcome variable.	Those struggling with unemployment in rural Bangladesh.	The author found a positive and significant credit effect of participation in the programme. With this participation profit increased ranging from 88 per cent to 122 per cent depending upon the specific nature of estimation. Participation in the microcredit programme led to increased employability of borrowers, which increases the profit of participation.
Disability cash transfers (Mitra 2010)	Urban South Africa	Assessed the impact of the implementation of disability cash benefits on labour force participation, as assessed through a difference-in-difference estimator using a logistic regression.	Working-age persons with disabilities at risk of poverty.	Labour force non-participation and non-employment have tended to increase over the study period in both treatment and control provinces, which leads to difference-in-difference estimates that are not statistically different from zero. One exception is for younger males in the treatment province, non-participation increased by a statistically significant 3.3 percentage points. There was a drop in non-participation for the control province, but it is not statistically different from zero. The unadjusted difference-in-differences estimate for younger males is a (significant) eight per cent relative increase in the non-participation rate. This result suggests the need for an information campaign or efforts to reduce the cost of applying for the programme in isolated areas. A move toward more leniencies in disability screening does not appear to have altered the labour market behaviour of working age individuals. The result goes against a commonly held view among observers that the programme has been promoting dependency by reducing labour supply. In the context of high unemployment and poverty as in South Africa, a disability cash transfer programme for the working age population may be able to redistribute to the poor and unable to work with insignificant distortionary effects.

What?	Where?	How and why?	To whom?	What impact?
Creation of micro- enterprises for HIV- affected households (Mutenje et al. 2007)	Urban Zimbabwe	Impact of creation of micro-enterprises on household demographic data and income data, as assessed through a case study.	HIV-impacted households at risk for poverty.	Income-generating projects were viable for these households, although some were not feasible for the most vulnerable HIV-affected households.
Subsidized ART (Onwujekwe et al. 2009)	Rural and urban Nigeria	Examined the impact of subsidizing ART on economic well-being of PLWHA, as assessed through a cohort study.	PLWHA struggling with treatment costs.	Almost all costs associated with ART are catastrophic to almost all the patients who attended the clinic, no matter the geographic location, sex or SES, although the level of catastrophe varied and was inequitable. The fact that people paid mostly using out-of-pocket spending resonates the argument that people, particularly people in poor households, can be protected from catastrophic expenditures by reducing a health system's reliance on out-of-pocket payments and providing more financial risk protection.  Even assuming that the patients overstated their expenditures and lowering the total expenditures by 100 per cent, the costs were still catastrophic. It was very catastrophic for rural dwellers and for females. The level of catastrophe increased as SES class decreased and this could possibly lead to increased incidence of poverty, deprivation, vulnerability, and adverse coping mechanisms.
Workfare Programme (NREGS) (Ravi and Engler 2009)	Rural India	This study sought to examine food security, savings, and health outcomes associated with a workfare programme. The study was non-experimental type, using propensity score matching, double difference, and triple difference estimates to account for non-random attrition.	Those struggling with unemployment in rural India.	Households participating in NREGS experienced improved food security, an increased probability of holding savings, and less anxiety compared to non-participating households.
Workfare programme (Ronconi et al. 2006)	Argentina	This was a non-experimental study using propensity score matching to look at three issues: targeting efficiency, poverty effect, and employability effect. The study drew upon a bi-annual surveys collected between 1974 and 2001; each survey contains 80,000 individuals and 25,000 households.	Those struggling with unemployment in Argentina.	Respect of Poverty Effect: during treatment participants received a higher monthly income due to the workfare programme and this effect is larger when the participants are female. Eventually this effect reduced Argentina's indigence rate and poverty rate by 1.2 and 0.2 percentage points respectively. Respect of Employability Effect: This programme created some dependency among the participant i.e. once the individuals were able to enter into the programme, they remained participants for a period beyond the normative period of the programme. However, private job employers have shown a preference to hire the workfare participants.
Cash Transfer (Productive Safety Net Programme) (Sabates- Wheeler and Devereux 2010)	Rural Ethiopia	Through two rounds of surveys targeting four regions of rural Ethopia (n=960 and 893 respectively), the study sought to compare PSNT 'Cash' versus 'Food' transfers in terms of preference by recipients.	Poor residents in Ethiopia.	Income growth was higher with participation in the programme for food recipients and mixed payment recipients, relative to non-participants. In midst of an inflationary situation, this study concluded that food transfers or 'cash plus food' packages are superior to cash transfers—they enable PSNP beneficiaries' higher levels of income growth, asset accumulation, and self-reported food security.

What?	Where?	How and why?	To whom?	What impact?
Old age pension, disability pension, and survivor's pension (Son 2012)	Rural and urban Tajikistan	Assessed the impact of the three types of pension on aggregate poverty, drawing on survey data.	Adults at risk of poverty in Tajikistan.	57.28 per cent of poor individuals are not beneficiaries of the old-age social pension programme, while 57.03 per cent of the poor do not receive benefits from any of the three programmes. Conversely, 33.25 per cent of non-poor individuals are included in the benefits scheme. These results suggest that the programmes are badly targeted. The results suggest that more than 47 per cent of the total beneficiaries belong to non-poor households. Over 57 per cent of people from the poor families remain without any monetary assistance from any of these three programmes. Altogether, the three programmes reduce the proportion of people living below the poverty line (i.e. head-count ratio) by 3.47 per cent; of the three programmes, the contribution of the old-age pension scheme is the largest, amounting to 3.12 per cent. The author's estimates suggest that the survivor's pension has an insignificant impact on the reduction in the head-count ratio.
Provision of ART (Thirumurthy et al. 2011)	Urban India	Urban India Examined the economic impact on PLWHA of ART provision, as assessed through a cohort study.	PLWHA in urban India.	At six months after initiation of ART, patients were ten percentage points more likely to be economically active and worked 5.5 additional hours per week. These were higher than experienced by the comparison group. At 24 months, the impact represents a doubling of patients' employment levels at baseline. Effects were almost twice as large for men compared with women.

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General comments on what could work	Provide concrete examples of relevant What has been the role of Who could benefit innovations funded by aid aid in developing the from the innovation innovation and why is it relevant for development	What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit from the innovation	If known, what could be the impact if implemented
-	Community-based conditional cash transfer programme, piloted since 2008 in Tanzania. The programme replicates similar programmes in Latin America, and has been facilitated by support from UNICEF and a loan from the World Bank.	The programme relies on funding from UNICEF and a loan from the World Bank.		Vulnerable citizens in The impact evaluation results are yet to be released. Tanzania.
	Though not implemented, Long and Pfau (2009) use simulation techniques to predict the impact of a social pension scheme on elderly persons at risk of poverty in Vietnam.	This scheme has not been implemented.	If the simulation is accurate, then the elderly in Vietnam could conceivably benefit.	Older persons living in countries with comprehensive formal pension systems and public transfer schemes are less likely to fall into poverty than younger cohorts in the same population. Social transfer scheme in Vietnam significantly reduce poverty incidence for the elderly particularly in rural areas, and would evolve to cost a maximum of some 3.5 per cent of GDP in 2050. Targeting rural areas might be the most effective way to reduce elderly poverty when there is limited financial capacity. Schemes providing lower benefits to a wider group of beneficiaries would be more effective in reducing poverty and improving welfare, than those which provide higher benefits to limited numbers of

General comments on what could work	Provide concrete examples of relevant What has n innovations funded by aid aid in dev innovatio relevant f	ant What has been the role of aid in developing the innovation and why is it relevant for development	Who could benefit I from the innovation	If known, what could be the impact if implemented	oact if implemented
			20101	peneficiaries. Very small expend cost of a social pension scheme. neasure used is important in bo cheme is carefully considered a pension scheme to create a com	beneficiaries. Very small expenditures can potentially have big impacts, and the long-term cost of a social pension scheme as a percentage of GDP can be small. The precise poverty measure used is important in both policy examination and evaluation. If a social pension scheme is carefully considered and implemented, it can complement a contributory pension scheme to create a comprehensive multi-layered social protection system.
1	Ravallion (1999) offers a mini-manual for the rapid appraisal of workfare programmes.	Aid was not involved in the development of this appraisal method.	Policy makers, as they make decisions is about choosing the most effective finterventions.	his article discussed how to cor llustrative purposes, two progra nother in a low-income country ound in practice. The cost of US n both cases. However, poor ob country. In this stylised setting the ncome country, and US\$3.50 fo comparison with the cost effecti workfare schemes are more effe	This article discussed how to conduct rapid appraisal of workfare programme. For illustrative purposes, two programmes are considered, one in a middle-income country and another in a low-income country. Here these programmes are a stylised version of those found in practice. The cost of US\$1 gain to the poor using the programme is about US\$2.50 in both cases. However, poor obtain higher gains in current earnings in the low-income country. In this stylised setting the cost of US\$1 gain in current earnings is US\$5 for middle-income country, and US\$3.50 for the low-income country. This study concluded that with a comparison with the cost effectiveness ratio of other types of safety-net operation, workfare schemes are more effective than poorly targeted food and housing subsidies.
	Sabates-Wheeler et al. (2013) compared the three different targeting mechanisms for a social transfer programme in Kenya (community- based targeting [CBT], social pensions [SPJ, and household dependency ratio [DR]).	Aid was not involved in the development of this comparison, though it did fund the transfer s programmes presumably.	Policy makers, as they make decisions to about choosing the compost effective mechanisms to deliver interventions.	This paper concludes that comm three approaches, followed by si dependency ratio (DR). However implementation capacity and mo its performance would have bee simulation exercise which found would have performed better th household dependency ratios.	This paper concludes that community-based targeting (CBT) was the most accurate of the three approaches, followed by social pensions (SP) for older persons, and household dependency ratio (DR). However, targeting performance is strongly affected by implementation capacity and modalities. If DR targeting had been implemented perfectly, its performance would have been comparable to CBT. This paper also reports on a simulation exercise which found that combining several indicators in a proxy means test would have performed better than single categorical indicators based on individual age or household dependency ratios.
What is scalable?	lable?				
General comments on what is scalable	Provide examples of policies that have H been scaled to national level p	How the main constraints (financial, administrative, and political) were overcome	cial, administrative, and	Who have been the main winners (and losers) in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
1	Bolsa Familia, a conditional cash transfer programme in Brazil c (Bourguignon et al. 2003)	The programme was inspired by federal intervention in the city of Campinas in 1995, and then it was scaled up to 11 million beneficiaries.	ederal intervention in the n it was scaled up to 11	Unknown	Unknown
I	Job training programme for youths Hetween 16–29 years old (Card et al. 2011)	How constraints were overcome is unknown.	s unknown.	Youths aged 16–29 years in need of job training.	The programme, replicated from 'Chile Joven', increased formal jobs for males and wages for females. The impact evaluation and monitoring data allowed for the expansion of the programme to most large cities in the countries, with 40,000 beneficiaries.

General comments on what is scalable	Provide examples of policies that have been scaled to national level	How the main constraints (financial, administrative, and political) were overcome	Who have been the main winners (and losers) in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
1	Social cash transfer programme in Malawi (Covarrubias et al. 2012).	How constraints were overcome is unknown.	Unknown	The programme was initially assessed by UNICEF in 2006. The programme's pilot initiated in one district and scaled- up into six. In 2012 Malawi received a contribution from the European Union for funding the programme. The evaluation carried out in 2006 highlighted that the programme increased the investment in agricultural assets and inputs. However, low-skilled adult workers reduced their labour supply, while children increased their farm- related activities at home.
	Social protection policies in Brazil (Jaccoud 2009).	These policies were spurred on by poverty, vulnerability, and the social and political threat resulting from the contradiction between an economic system that reproduced poverty and a political system that affirmed equality between citizens.	Presumably, those who are poor and vulnerable in Brazil have benefited from the emergence of social protection policies.	Not discussed by the author.
I	Programme of Advancement Through Health and Education (PATH), a social transfer programme in Jamaica (Levy and Ohls 2010).	Financial constraints were mitigated by funding between 2001–05 from the Jamaican government and a loan from the World Bank.	Winners are beneficiaries of the programme	In light of the positive impact found at the pilot phase, the PATH was scaled-up to 180,000 beneficiaries.
1	Pilot study which assessed the impact of a micro-finance loan to purchase an irrigation pump (Pandit et al. 2010).	Though this project has not been scaled-up, it was a promising pilot project in rural Kenya which targeted HIV patients. The outcome of interest was annual family income after the micro-finance loan to purchase an irrigation pump.	Not applicable	This project has not been scaled up, but was comprised of a pilot project which resulted in positive outcomes. At the 12-month follow-up visit the mean annual family income increased significantly by U\$\$1,332 (Range: -U\$\$267 to U\$\$4825, p<0.05).
I	Progresa/Oportunida, conditional cash transfer programme in Mexico (Skoufias 2005).	How constraints were overcome is unknown.	Unknown	The programme has been scaled up to five million beneficiaries. A study revealed that the programme led to an improvement of nutritional status in the early childhood and school attendance in rural areas.

General comments on what is scalable	Provide examples of policies that have been scaled to national level	Provide examples of policies that have How the main constraints (financial, administrative, and been scaled to national level political) were overcome	Who have been the main winners (and losers) in the process of scalability	If known, what has been the impact of policy scalability at aggregate (regional-national, level)
	Social protection system in Brazil (Vaitsman et al. 2009).	The foundation of the social protection system in Brazil is the 1988 Constitution, which recognized human and social rights as a state responsibility. The process came under control of structural adjustment policies of the 1990s, which led to changes including decentralization. However, these changes did not radically change the way the programmes were offered. Non-profit organizations and the private sector continued to be the main service providers, and the state continued to place the role of philanthropy provider. National coverage was achieved in the 2000s. Citizen participation and social movements since the 1970s have been instrumental in the process of universal social protection policies in Brazil (Pochmann 2004). The development of knowledge, data, and methodologies to better understand risks and vulnerabilities was another essential feature in the evolution of social protection in Brazil, as these improved the state's planning capacity and strengthened the	Brazilians at risk of poverty and social marginalization are presumably the winners.	Unknown
		legitimacy of social policies (Leite et al. 2013).		

What is transferable?	sferable?			
General comments on what is transferable	General Provide examples of policy innovations that How the comments on have been replicated from one country to the role c what is another transferable	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
ı	The Familias en Accion conditional cash transfer programme in Columbia was inspired by Mexico's Progresa/Oportunidades (Attansio et al. 2005).	The role of aid in transferability is unknown in this case.	Columbia has benefited from Mexico's innovative policy.	Columbia has benefited This programme was scaled up in Columbia to three from Mexico's million beneficiaries. innovative policy.
I	Programmes providing direct transfers in cash and in-kind to poor households started in middle-income countries in the last decade, and then spread to low-income countries (Barrientos and Villa 2013).	Programmes providing direct transfers in cash Exact process unknown; it is likely that these projects are and in-kind to poor households started in funded by aid agencies rather than governments. middle-income countries in the last decade, and then spread to low-income countries (Barrientos and Villa 2013).	The main beneficiaries Unknown have been poor residents of low-income countries	Unknown

General comments on what is transferable	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
1	Livelihood Empowerment Against Poverty (LEAP) in Ghana, which was replicated from Latin America (Barrientos and Villa 2013).	Transferability process was assisted by the World Bank and UNICEF.	Poor residents of Ghana	No monitoring has been implemented so far, but the programme is being scaled up to enrol 200,000 households by 2015 (increased from 30,000, the initial plan in 2005).
	Cash transfers for orphans and vulnerable children, piloted in Kenya, replicated from Latin America (Barrientos and Villa 2013).	The World Bank sponsored the exchange from the Latin American experience to Kenya. The process was also assisted by a donation from UNICEF and commitment from the Kenyan government.	Poor orphans and vulnerable children in Ghana	The pilot was scaled up to reach 74,000 households.
1	Conditional cash transfer targeted at schoolaged girls, piloted in Nigeria, originally developed in Latin America (Barrientos and Villa 2013).	The programme is currently in the pilot stage, and funded by the federal MDG fund.	Unknown	The pilot is currently being evaluated but results are not yet known.
	Conditional cash transfer programme for 0-14 year olds and pregnant women, piloted in Philippines, inspired by Progresa/Oportunidades and other programmes in Mexico (Barrientos and Villa 2013).	The role of aid in transferability is unknown in this case.	Vulnerable youth and women in the Philippines	The programme was expected to reach 321,000 households in 2013. However, the pilot phase was scaled up and in 2012 it had 2.8 million beneficiaries.
1	Conditional cash transfer programme in Turkey, inspired by Progresa/Oportunidades in Mexico (Barrientos and Villa 2013).	The World Bank provided a US\$500 million loan for the pilot and first phase. The target was 1.1 million recipients.	Vulnerable persons in Turkey	Unknown
1	Anti-poverty strategy, implemented in Columbia, replicated from Chile Solidario in 2006 (Barrientos and Villa 2013).	Unknown	The poor in Columbia	The evaluation is on-going, but results have not yet been released.

General comments on what is transferable	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
	Cash transfer and integrated anti-poverty strategy in Paraguay (Tekopora), inspired by Chile Solidario (Barrientos and Villa 2013).	Role of aid is unclear.	The poor in Paraguay	A propensity score matching method showed that the programme caused a significant increase in school attendance (Teixeira et al. 2011). Soares et al. (2008) found positive effects of Tekopora on consumption. After a pilot with 3,453 households in 2005 the programme is intended to reach 200,000 households.
	Cash transfer and anti-poverty strategy implemented in El Salvador, based on Progressa/Oportunidades in Mexico (Barrientos and Villa 2013).	Role of aid is unclear.	The poor in El Salvador	Unknown
1	Job training programme aimed at youth aged between 18–25, inspired by Chile 'Jovens' programme (Barrientos and Villa 2013).	Role of aid is unclear.	Youth aged 18–25 in need of job training	A quasi-experimental evaluation based on difference-in-differences revealed that the intervention increased the probability of being employed. However, most results were not significant for female participants. The programme was phased down in 2007.
I	Conditional cash transfer programme in Uraguay, originally implemented in Latin America (Borraz and Gonzales 2009).	This programme was created, among others, as part of an emergency package between 2005–07 but the funder is unclear.	Vulnerable persons in Uraguay	Unknown. The programme was replaced by the 'Equity Plan,' introduced in 2007.
1	Workfare programme without training component to create temporary employment by building infrastructure in rural areas, introduced in Malawi, modelled on a programme in South Asia (Chirwa et al. 2002).	Role of aid is unclear, but the operation of the programme does fluctuate depending on the flow of donors' resources.	Those at risk of unemployment and poverty in Malawi	The programme is associated with a positive effect on employment levels.
!	Productive Safety Nets Programme, implemented in Ethiopia and based on a programme in South Asia (Gilligan et al. 2008).	After an initial phase 2005–07 reaching five million workers, the programme evolved into a second one reaching 7/6 beneficiaries with a total investment of 1.040 million dollars (80 per cent from donors) in which the government committed with in-kind contribution.	Ethiopian citizens	The evaluation relies on a quasi-experiment performed by the IFPRI (Gilligan et al. 2008) who found positive effects on food security and livestock accumulation. The programme was launched in 2005 as one of the largest public work intervention in Africa, reaching more than seven million beneficiaries geographically selected.
!	Social protection policies developed and scaled up in Brazil are now being applied in Sub-Saharan Africa (Leite et al. 2013).	In terms of modalities, the Brazilian Ministry of Social Development and Fight against Hunger (MDS)'s engagement in SSA involves knowledge exchange,	In this case, Latin American and Sub- Saharan Africa	Unknown

General comments on what is transferable	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
		technical assistance, construction (involved in the Cisterns Programmes), internships, field visits in Brazil, training activities, seminars, workshops, and informational materials. Due to limited human and financial resources, there is a tendency to concentrate activities in Brasilia, with the support of traditional donors, gathering international delegations for seminars and field visits, some of which are followed by pairing individuals from international delegations to individuals in MDS, so they can accompany the ministry's daily work.  Traditional donors are important partners in MDS's engagement in the South-South Development Cooperation (SDC). Main partners include FAO, WFP, the IPC-IG, and DFID. According to the MDS, these organizations have several roles: promoting Brazilian experiences abroad; mediating demands; funding SSDC; partnering in multi-country projects; giving technical advice; monitoring and evaluation; and supporting learning and research. With consideration of limited Brazilian human and financial resources to plan, implement and evaluate actions, there is a growing tendency to partner triangular and multi-stakeholder initiatives (Leite et al. 2013).	benefiting from innovations in social protection policies in Brazil.	
	Social development in Ghana as supported by Brazil (Leite et al. 2013).	In January 2006, the Africa-Brazil Programme on Social Development was launched during a study tour organized by the MDS and the DFID that gathered delegations from African countries (Ghana, Mozambique, Guinea Bissau, South Africa, Nigeria, and Zambia), and in Brasília to exchange experiences in Conditional Cash Transfer Programmes (Barros 2011). This lead to an agreement between MDS and DFID in February 2007 to implement the Livelihood Empowerment Against Poverty (LEAP) in Ghana.	LEAP was implemented in Ghana. The political commitment of the Ghanaian government has been critical to this implementation. The implementation was seen as a win-win situation, as the process strengthened each involved institution's goals and strategies.	The Ghanaian case posed important challenges. The first one was related to the unavailability of MDS's experts to work as consultants to the LEAP, something that had been considered by the Ghanaian team as necessary, and initially agreed with the MDS to speed up the programme's activities. Although MDS's technical support was later evaluated as positive by Ghana's counterparts, the challenges of it being understaffed, absorbed by domestic demands and unfamiliar with the Ghanaian reality and language point that there was a gap among decisions made by high-level authorities and implementing capacities. Just like in other areas concerning Brazil's engagement in SSDC, it had not been accompanied by the design of a clear strategy matching will with an adequate structure and institutional

General comments on what is transferable	Provide examples of policy innovations that have been replicated from one country to another	How the process of transferability has taken place, and the role of aid to support that process	Who have been the main beneficiaries of innovation transferability	If known, what has been the impact of policy transferability
				alignment in implementing agencies, which is expectable given the novelty of the theme in Brazil. One of the main lessons learnt by the MDS was that something working in Brazil would not be would not be automatically applicable in Africa.
-	Microeconomic loans and health education for families in poor communities in Guatemala, Malawi, and Thailand (Sherer et al. 2004).	Transferability process unknown, it is likely that aid funded each programme.	Residents in receipt of the programme in each country were the main beneficiaries of the transferability.	Impact of policy transferability is unknown, but impact of the programmes was assessed. The VHB programme produces significant and sustainable economic improvements for individuals and groups, such as increases in personal income and family savings. This programme also improves health knowledge for community-level groups.
	Conditional cash transfer in order to reduce inequality, implemented in Brazil, Chile, and Mexico (Soares et al. 2007).	The programme may have been implemented simultaneously at all three sites rather than transferred from one site to the next.	The programme was the most effective in Mexice and Brazil, and least effective in Chile.	The main finding is that CCT programmes helped to reduce inequality between the mid-1990s and roughly mid-2000. The share of total income represented by the CCTs has been very small: about 0.5 per cent in Mexico and Brazil, and 0.01 per cent in Chile. But due to good targeting, their equalizing impact was responsible for about 21 per cent of the fall in both the Brazilian and the Mexican Gini Index, each of which fell by approx. 2.7 points. In Chile the effect was responsible for a 15 per cent reduction in inequality, although the total reduction in inequality was very modest: a mere 0.1 Gini point. The difference was due to the small size of Chilian programme relative to the larger Mexican and Brazilian programme.
Source: Author.	nor.			

## Appendix 5: Research briefs

The research briefs are two-page documents providing in a compact and easy language some of the key findings and implications of WIDER Working Papers from ReCom programme. The briefs are also the building blocks of the highly praised ReCom website (www.wider.unu.edu/recom), which delivers a wide range of knowledge on the five themes of the research programme. All papers coming out of the ReCom programme will also have research briefs on the ReCom website.

- 1. Impact of aid for health and education on gender equity and human development - WIDER Working Paper 2013/66
- Assessing the role of gender in DfID and Sida challenge funds WIDER Working Paper 2013/043
- How to promote sustainable jobs in Mozambique WIDER Working Paper 2013/45
- The effectiveness of aid to women's political participation in MENA -WIDER Working Paper 2013/74
- Lessons from US interventions to Japan, Afghanistan and Iraq WIDER 5. Working Paper 2013/108
- Maximizing the effectiveness of foreign aid in the forestry sector -WIDER Working Paper 2013/054
- Supporting design of green cities Working Paper 2013/051
- Neotrusteeship in post-conflict states lessons from Kosovo and East Timor - WIDER Working Paper 'Aid and Institution-Building in Fragile States: State-Building through Neotrusteeship: Kosovo and East Timor in Comparative Perspective'
- Policing reforms in African states exploring the link to economic development - WIDER Working Paper 2013/013
- 10. Gender sensitivity of World Bank investments WIDER Working Paper 2013/017
- 11. Using foreign aid to incentivize pioneer investing WIDER Working Paper 2013/004
- 12. Building a capable state in Afghanistan WIDER Working Paper 2013/063
- 13. Global poverty, middle-income countries and the future of development aid - WIDER Working Paper 2013/062
- 14. How to achieve economics of peace? WIDER Working Paper no. 2012/47
- 15. Confronting climate change: The role of land WIDER Working Paper 2013/107
- 16. Trends in environmental aid: global issues, bilateral delivery WIDER Working Paper Environmental and Climate Finance in a New World'

- 17. Improving food security: what works and what could work? WIDER Working Paper 2013/061
- 18. Foreign aid, capacity building and climate change WIDER Working Paper 2013/46
- 19. Job creation and small and medium size enterprises WIDER Working Paper 2012/94
- 20. How can aid help mitigate the problem of overfishing in Africa? -WIDER Working Paper Foreign Aid and Sustainable Fisheries Management in Sub-Saharan Africa'
- 21. How can aid help agriculture become more resilient to climate change? -WIDER Working Paper 2013/047
- 22. Gender mainstreaming: the comparative case of the Nordic Development Agencies - WIDER Working Paper 2012/91
- 23. An assessment of a village development programme in Mozambique -WIDER Working Paper 2012/88
- 24. Curbing early childhood undernutrition in lower and middle income countries – findings and lessons for the future - This research brief is based on a series of systematic reviews and evaluations conducted by Elizabeth Kristjansson, Damian Francis, Selma Liberato, Trish Greenhalgh, Vivian Welch, Eamonn Noonan.
- 25. Principled aid: ways to attain MDG4 and MDG5 This research brief is based on 'A review of external assistance and aid effectiveness for maternal and child health: challenges and opportunities'
- 26. Evaluations: crucial for the spread of social protection programmes -WIDER Working Paper 2013/009
- 27. Education aid a way forward WIDER Working Paper 2013/018
- 28. What is the effect of aid on primary enrolment and quality of education? -WIDER Working Paper 2012/21
- 29. Aid, poverty, and the working poor WIDER Working Paper 2012/86
- 30. What works? lessons from aid to education WIDER Working Paper 75/2012
- 31. Healthcare: Barriers to effective aid WIDER Working Paper 2012/69
- 32. The development process the problem of imitating success WIDER Working Paper no. 2012/63
- 33. The development process escaping the capability trap WIDER Working Paper no. 2012/64
- 34. Gender and transitional justice WIDER Working Paper no. 2012/06
- 35. Does aid promote development? WIDER Working Paper 2011/44
- 36. Foreign assistance in a climate-constrained world WIDER Working Paper 2011/66
- 37. Service delivery in Nairobi and Mombasa WIDER Working Paper no. 2012/92
- 38. Aid for statistics in Africa WIDER Working Paper no. 2012/99

- 39. Aid and management training WIDER Working Paper no. 2012/99
- 40. Financing growth in low-income countries WIDER Working Paper no. 2012/77
- 41. Barriers to effective civil service reform in developing countries WIDER Working Paper no. 2012/90
- 42. Growth for low-income countries? WIDER Working Paper no. 2012/77
- 43. The unique character of EU aid WIDER Working Paper no. 2012/76
- 44. Greenhouse gas emissions and China's agriculture sector UNU-WIDER working paper no. 2012/74
- 45. Democratic consolidation and donor activity in Malawi UNU-WIDER working paper no. 2012/28
- 46. Foreign aid and Ghanaian democracy UNU-WIDER working paper no. 2012/40
- 47. Aid and Dutch Disease UNU-WIDER working paper no. 2012/26
- 48. The fungibility problem: Budget support, aid on delivery or project aid? -UNU-WIDER working paper no. 2012/68
- 49. Foreign aid and Malian democracy UNU-WIDER working paper no. 2012/61
- 50. The role of ODA in infrastructure financing UNU-WIDER working paper no. 2012/56
- 51. Should aid be allocated according to need or governance capacity? -UNU-WIDER working paper no. 2012/54
- 52. The second best solution seven problems of aid effectiveness UNU-WIDER working paper no. 2012/24
- 53. Divided authority in Kampala, Uganda UNU-WIDER working paper no. 2012/51
- 54. Urban service delivery in Africa and the World Bank UNU-WIDER working paper no. 2012/49
- 55. Taxation, public expenditure and aid effectiveness UNU-WIDER working paper no. 2012/29
- 56. The global triple crises finance, environment and food UNU-WIDER working paper no. 2010/01
- 57. The supply side of aid UNU-WIDER working paper no. 2011/04
- 58. Aid and structural change in Africa: a new agenda UNU-WIDER working paper no. 2012/21
- 59. Delivering aid through religious organizations UNU-WIDER working paper no. 2011/73
- 60. How to spend it? UNU-WIDER working paper no. 2012/05
- 61. Aid to Mozambique: a trade-off between governance and democracy? -UNU-WIDER working paper no. 2012/18
- 62. Economic aid vs. democracy aid: democratic consolidation in Africa -UNU-WIDER working paper no. 2012/20

- 63. Democracy in Benin: achievements and challenges UNU-WIDER working paper no. 2012/33
- 64. Is there a micro-macro paradox in aid? UNU-WIDER working paper no. 2010/96
- 65. A meta-analysis of the literature on aid and growth UNU-WIDER working paper no. 2011/22
- 66. Aid effectiveness in 36 African countries UNU-WIDER working paper no. 2011/51
- 67. Responding to aid-induced Dutch Disease UNU-WIDER working paper no. 2011/95
- 68. Aid and economic growth: the case of Sierra Leone UNU-WIDER working paper no. 2012/07
- 69. Aid, debt, and public expenditure allocation UNU-WIDER working paper no. 2012/42
- 70. Vulnerability, aid and accelerated growth UNU-WIDER working paper no. 2012/31
- 71. Democratic transitions in Africa: the impacts of development aid and democracy assistance - UNU-WIDER working paper no. 2012/15
- 72. Zambia Foreign Aid and Democratic Consolidation UNU-WIDER working paper no. 2012/16
- 73. How Aid Supplies from Donor Countries Respond to Economic Crisis -UNU-WIDER working paper no. 2012/25
- 74. Ghana's oil resources toward economic growth and human development -UNU-WIDER working paper no. 2012/22
- 75. Aid and government fiscal behaviour: What does the evidence say? -UNU-WIDER working paper no. 2012/01
- 76. Can the coordination of aid cut costs for donors? UNU-WIDER working paper no. 2012/32
- 77. What does good governance mean? UNU-WIDER working paper no. 2012/30
- 78. Lessons of Experience in International Democracy Support UNU-WIDER working paper no. 2011/84
- 79. The unintended consequences of foreign aid in Tanzania UNU-WIDER working paper no. 2012/37
- 80. Aid in North Africa after the 'Arab Spring' UNU-WIDER working paper no. 2011/72
- 81. Aid volatility across development sectors UNU-WIDER working paper no. 2012/35
- 82. Rethinking aid allocation in light of current global challenges UNU-WIDER working paper no. 2011/67
- 83. The politics of urban poverty reduction UNU-WIDER working paper no. 2011/68

- 84. Female Empowerment and Extreme Poverty Reduction: Progressing On One without the Other? - UNU-WIDER working paper no. 2012/02
- 85. Learning how to promote social protection from Cambodia's garment workers - UNU-WIDER working paper no. 2011/81
- 86. How can food aid be more effective? UNU-WIDER working paper no. 2012/19
- 87. Food Aid: What we know and what we need to know UNU-WIDER working paper no. 2012/34

## Notes in appendices

<sup>&</sup>lt;sup>i</sup> This list does not include some papers that will be submitted after the completion of the ReCom position papers.

<sup>&</sup>lt;sup>ii</sup> This list does not include papers currently under review.

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