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Aid and environment in Ghana

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Abstract

In this paper we discuss aid and the environment in Ghana. Our analysis indicates that expenditure by the government of Ghana has increased consistently since 2000, with seven sectors weakly linked to the environment taking about 78.9 per cent of all government expenditure. Also, the rate of increase of environmental expenditures has not kept pace with overall expenditure. External aid disbursement to environmental sectors has expanded and efforts are being made by the development partners to steer more grants instead of loans to environment-related activities.

A 19-sector analysis of data from the AidData dataset from 1993 to 2009 indicates that the environmental sector ranks 11th in terms of project numbers, commitments and disbursements. A worrying phenomenon is the average disbursement rate of 27.8 per cent which is lower than the average rate of disbursements for all the 19 sectors (29 per cent), indicating the poor implementation of environmental projects. Also, cross-cutting issues such as climate change, biodiversity and desertification appear to be important only for the

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Keywords: environmental aid, aid disbursement, aid commitment, development aid, Ghana
JEL classification: F42, F64, P45

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environmental sectors even though some of these, such as education, can be used to combat environmental degradation. Poor commitment of aid to the environmental sectors reflects the views of the development partners that the non-environmental sectors require more aid than the environmental sectors, even though donors recognize that non-environmental sectors have environmental impacts and are addressing them in their activities.

Acronyms

DPs	development partners
ERP	economic recovery programme
GHC	Ghana <i>cedis</i>
GPRS I	Ghana Poverty Reduction Strategy I
GPRS II	Growth and Poverty Reduction Strategy Paper
GSGDA	Ghana Shared Growth and Development Agenda
IPRSP	interim poverty reduction strategy paper
MDAs	ministries, departments and agencies
MESTI	ministry of environment, science and technology and innovation
MoFEP	ministry of finance and economic planning
MTDP	medium-term development plan
SAPs	structural adjustment programmes
SD	sustainable development
SEA	strategic environmental assessment
UNCCD	UN Convention to Combat Desertification

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1 Introduction

The effectiveness of aid in enhancing growth and reducing poverty has been the subject of intense debate in recent years. Much literature has highlighted the negative side effects of aid to include unbalanced appreciation of the recipient country's currency (known as Dutch disease); increasing dependency and corruption; the support of programmes which are of less importance to developing countries (white elephants); encouraging dumping which reduces the competitiveness of local industries as well as aid tying which increases the cost to developing countries' programmes.

In order to make aid more effective, the Paris Declaration that provides a blueprint for the poorest and wealthiest nations as well as development institutions for improving aid quality and enhancing efficiency was endorsed by many countries. A notable feature of the Declaration is that it enjoins participants to improve accountability by monitoring the implementation of the blueprint. One component of the Declaration encourages countries to take the lead in coordinating aid at all levels in conjunction with other development resources in dialogue with donors and to encourage the participation of civil society and the private sector.

In the midst of degrading environment, donor expressions frequently emphasize the need to protect the natural environment and to prepare for the challenges posed by climate change both in terms of adaptation and mitigation. However, information on the actual share of resources that is allocated to environmental activities including climate change is quite lacking. In addition, there is very little information on the relative importance of environmental activities undertaken by donors or their areas of focus.

It is in this regard that this paper aims to assess the impact of aid on the environment. Specifically, the objective is to ascertain if indeed donor resources are actually tackling the problem of natural resource degradation as well as the challenges faced in assessing donor funds for environmental activities. To ascertain if donors are fulfilling their pledges on environment issues, the paper also attempts to link 'top down' donor data on foreign aid to information on the ground collected systematically.

Data for the study are based mainly on secondary sources. Specifically, the majority of the data was obtained from the Aid Management Database of the MoFEP and the AidData dataset. To ascertain the views of development partners (DPs) on aid and the environment, a structured questionnaire was administered to 14 development partners who were randomly selected. Out of the 14 questionnaires distributed, the team was able to recover only six, representing a response rate of about 45 per cent, which is quite low, perhaps because it was very difficult to have access to DPs. On many an occasion the DPs did not honour scheduled appointments while others categorically refused to respond to the questionnaire. Many of the DPs who did respond to the questionnaire needed to be visited on average by our interviewees about six times.

The paper has eight sections. Section 2 discusses priority development and environmental issues in Ghana. Section 3 examines the trends in government expenditure across sectors and expenditure in environmental sectors for the past decade. Section 4 reviews the trends in external disbursements across sectors and disbursements in environmental sectors based on information from MoFEP. The section also presents information on external aid by major donors and the views of DPs on aid and the environment. Section 5 provides a 19-sector analysis of aid disbursement by all donors from 1993-2010 based on data from the AidData

dataset while section 6 assesses publicly available information on donors. In section 7, we discuss the factors that can lead to the success or failure of an environmental project as well as suggestions on how to improve them. Section 8 concludes the paper.

2 Priority development and environmental issues

A long series of medium-term stabilization programmes began in 1983 with the economic recovery programme (ERP) and structural adjustment programmes (SAPs) (1983-99). The first medium-term development plan (MTDP), carved out of *Vision 2020*, was implemented from 1996 to 2000. *Vision 2020* was discontinued in 2000 due to macroeconomic imbalances and replaced by the World Bank/International Monetary Fund sponsored interim poverty reduction strategy paper (IPRSP) (2000-02), Ghana Poverty Reduction Strategy I (GPRS I) (2003-05), Growth and Poverty Reduction Strategy Paper (GPRS II) (2006-09) and currently the Ghana Shared Growth and Development Agenda (GSGDA) 2010-13. Table 1 summarizes the priorities addressed by the various development strategies. As is evident from the table, since 1996 the government of Ghana has re-oriented all development policies around economic and social development, more specifically poverty reduction, and has to some extent mainstreamed environment and social issues into these plans to ensure sustainable development (SD).

A detailed analysis of the objectives and core themes of development plans in Ghana suggests that the various poverty reduction strategies enhanced the three pillars of SD compared to the ERP/SAPs and *Vision 2020*. Specifically, the ERP/SAPs and the *Vision 2020* emphasized the economic and social dimension to the detriment of the environmental pillar. Proper integration of the three pillars started with the development and implementation of GPRS I. One important observation of GPRS I is the weaker acknowledgement of the environment pillar. To solve this issue, a post-strategic environmental assessment (SEA) was undertaken to address these shortcomings.

Whereas GPRS I was directed primarily at attaining the anti-poverty objectives of the Millennium Development Goals (MDGs), GPRS II introduced a change in strategic focus, shifting towards accelerating economic growth so that Ghana could achieve middle-income status within a measurable planning period. The document also ensured better integration of the three SD pillars. The GSGDA continued to expand the integration of the three SD pillars and focused on achieving the intra-generational equity component of SD through the shared growth objective (MESTI 2012).

The country has recognized that climate change will have adverse repercussions on all sectors of the economy and can even reverse the little economic and social gains already achieved if measures are not taken to adapt and mitigate the impacts. In line with this understanding, the GSGDA has mainstreamed climate change activities into all development programmes and projects. This enjoins all ministries, departments and agencies (MDAs) to do same in their policy development and implementation. The need is quite imperative given the increasing pressure on the country's natural resources from unsustainable development patterns and high population growth.

Several development and environmental problems confront Ghana in its attempt to ensure sustainable development. These, among others, include issues related to energy, transport, agriculture, water, forestry, urban management, to which we turn our attention now.

Table 1: Priorities addressed in development strategies, 2002-13

Name of strategy	Objectives and priorities
Interim Poverty Reduction Strategy Paper (2000-02)	
	<ul style="list-style-type: none"> – Reducing the incidence of poverty in both rural and urban areas; – Strengthening capabilities of the poor and vulnerable to earn income; – Reducing gender, geographical and socioeconomic disparities; and – Promoting a healthier, better educated and more productive population
Ghana Poverty Reduction Strategy (2003-05)	
	<ul style="list-style-type: none"> – Sound economic management for accelerated growth; – Increasing production and promoting sustainable livelihoods; – Supporting human resources development and provision of basic services; – Special programmes for the vulnerable and excluded; – Ensuring good governance and increased capacity for public and private sector development.
Growth and Poverty Reduction Strategy (2006-09)	
	<p>GPRS-II was implemented by propelling some key sectors of the economy (e.g., agriculture, tourism, ICT, light industries such as garments and textiles and other strategic sectors) that have long-term growth potential. Most of these activities were implemented through the Presidential Special Initiative. District assemblies were actively engaged through a vigorous decentralization programme. Strategies included partnerships with development partners and public-private partnership arrangements. Private sector growth was also one of the strategic pillars of GPRS-II</p>
Ghana Shared Growth and Development Agenda (2010-13)	
	<p>The programme was aimed at bolstering rapid infrastructural and human development as well as the application of science, technology and innovation. This was to enhance job creation and income earning opportunities for rapid and sustained economic growth and poverty reduction. Priority areas included:</p> <ul style="list-style-type: none"> – Ensuring and sustaining macroeconomic stability; – Enhanced competitiveness of Ghana's private sector; – Accelerated agricultural modernization and natural resource management; – Oil and gas development; – Infrastructure and human settlements development; – Human development, employment and productivity; – Transparent and accountable governance.

Source: NDPC (2002, 2005, 2009).

2.1 Energy

Ghana is rich in renewable and non-renewable resources. In terms of energy, the country has recently discovered oil and gas, in addition to natural sources such as wind, water and solar which can generate cleaner energy for development. However, the country has huge energy infrastructure and supply deficits that will require massive investment. In addition, inefficient use of energy has serious implications for the country. Ghana's efforts at harnessing renewable energy resources have largely been minimal, consisting of renewable resource assessment and mapping, pilot projects on energy efficiency and programmes aimed at retrofitting existing buildings. A major challenge is the up-scaling of these projects based on the outcome of the pilots as well as providing incentives for the private sector to participate.

2.2 Forestry

The majority of Ghanaians live in rural areas and depend on the forest for their livelihoods. Unfortunately, forests are being degraded at a rapid rate. Information from the World Development Indicators (WDI) of the World Bank indicates that forest area as a percentage of total land mass has decreased from 26.8 per cent in 2000 to 24.2 per cent in 2005, and further to 21.2 per cent in 2011. Various programmes and projects have been put in place to reduce deforestation in line with the National Forest and Wildlife Policy. Initiatives such as the Reduced Emissions from Deforestation and Forest Degradation plus (REDD+) have been negotiated and are being implemented. The challenge now is the intensification of current programmes including the assessment of the value of forest products to enable economic pricing of forest resources.

2.3 Fisheries

Ghana is one of the countries sharing the Guinea Current Large Marine Ecosystem (GCLME) belt, which is very rich in fishery resources. In addition, the country has several water bodies—lakes, rivers, streams and wetlands—that provide significant economic benefits such as fisheries which provide an important source of protein for Ghanaians. A challenge that confronts the country today is the unprecedented degradation, pollution and exploitation of fishery resources beyond their maximum sustainable yields. Building capacity in the area of aquaculture as well as educating communities on sustainable fishing and water use is imperative.

2.4 Transport

An efficient transport system is important for sustainable development. Road transportation in Ghana handles about 97 per cent and 94 per cent of passenger and freight transport, respectively (AfDB 1994). However, compared to other modes like rail and water, it is inefficient in terms of time and energy consumption. Partly due to the poor development of rapid mass transport in urban and rural areas, many Ghanaians use private cars which are less energy-efficient in terms of passenger-kilometres than buses. For example, a study by Akoena and Twerefou (2002) shows that in 2002 light vehicles and buses covered 59,654 million passenger-kilometres with a consumption of 356,000 tons of oil equivalents compared to 13,786 million passenger-kilometres and 537 tons of oil equivalents for taxis and private cars. The challenge is how to put in place policies to promote the use of greener means of transport, including integrated planning, differential taxation and duties on vehicles, area licensing, parking fees and tolls applied to the less efficient modes of road transport like private cars. Encouraging the use of cars with smaller and more fuel-efficient engines; improving standards and regulations; driver and vehicle maintenance habits; road infrastructure and traffic management as well as promoting cycling and walking also pose serious challenges.

2.5 Agricultural land use and management

Agriculture can be considered as the main sector holding the key to Ghana's growth, development and transformation. The sector employs about 55 per cent of the work force, mainly smallholders (with three hectares or less) and contributes significantly to foreign exchange earnings. It supports about 70-80 per cent of the total rural population, the majority of who are extremely poor (Chamberlin 2000), thus rural people mainly depend on agriculture, either directly or indirectly. Agricultural practices are mainly subsistent, where primitive low-productive tools are used (such as hoes and machetes), making it difficult for

many rural communities to be self-sufficient in food. In addition, poor farming practices such as the ‘slash and burn’ method have led to land degradation, soil quality depletion and biodiversity loss.

Several strategies and policies have been undertaken to improve sustainable agriculture and land use. The main ones include the Accelerated Agricultural Growth and Development Strategy and the updated Food and Agriculture Sector Development Policy (FASDEP II) adopted in 2009. Major issues involve the shift towards sustainable agriculture which necessitates the provision of agricultural infrastructure, adequate technology, research, extension services and marketing, access to inputs and credit as well as reforming land tenure systems and improving the value chain through manufacturing.

2.6 Water resources

Ghana has abundant water resources but many Ghanaians do not have access to potable water. The country’s water resources face several challenges including managing quantity, quality, flooding, drought and maintaining ecosystem services. Pollution from mining and agriculture is leading to communities being unable to use water from rivers like the Pra and Birim. The felling of trees along river banks has exposed many rivers such as Densu to siltation and drying. The limited access to potable water is largely a result of the lack of investment to address obsolete infrastructure, low tariffs, poor management and pollution. A major issue that arises is the development of integrated water resource management to promote sustainable water use and water resource protection.

2.7 Urban management

Ghana is among the fastest urbanizing countries in the subregion (ECOWAS 2012). Like many other developing countries, the phenomenon is caused by the outward expansion and conversion of prime agricultural lands into residential and industrial uses. Unplanned urban management has triggered many environmental and social problems—poor sanitation and waste management, greater disease burden; increased distances to school; added crime; violence; traffic congestion; slums; pollution of air and water bodies; social inequality and exclusion, among others. Issues to be addressed in this direction include the implementation of integrated land use and urban planning framework to ensure the efficient provision of urban services, efficient transport, ‘green’ infrastructure and the management of urban waste through reuse, recovery and recycling.

In addition to the problems discussed, there are a number of emerging issues that make it difficult for the country to develop sustainably. These include climate change, desertification, coastal erosion, energy crisis, non-transparency in the management of mineral/oil resources, biodiversity and ecosystem loss, as well as food insecurity.

3 Trends in government expenditure by sectors and expenditure in the environmental sectors, 2000-11

Expenditure by the government of Ghana in nominal terms has increased consistently since 2000 as indicated in Table 2. Specifically, government expenditure has increased from about GHC186 million in 2000 to about GHC7,725 million in 2011, an average annual increase of about 43 per cent. Key sectors of government expenditure include education (about 40.39 per cent), health (12.21 per cent), finance (9.91 per cent), interior (6.53), defence (5.23 per cent)

and foreign affairs (4.51 per cent). The six sectors together take about 78.78 per cent of all government expenditure. However, none of these sectors has strong links with the environment.

Table 2: Sectoral shares of government expenditures (%), 2000-11

MDAs	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Audit Service	0.65	0.55	0.53	0.86	0.67	0.67	0.61	0.61	0.62	1.04	1.02	0.80
Commission on Human Rights & Admin. Justice	0.21	0.23	0.22	0.25	0.22	0.21	0.17	0.16	0.14	0.13	0.14	0.13
District Assemblies Common Fund Administrator	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Electoral Commission	0.39	0.36	0.49	0.48	0.79	0.29	0.26	0.25	0.89	0.26	1.39	1.41
Ghana Postal Services	0.28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Judicial Service	1.27	1.34	0.92	0.91	0.88	1.12	0.82	0.95	0.98	1.27	1.04	0.86
Ministry of:												
– Communications and Technology	2.11	1.09	0.23	0.23	0.21	0.18	0.13	0.19	0.32	0.18	0.15	0.15
– Defence	5.74	6.08	4.90	6.21	5.12	4.84	5.00	3.21	2.61	4.70	3.87	4.55
– Education	51.21	39.68	38.01	41.11	39.97	41.95	39.12	37.06	41.21	41.06	40.65	34.38
– Environment Science & Technology	2.41	1.78	1.60	1.54	1.77	1.38	1.19	0.85	0.00	0.99	1.58	0.97
– Finance & Economic Planning	5.66	8.93	15.37	9.07	10.54	7.38	10.48	11.74	5.71	10.52	5.68	4.89
– Food & Agriculture	1.71	1.51	1.33	1.42	1.33	1.57	2.14	1.70	2.50	1.58	1.53	1.25
– Foreign Affairs	3.61	4.05	5.90	4.32	4.95	4.93	3.78	4.01	3.06	3.39	3.25	1.70
– Health	7.69	10.90	11.19	12.89	10.31	12.85	13.69	12.44	9.61	11.66	10.33	9.98
– Interior	6.02	6.82	6.26	7.38	6.85	6.56	6.03	6.48	4.88	5.36	9.50	9.76
– Justice	0.34	0.41	0.33	0.31	0.34	0.37	0.45	0.40	0.51	0.74	0.46	0.40
– Lands & Forestry	0.92	1.07	0.55	0.75	0.85	0.63	0.54	0.62	1.30	1.79	1.70	1.52
– Local Government & Rural Development	2.70	2.41	1.99	2.04	1.87	1.59	1.42	1.81	1.80	2.02	2.08	1.66
– Manpower & Employment	0.61	0.90	0.53	0.44	0.43	0.51	0.46	0.55	0.64	0.55	0.46	0.37
– Mines & Energy	0.18	0.32	0.34	0.18	0.40	0.18	0.21	1.85	7.05	1.08	2.35	5.06
– Parliamentary Affairs	0.00	0.02	0.02	0.02	0.03	0.05	0.04	0.09	0.77	0.83	0.00	0.00
– Roads & Transport	0.87	2.70	1.18	2.28	2.91	2.96	4.73	4.91	0.00	3.66	4.34	10.83
– Tourism & Modernization	0.09	0.37	0.13	0.11	0.13	0.13	0.29	0.18	0.23	0.11	0.11	0.09
– Trade & Industry	0.45	0.42	0.41	0.43	0.51	0.91	0.42	0.46	0.59	0.24	0.32	0.28
– Works & Housing	0.59	1.07	1.10	0.83	0.82	1.13	1.10	0.94	1.28	1.06	0.96	1.55
– Youth & Sports	0.20	0.64	0.33	0.38	0.28	0.56	0.74	0.09	0.00	0.30	1.47	1.84
National Commission for:												
– Civic Education	0.56	0.37	0.34	0.29	0.37	0.26	0.21	0.15	0.16	0.17	0.33	0.30
– Culture	0.46	0.27	0.30	0.20	0.21	0.23	0.24	0.95	0.00	0.30	0.00	0.00
National Media Commission	0.00	0.02	0.03	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Office of Government Machinery	2.67	4.17	3.34	2.95	4.57	4.07	3.82	4.58	4.78	3.89	3.89	4.18
Office of Parliament	0.35	1.23	0.69	1.01	1.07	1.19	0.96	0.94	0.00	0.00	0.00	0.00
Public Services Commission	0.01	0.02	0.02	0.06	0.03	0.04	0.02	0.03	0.02	0.03	0.05	0.02
Ministry of:												
– Women's Affairs	0.00	0.04	0.07	0.07	0.22	0.13	0.08	0.07	0.11	0.06	0.06	0.06
– Econ. Plg & Reg. Cooperation	0.00	0.01	0.15	0.11	0.21	0.10	0.02	0.00	0.00	0.00	0.00	0.00
– Private Sector Development	0.00	0.01	0.03	0.06	0.07	0.07	0.01	0.09	0.00	0.00	0.00	0.00
– Media Relations /Ministry of Information	0.00	0.19	0.84	0.23	0.63	0.59	0.53	0.52	0.61	0.82	0.54	0.51

Table 2 continues

Table 2: Sectoral shares of government expenditures (%), 2000-11 (con't)

MDAs	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
National Development Planning Commission	0.00	0.00	0.11	0.18	0.19	0.12	0.08	0.63	0.06	0.00	0.04	0.05
Ministry of Mines Headquarters	0.00	0.00	0.01	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Minerals Commission	0.00	0.00	0.06	0.03	0.02	0.03	0.00	0.05	0.00	0.00	0.00	0.00
Mines Department	0.00	0.00	0.02	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Geological Survey Department	0.00	0.00	0.07	0.07	0.07	0.04	0.03	0.03	0.00	0.00	0.00	0.00
Transport Department	0.00	0.00	0.06	0.18	0.07	0.07	0.02	0.02	7.14	0.19	0.43	0.23
Ministry of Ports & Harbours	0.00	0.00	0.00	0.00	0.05	0.09	0.13	0.13	0.09	0.00	0.00	0.00
Ministry of Aviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
Ministry of Chieftaincy & Culture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.27	0.22
Total	(186)	(418)	(598)	743	990	1,203	1,753	2,371	3,194	3,497	4,491	7,725

Note: Figures in parentheses are the nominal values in millions GHC.

Source: Author's calculations based on data from the Comptroller and Accountant General's Department (2013).

It is difficult to determine the exact amount of resources going to the environmental sector because environment is a cross-cutting issue and expenditure in other sectors may therefore have direct and indirect impact on the sector. For example, expenditure on environmental education may have impact on the environment but will be captured under the education ministry's budget. To be able to capture some environment expenditures, we consider the expenditures of environmental-related ministries such as the ministry of environment, science technology and innovation (MESTI), ministry of local government and rural development (MLGRD), ministry of food and agriculture, and ministry of lands and natural resources (MLNR), and occasionally examine expenditure by MESTI which is the main ministry in charge of the environment.

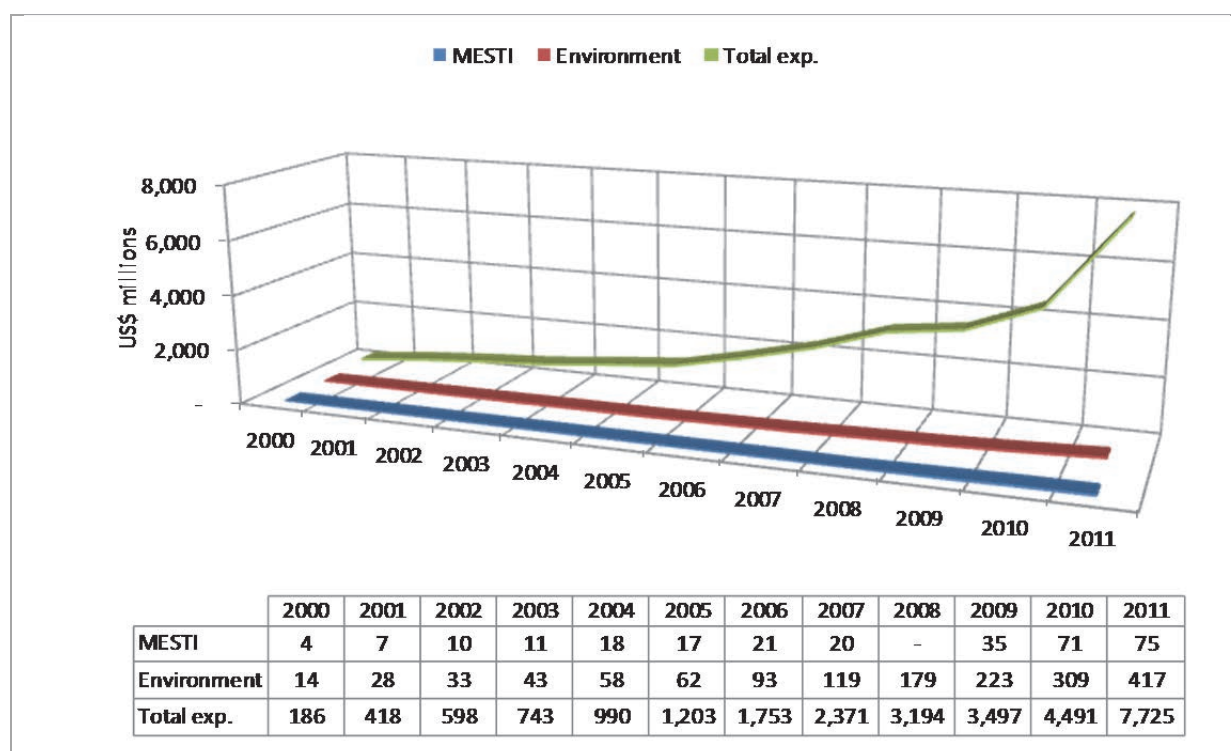
Figure 1 shows the government's overall expenditure, allocations in the environmental sectors and MESTI. As can be seen, even though overall expenditure has increased rapidly, the same cannot be said for the expenditure on environmental sectors and MESTI. Specifically, overall government expenditure has increased at an average annual rate of 43 per cent from 2000 to 2011 while that of the environmental sectors and MESTI over the same period is around 37 and 20 per cent, respectively. Consequently the share of environmental expenditure in total expenditure and the share of expenditure by MESTI in total expenditure have generally decreased as shown in Figure 2.

4 Trends in external disbursements and views of DPs on aid and the environment

In line with government expenditure, external aid disbursements have also increased. Specifically, total external aid has increased from about US\$992 million in 2000 to about US\$2,075 million in 2011, an annual average growth of about 12 per cent. Loans constitute the majority of external aid, increasing from about US\$704 million in 2000 to about US\$1,364 million in 2011 at an average annual growth of about 15.0 per cent while grants increased at an average annual growth of about 16 per cent, from about US\$288 million in 2000 to about US\$711 million in 2011. Overall, loans constituted about 60 per cent of all external disbursement from 2000 to 2011. Details of external disbursements are presented in Figure 3. External aid disbursements to the environmental sectors have grown from about US\$85 million in 2000 to about US\$220 million in 2011. Loans have exceeded grants in all years, except in 2001, 2006 and 2007 when the reverse was observed. Over the period under

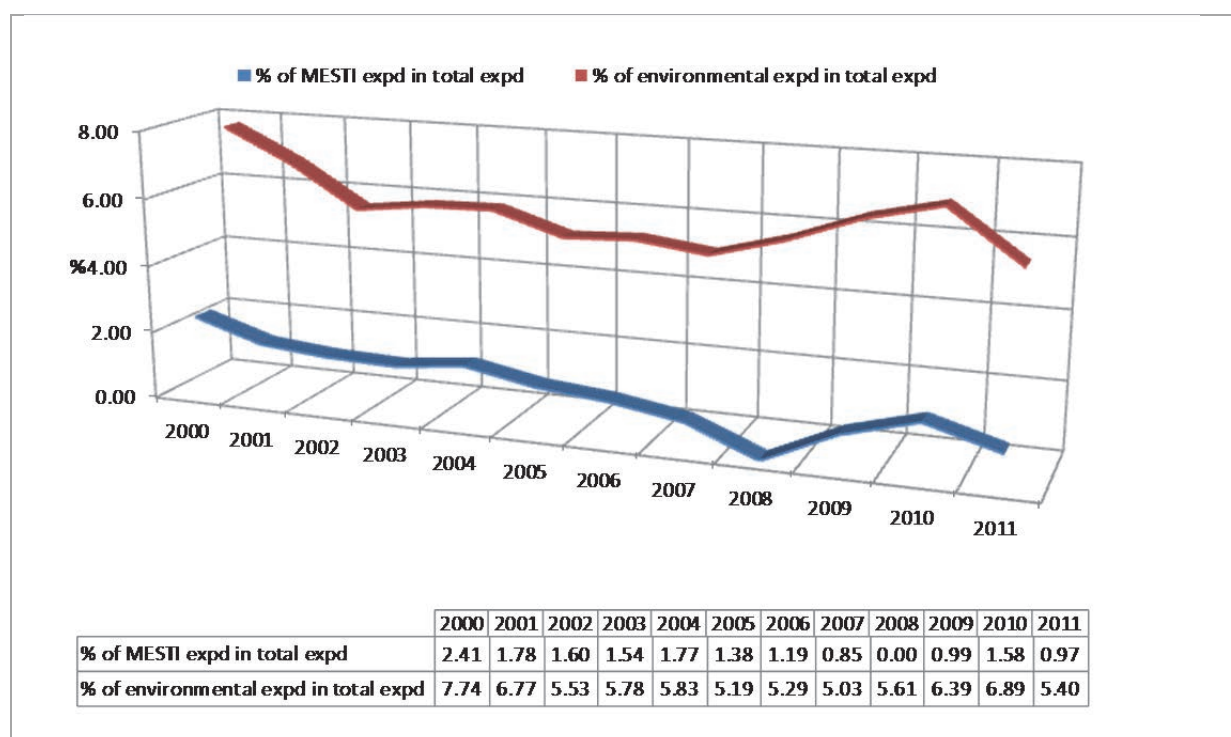
consideration, loans have formed about 57 per cent of all disbursements to the environmental sectors with grants the remaining 43 per cent.

Figure 1: Total expenditure and expenditure in environmental sectors, 2000-11 (in millions of US\$)



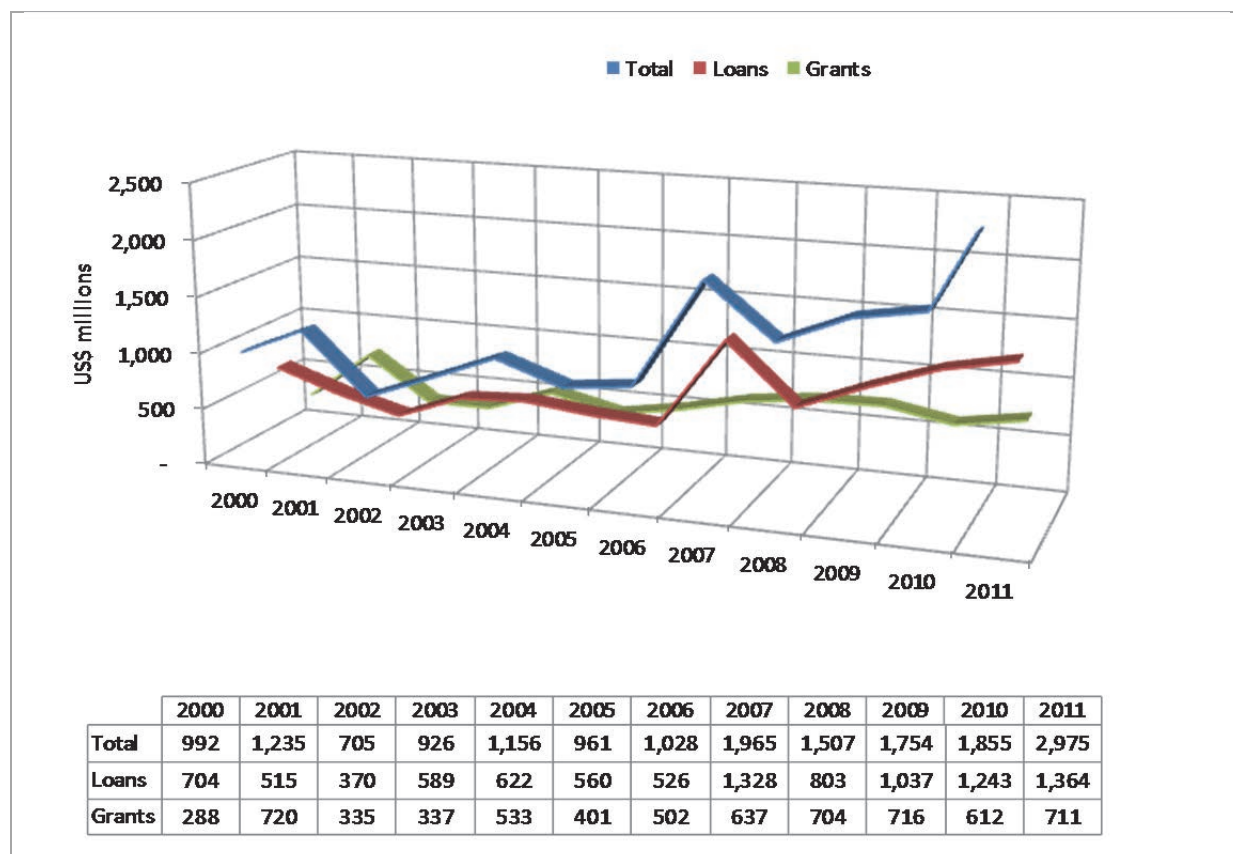
Source: Author's computations based on data from Comptroller and Accountant General's Department (2013).

Figure 2: Share of environmental expenditure in total expenditure (%), 2000-11



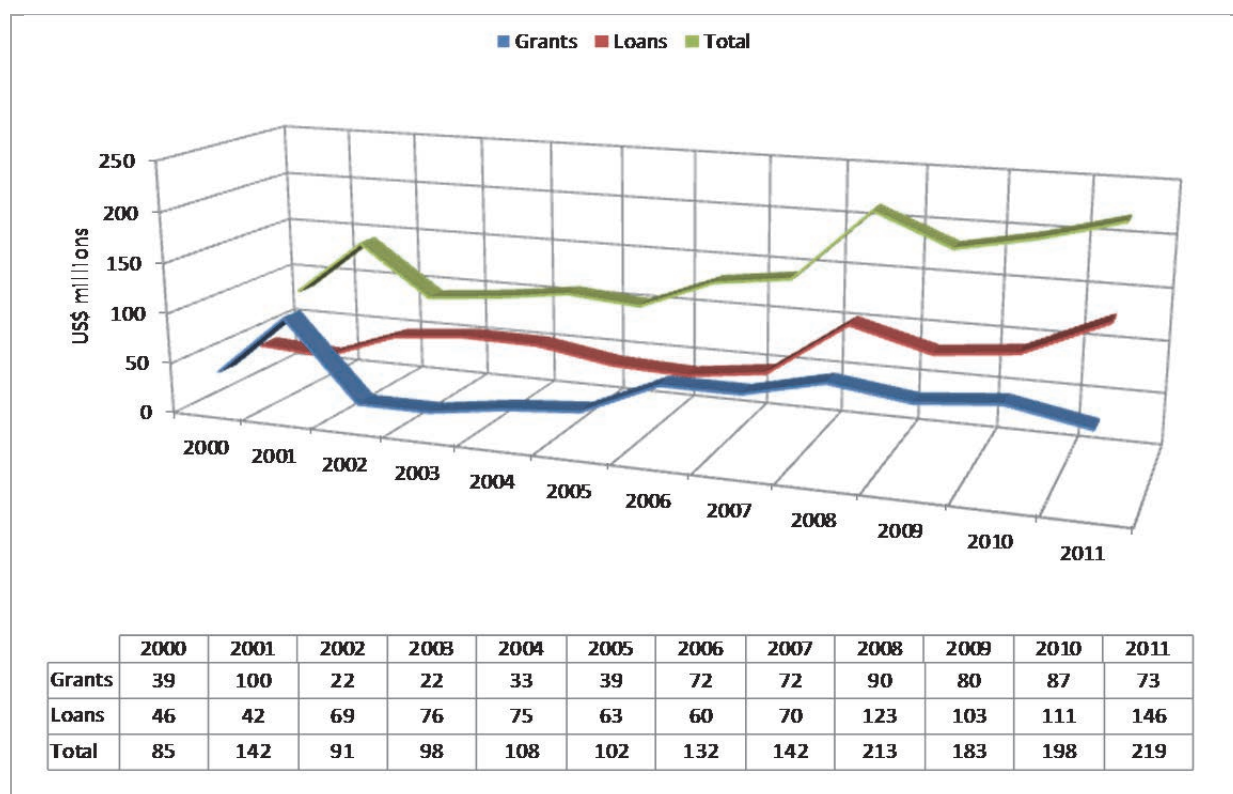
Source: Author's computations based on data from Comptroller and Accountant General's Department (2013).

Figure 3: External disbursements, 2000-11 (in millions of US\$)



Source: Ministry of Finance and Economic Planning (2013).

Figure 4: Disbursements to environmental section, 2000-11 (in millions of US\$)



Source: Ministry of Finance and Economic Planning (2013).

With respect to the MESTI, which is the main Ministry in charge of the environment, total disbursement to the Ministry from 2000 to 2011 amounted to about US\$83.4 million of which about 86 per cent were loans.

Effort is being made by the development partners to favour grants in environment related activities rather than loans. As indicated in Table 3, the share of grants to environment related sectors decreased from about 13.5 per cent in 2001 to about 6.2 in 2004 but increased thereafter to about 18.3 in 2011. The share of loans dropped from about 6.5 per cent in 2000 to about 0.2 per cent in 2011. Overall the share of external aid (loans and grants) targeted to environmental-related activities increased from about 8.5 per cent in 2000 to about 17.1 per cent in 2011.

Table 3: Share of grants, loans and total external aid in environmental sectors (%)

	Share of grants	Share of loans	Share of external aid
2000	13.5	6.5	8.5
2001	13.9	0.1	11.5
2002	6.5	0.2	12.9
2003	6.6	0.1	10.6
2004	6.2	0.1	9.3
2005	9.8	0.1	10.6
2006	14.3	0.1	12.8
2007	11.2	0.1	11.8
2008	12.8	0.2	14.9
2009	18.2	0.1	15.1
2010	21.3	0.1	13.5
2011	18.3	0.2	17.1

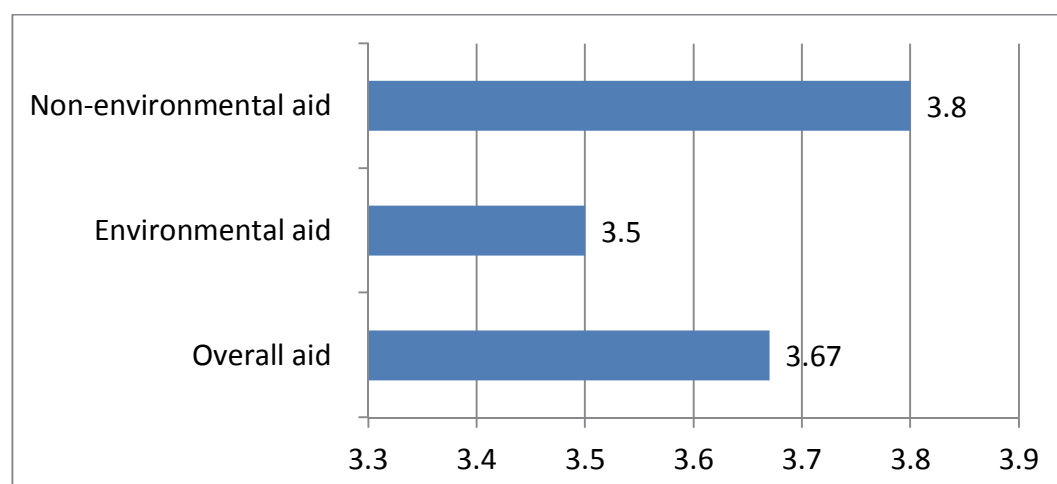
Source: Ministry of Finance and Economic Planning (2013).

An analysis of the survey results indicates that about two-thirds of the development partners believed the non-environmental sectors to be most in need of aid while only a third would have prioritized the environmental sectors with more aid. The argument was that the core goal of the country was poverty reduction which requires expanding economic opportunities for the poor through job creation, hence the emphasis on the non-environmental sectors. In addition, it was pointed out that the non-environmental sectors (education, health, infrastructure, etc.) are underlined in the GSGDA, making it easier to provide aid to these priority sectors. Furthermore, it was also argued by the development partners that environmental issues are cross-cutting and are thus factored into a number of projects indirectly. On a Likert-scale of 1-to-5 (a score of one implying not important and five signifying very important), the DPs were asked to rate the environmental sector's need for aid. The average rating was 3.8, indicating that the DPs in general believed the environmental sector's need for aid to be important.

The DP decision to provide aid to a specific sector depends on both demand and supply factors. Half of the DPs responded that the decision was demand-driven while the other half believed it was supply-driven. About 83.33 per cent of the DPs interviewed believed that non-environmental aid has environmental impacts while the remaining (16.67 per cent) did not. Also, among the latter group of DPs, allocations to non-environment aid were to some extent guided by the effect they would have on the environment. On a Likert-scale (going from one for limited impact to five for very high impact), the average ranking of the DPs with regard to their consideration of the environment in relation to other aspects that influenced their non-environmental aid decisions was four, indicating that environmental considerations

are prominent. This assertion is quite valid as by law every project in Ghana should undergo environmental impact assessments.

Figure 5: Comparison of the overall, non-environment and environmental aid on welfare and the environment



Source: Author's survey.

DPs were asked to assess, on a Likert-scale (ranking one as non-effective to five for more effective) the impact of overall aid on welfare and the environment. As Figure 5 shows, the DPs rated non-environmental aid as having a stronger input than overall aid and environmental aid, which may account for their understanding that the non-environmental sectors need more aid than the environmental sectors. About 60 per cent of DPs also reported that the different kinds of aid—environmental and non-environmental—did produce the expected results. Twenty per cent held the opposing view and the rest were indifferent.

To gauge the DPs' views on prioritizing the environmental sectors, they were asked to single out five environmental sectors to be prioritized, and the reasons why. Table 4 represents the sectors in the order of importance, as given by the DPs and indicates that issues related to land-based natural resources are important for DPs. Hence projects in these areas may attract funding.

Table 4: Priority sectors and reasons for their importance

Sectors	Reasons
Green and sustainable agriculture	<ul style="list-style-type: none"> – To reduce greenhouse gases. – Expansion of arable land area for enhancing food security and the creation of employment and wealth through agricultural interventions has to be safeguarded against adverse environmental consequences. – To create artificial reservoirs to harvest water for all year-round agriculture will ensure food security. – To promote sustainable agriculture to ensure better application of agro-chemicals including weedicides, pesticides, fertilizers, etc. which have the propensity of polluting water resources if unchecked. – Green agriculture will ensure that effluence from agro-based industry, e.g. oil palm processing, garri-processing, abattoirs, etc., are used as raw material for bio-gas generation and organic manure to improve value chain development.
Protection of water bodies and aquatic resources	<ul style="list-style-type: none"> – To enhance soil management. – To improve climate resilient agriculture. – To protect and sustain water resources. – To reduce overfishing. – To reduce water pollution. – To increase access to good drinking water.

Table 4 continues

Table 4: Priority sectors and reasons for their importance (con't)

Sectors	Reasons
Forest restoration and conservation	<ul style="list-style-type: none"> – Forest is a vital natural resource and important contributor to GDP and employment. – To prevent the degradation of forests which has impacts on livelihood and socioeconomic activities. – To enhance climate change mitigation. – To improve poor institutional capacity to monitor and enforce policies and rules.
Urban (waste) management	<ul style="list-style-type: none"> – City waste management and sewage control are vital for good health, disaster risk reduction and overall living standards of the citizens. – Waste generation is a glaring problem and is expected to worsen as incomes increase. – High urbanization rate means that the problem will intensify.
Mining	<ul style="list-style-type: none"> – High and inter-generational environmental impact. – To upgrade poor capacity of regulatory authorities to properly enforce rules and regulations based on internationally accepted standards and best practices. – To mitigate serious environmental and social consequence such as child labour, human health, water pollution, land degradation, etc. – Current benefits from the sector is lower than the cost to Ghanaian. – Benefits accrue mostly to foreigners.
Climate change	<ul style="list-style-type: none"> – Has multidimensional impacts and should be mainstreamed into overall development plans.
Biodiversity	<ul style="list-style-type: none"> – Very important for sustainable development.
Invasive aquatic weeds	<ul style="list-style-type: none"> – To minimize the residual impact of weeds in water bodies.
Noise and air pollution	
Control of heavy metal and toxic items	<ul style="list-style-type: none"> – Serious problems on human health.

Source: Author's survey (2012).

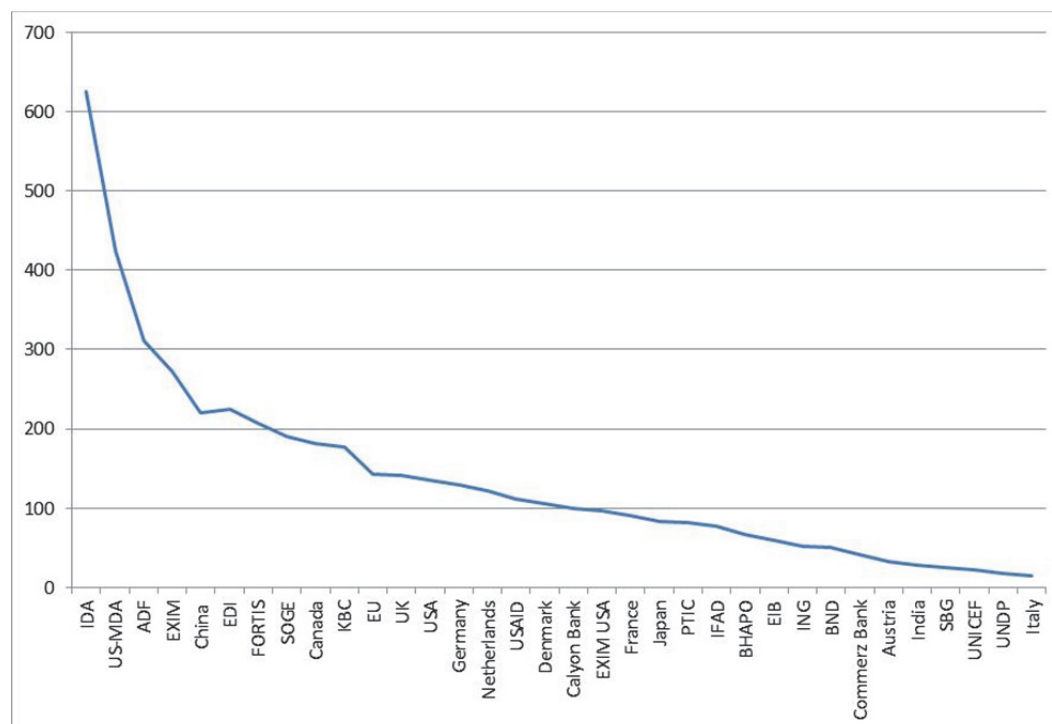
To determine the level of knowledge of the environmental sectors among the development partners, they were asked to list the sectors/issues they perceived to constitute environmental matters. Below are some of the sectors mentioned, and as can be noted, all related to the environment. Therefore one can conclude that the DPs do have a good knowledge of environmental sectors/issues:

- agriculture and natural resources
- infrastructure and human settlements
- forest
- rivers and marine systems
- water and transport
- sanitation
- conservation of wildlife
- control of poisonous and toxic items
- climate change
- chemicals management

- energy
- climate change mitigation and adaptation
- biodiversity and disaster risk reduction
- pollution.

In Ghana, there are about 51 creditors providing various forms of assistance to the country. Information on the resources provided by various creditors is available from the year 2008. A picture of the total resources (loans and grants) provided by various creditors over 2008-11 is presented in Figure 6.

Figure 6: Aid provided by the major creditors, 2008-2011 (in millions of US\$)



Sources: Ministry of Finance and Economic Planning (2013).

As can be seen, the major donors in terms of total resources are International Development Association (IDA), US Millennium Challenge Authority (US-MCA), African Development Fund (ADF), China Exim Bank, China, FORTIS, SOGE, Canada, KBC Bank, the European Union (EU) and the United Kingdom (UK).

All the DPs interviewed confirmed that they undertake external evaluations of their projects on an annual or semi-annual basis with a mid-term review and a comprehensive assessment at the end of the project. According to one DP, evaluation criteria include disbursement rates, implementation progress, lapse between approval and actual implementation, and payment of government counterpart funds. These items suggest that evaluation criteria are more input-oriented rather than out-oriented, indicating that less emphasis is placed on the outcome, which should be important. Also, no monitoring of the problem was done, as this probably was considered to be task of the host country.

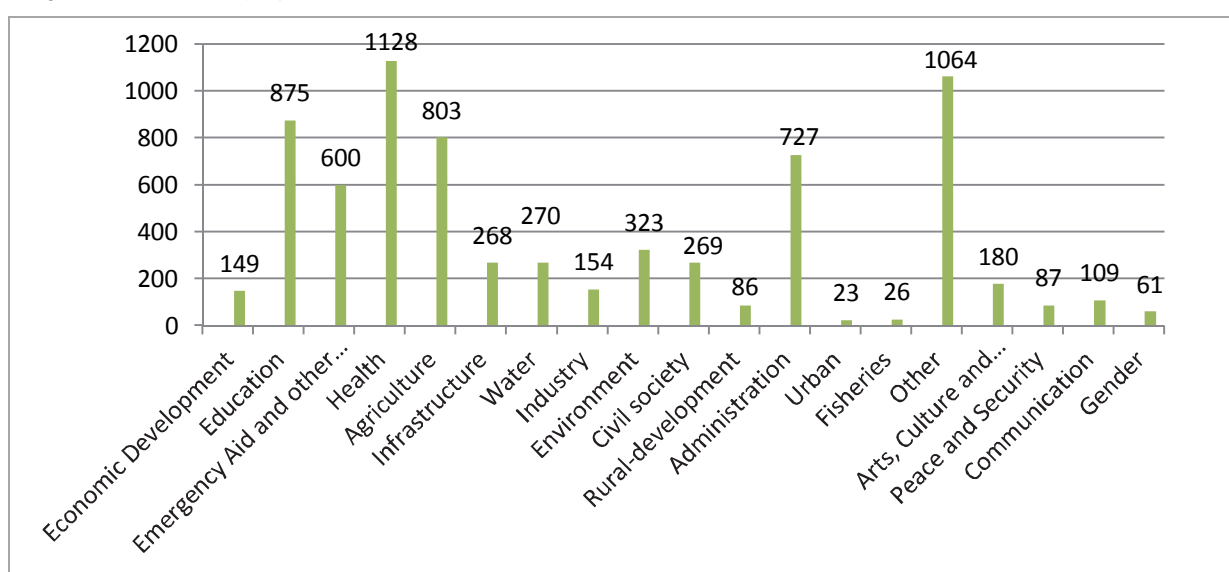
5 Sectoral analysis of developing aid, 1993-2010

Information for this section was sourced mainly from the AidData dataset, a comprehensive database that contains information on almost all key donors. We decomposed the dataset into 19 sectors according to the title of each project, its purpose and description.

5.1 Number of projects financed, commitments and disbursements

It is important to look at the number and types of projects since a review of the level of funding without reference to these details would limit our understanding of the likely effects of such funding. Therefore Figure 7 gives the number of aid-financed projects in Ghana from 1993 to 2010.

Figure 7: Number of projects financed in Ghana, 1993-2010



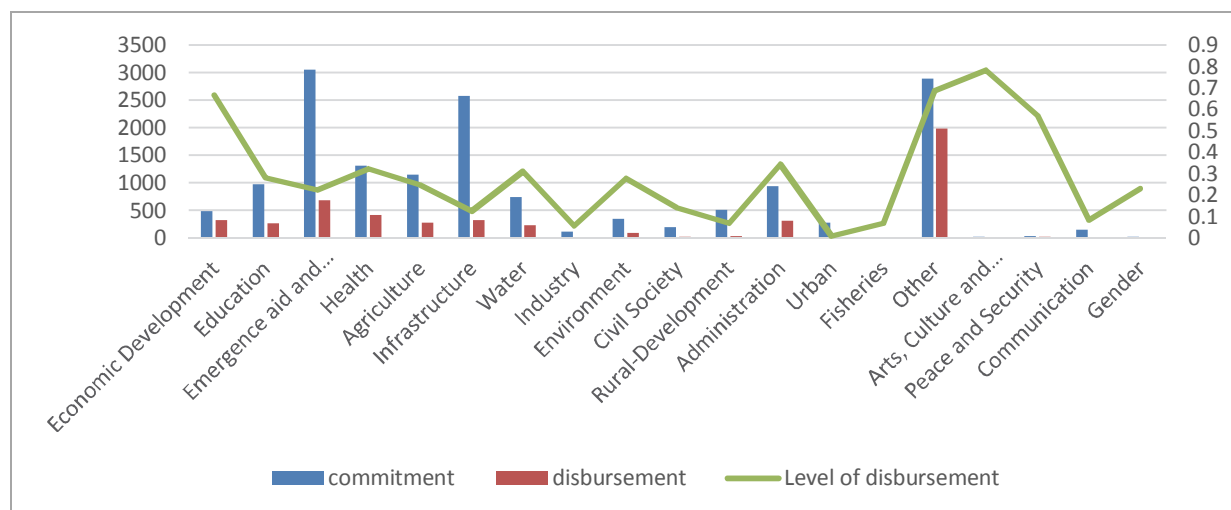
Source: Author's computation based on AidData.

To facilitate comparison, we classify the sectors into three main groups. The first group includes sectors that have had more than 400 aid-funded projects over 1993-2010. This group includes health, education, agriculture, administration, and emergency, and their total number of projects is 4,133 (accounting for 57.39 per cent of all projects). The second group, which covers sectors with 100–400 projects, includes environment, water, civil society, infrastructure, arts culture and recreation, industry and economic development. Together these sectors accounted for 1,722 aid projects (or 23.91 per cent). The third group, accounting for 1,347 projects (18.7 per cent) is made up of all sectors that received funding for less than 100 projects within same the period. Of the total number of projects, the share of those targeted to environmental issues was relatively low (4.48 per cent) as compared to health (15.66 per cent), education (12.15), agriculture (11.15), administration (10.10) and emergency aid (8.3 per cent).

It can be expected that the deviations in the distribution of projects among the various sectors also have a direct effect on the allocation of funds to the sectors. Figure 8 shows aid commitments, disbursements and levels of funding for the different sectors in Ghana from 1993 to 2010. A major challenge in aggregating project funds is the diversity of institutions and interest groups involved in the implementation of projects. This makes it difficult to

estimate the amounts invested in each respective sectors. Nevertheless, the trend analysis in Figure 8 gives an indication of the priorities of the funding agencies in relation to aid commitments and disbursements. It also shows the evolution of the level of commitments and disbursements, and the share of the disbursements to various sectors in Ghana.

Figure 8: Level of funding in Ghana, 1993-2010 (in millions of US\$-nominal)



Source: Author's computation based on AidData.

Consistent with the sector categorization given earlier, emergency aid and other support from the first group topped the list. With 600 projects, emergency aid recorded the highest level of funding commitments (US\$3,060 million) and the highest level of disbursements (US\$686 million). Disbursement rate was 22.42 per cent. The second highest level of commitments (US\$2,580 million) was in infrastructure (from the second group) but disbursements at US\$331 million were at the third highest level, giving a disbursement rate of 12.83 per cent. The environmental sector ranked eleventh in terms of the level of funding commitments (US\$352 million) and actually disbursements (US\$97.9 million), which implies a disbursement rate of 27.81 per cent. Environmental aid's position in the ranking of aid commitments to the 19 sectors may be an indication that environmental protection in Ghana is not a major priority for the DPs.

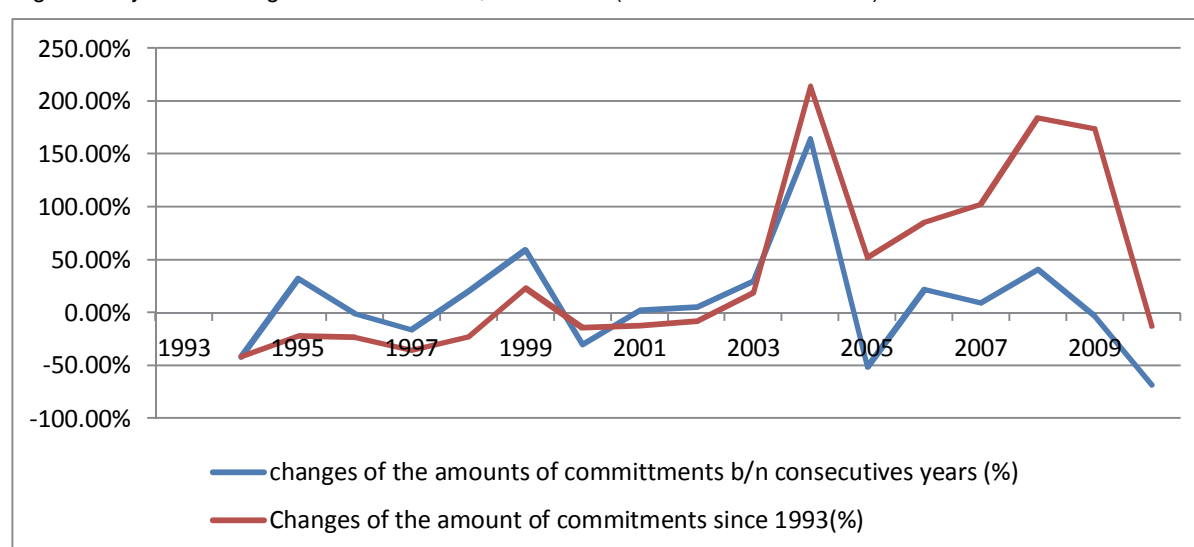
The average rate of disbursement for all 19 sectors was 29.03 per cent, which is very low. This low disbursement rate could be a reflection of the accessibility challenges that accompany many donor funds and the low capacity of recipient agencies (EPA 2011). The best performing sectors in terms of aid disbursement rates were arts, culture and recreation (78.38 per cent), economic development (66.73 per cent), peace and security (57.18 per cent). The relatively high rate of disbursement for development aid is not surprising, as most donor partners consider economic development and poverty reduction to be priority sectors. It is also not surprising that peace and security has a disbursement rate of over 50 per cent because this sector is seen as critical to a nation's development process and hence is given due attention in grants and aid disbursements. The highest disbursement rate recorded for arts, culture and recreation is probably a reflection of the sector's relatively low commitment amount, US\$29.6 million. In all, 12 out of the 19 sectors—including the environmental sector—had a less-than-average disbursement rate (29.03 per cent), and the environmental sector's rate of 27.81 per cent is about 2 percentage points below the average of all 19 sectors. This suggests that the environmental ministry and its related agencies need to be

strengthened further in order to be able to effectively manage all environmental related aid projects to facilitate prompt release of committed funds.

5.2 Dynamic changes of committed and disbursed funds

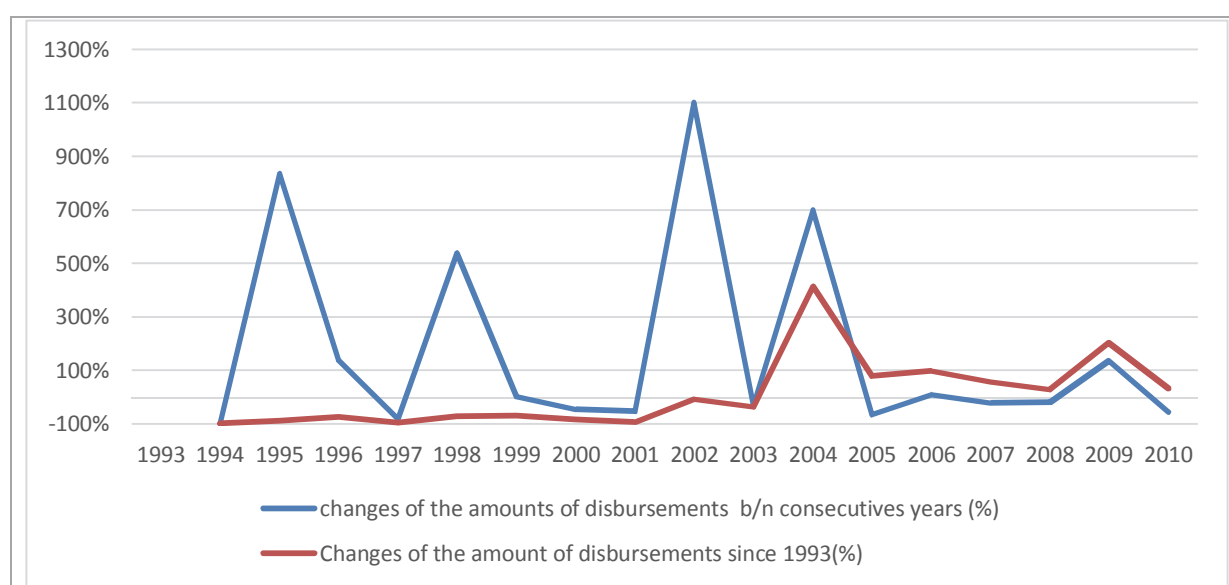
To review the dynamic changes in committed and disbursed funds, we analyse the changes in aid commitments between 1993-2010 (Figure 9) and the changes in the amount of disbursements since 1993 (Figure 10). These show that commitments increased gradually between 1993 and 2003, followed by a sharp increase of 164.32 per cent between 2003 and 2004. This, however, was followed by a drastic decline between 2004 and 2005, when commitments fell 51.58 per cent. Commitments further declined by 68.08 per cent between 2009 and 2010.

Figure 9: Dynamic changes in commitments, 1993-2010 (in millions US\$-nominal)



Source: Author's estimations based on AidData.org.

Figure 10: Dynamics of changes in disbursements, 1993-2010 (in millions of US\$-nominal)



Source: Author's estimations based on AidData.org.

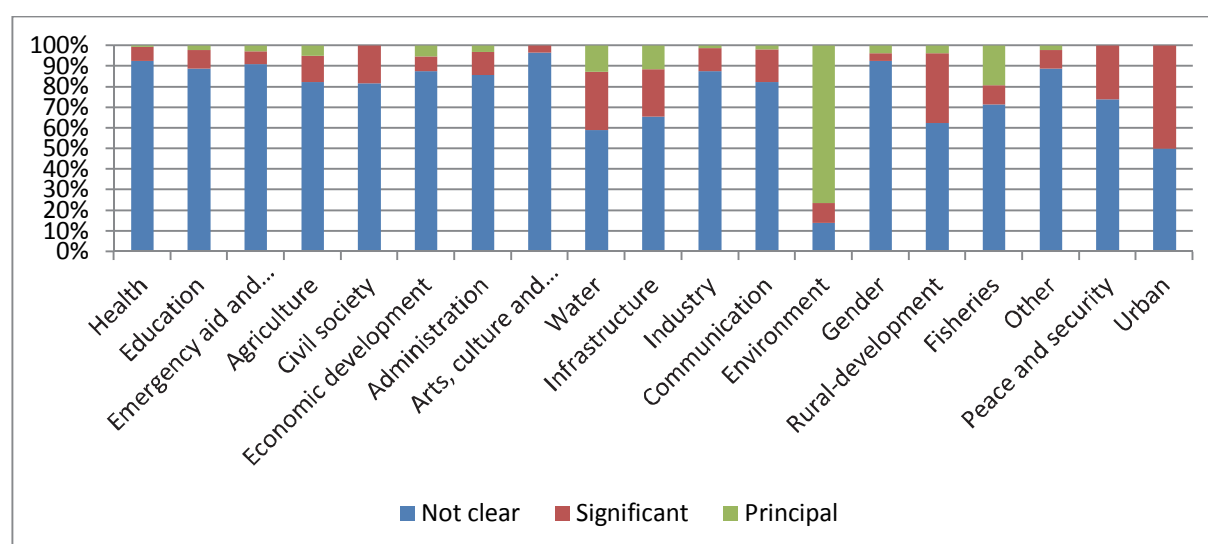
The trends in disbursements have not been steady but rather have generally increased. The wide disparities observed in commitment and disbursement patterns seen in Figures 9 and 10, respectively, can be attributed to the fact that during periods of increased funding commitments, capacity of the government and other project implementing agencies has not been sufficient to absorb all the funding. This leads to low levels of disbursement.

5.3 Relevance of the environment, biodiversity, climate change and desertification in foreign aid by sectors

Relevance of the environment

Almost every project directly or indirectly affects the environment. Government policies over the years have been geared towards the integration of environmental goals into policies, programmes and projects of all other sectors of the economy through environmental impacts assessment and SEA processes. AidData defines the variable ‘environment’ in other sectors according to the extent to which environmental concerns are incorporated in their respective projects. Figure 11 gives an indication of the various sectors’ evaluation of environmental concerns.

Figure 11: Relevance of the environment within the 19 sectors, 1993-2010



Source: Author's computation based on AidData.

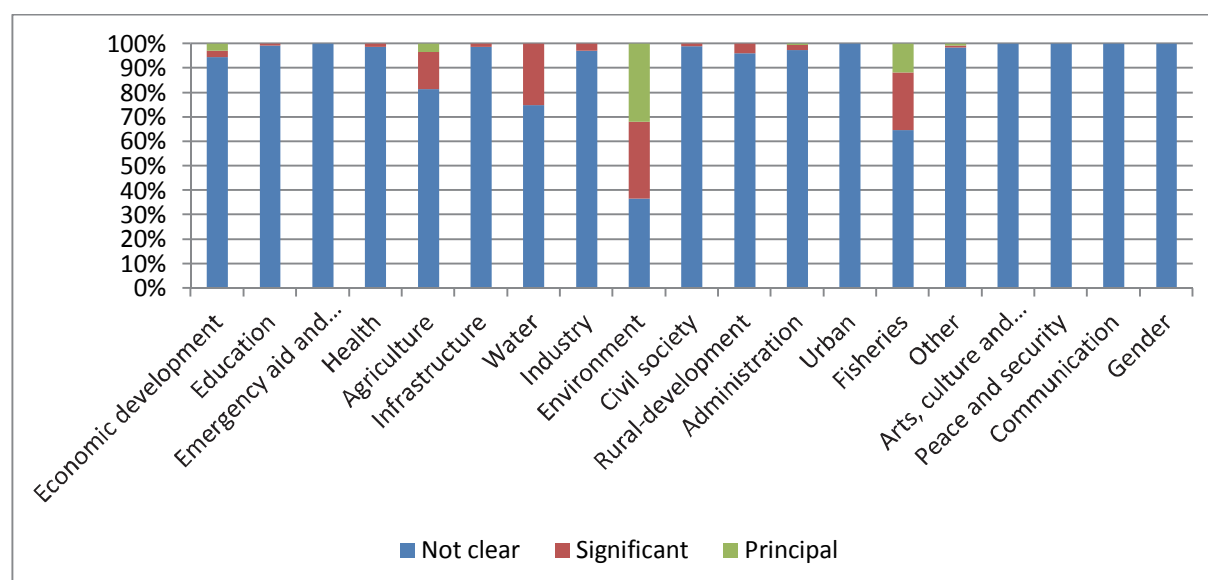
As is to be expected, the environmental sector prioritizes environmental concerns in its project implementation. Also, sectors such as water, fisheries, agriculture and infrastructure are concerned with the environment while the environment has the least relevance for the arts, culture and recreation sector. Furthermore, environmental considerations were not clear in many projects among the various sectors.

Relevance of biodiversity management and conservation

Today, the world is more committed than ever to the conservation of biodiversity and natural resources. The aim is not only to avert degradation that has been associated with the exploitation of natural resources but also to reduce desertification and climate change impacts that threaten to erode the little economic gain made over the past two decades. Majority of Ghana's rural inhabitants depend on natural resources for their livelihoods. Conservation of biodiversity and natural resources in general is therefore seen as a prudent means of ensuring

the survival of the rural communities and a sure way to foster poverty reduction. Figure 12 summarizes the extent to which biodiversity conservation is relevant to the 19 sectors in Ghana.

Figure 12: Relevance of biodiversity to the 19 sectors, 1993-2010



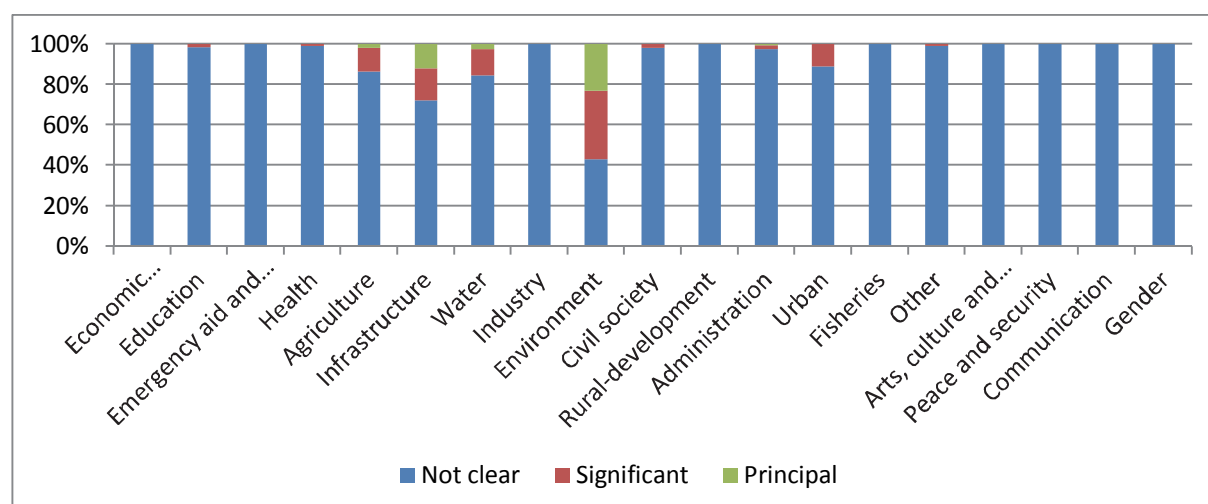
Source: Author's computation based on AidData.

As can be seen, biodiversity has no or insignificant relevance for some sectors: education, energy, health, civil society, urban, arts culture and recreation, peace and security, communication and gender. Biodiversity is significant in varying degrees in the remaining sectors. The environmental sector has the greatest interest in biodiversity conservation, followed by the fisheries, water and agriculture sectors. More than half of the sectors regard biodiversity as insignificant and most likely may not factor biodiversity conservation measures in their sectoral policies. This finding is worrisome, considering the numerous benefits that can accrue to the nation from biodiversity conservation.

Relevance of climate change

Figure 13 depicts the relevance of climate change to all the 19 sectors with respect to each sector's project implementation plans.

Figure 13: Relevance of climate change to the 19 sectors, 1993-2010



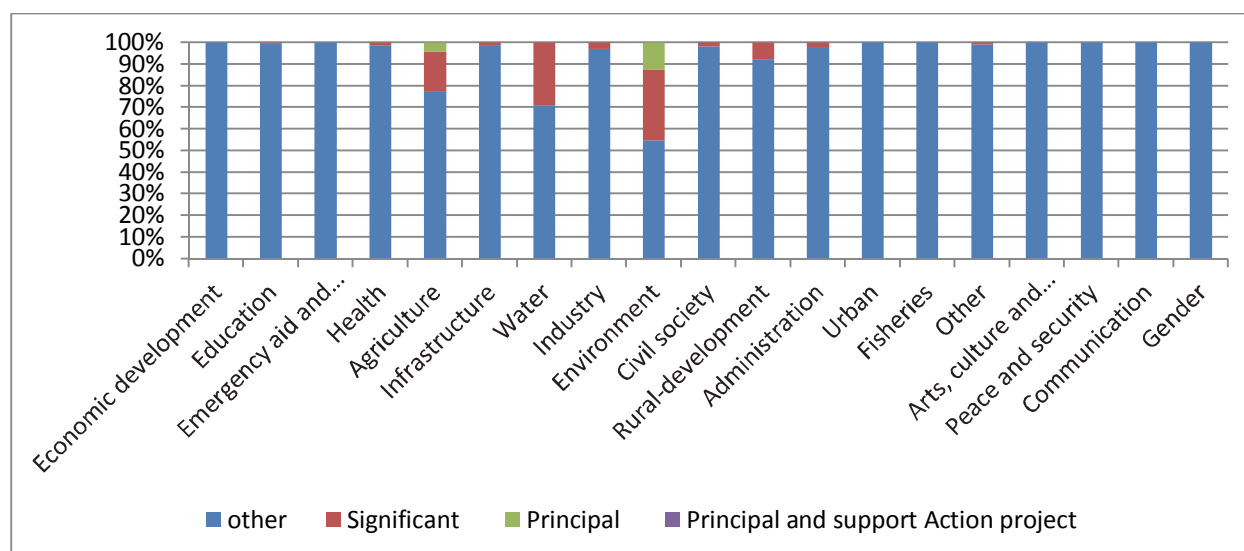
Source: Author's computation based on AidData.org.

As Figure 13 indicates, the sectors can be classified into three subgroups according to their recognition of the importance of climate change: (i) sectors that perceive climate change to be a significant and primary challenge; (ii) those that acknowledge its importance but do not consider it a primary concern and (iii) those that view the issue as insignificant. Within the first group, the environmental sector tops the list for climate change awareness, followed by infrastructure, water, agriculture and administration sectors. Among the second group are sectors such as urban, education, civil society and health. The last group, comprising of nine sectors or 47.3 per cent of all sectors, makes no reference to climate change issues in their sector policies. This outcome is not acceptable considering the fact that climate change is a cross-cutting issue that affects all sectors of the economy.

Combating desertification

Ghana is a party to the UN Convention to Combat Desertification (UNCCD) which came into force in 1996. Its objective is to combat desertification as well as mitigate the effects in countries experiencing serious drought and/or desertification. Ghana has developed an action plan to that effect. Nevertheless, deforestation is a major problem in the country, and it is estimated that an average of 125,400 hectares (ha) or 1.68 per cent of Ghana's forest cover was lost annually during the period 1990-2010. This, for the same period, translates to approximately 2.5 million ha, or 33.7 per cent loss of forest cover.¹ The FAO has also documented the gradually declining trend: total forest area has diminished from 9.6 million ha in 1961 to 7.448 million ha in 1990, 6.094 million ha in 2000, 5.517 million ha in 2005 and 4.940 million ha in 2010 (FAO 2010). At this rate, Ghana may not be able to meet the MDG target of increasing the proportion of land area covered by forests.

Figure 14: Relevance of desertification to the other sectors, 1993-2010



Source: Author's computation based on AidData.

Figure 14 shows the level of significance given to desertification by the various sectors in Ghana, with the sectors classified into subgroups. Here, we also add an additional indicator to determine whether a sector considers desertification a primary dilemma and whether it supports plans for its prevention. The analysis shows that only the environmental and

¹ See www.rainforests.mongabay.com/deforestation/2000/Ghana.htm#01-cover

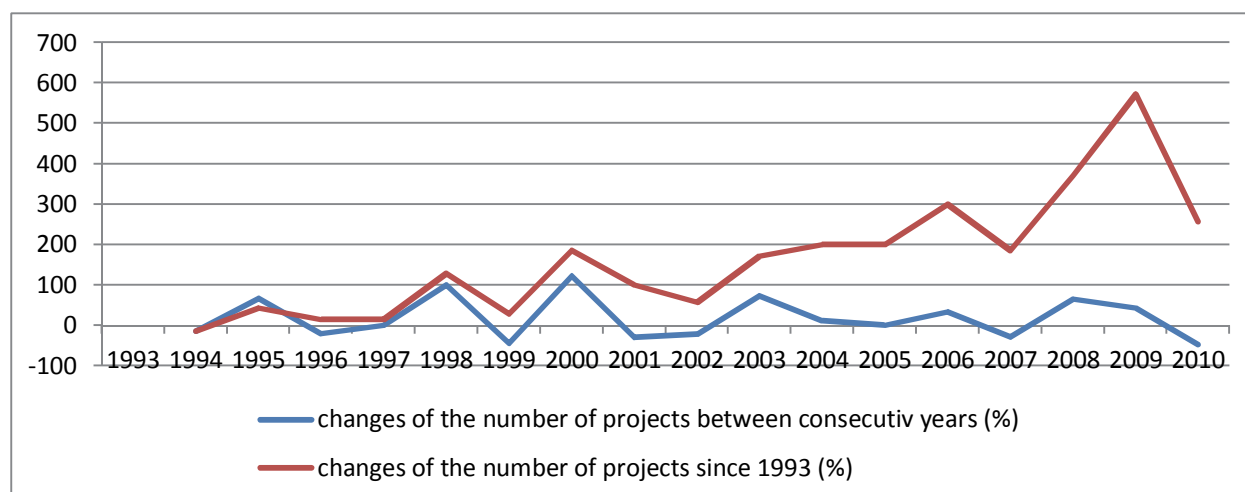
agriculture sectors consider desertification a primary problem but do not support action projects for its prevention. Sectors that perceive the desertification dilemma to be significant include health, infrastructure, industry, civil society, rural development and administration. Eight sectors, namely gender, communication, peace and security, arts culture and recreation, fisheries, economic development, emergency aid and the urban sectors, do not consider desertification in any of their projects.

In general, the environment which includes climate change, biodiversity and desertification is cross-cutting, but appears to be important only for the environmental sector even though some of these sectors such as education can be used to combat environmental degradation.

5.3 Dynamics of commitments and disbursements to the environmental sector during 1993-2010

In order to shed light on the issues facing the environment sector in accessing aid commitments, trend analysis was undertaken. The analysis compares the changes in environmental projects on a year-to-year basis to the long-term trend since 1993 (Figure 15).

Figure 15: Dynamics of the number of environmental projects financed in Ghana, 1993-2010



Source: Author's computation based on AidData.

The first indicator depicts the variations in aid projects between any two consecutive years whereas the second indicator captures the long-term trend in aid projects since 1993. As can be seen, there is a direct relationship between the short-term and the long-term trends. As the number of projects declines between two given years, the long-term trends also decline. Variation in the number of projects was quite small until 2008 when the numbers increased substantially, only to decline again in 2009. The long- and short-term variations in the number of projects were quite small until 2008. In 2009, there was a significant increase in the long term trend but reduced in 2010

Commitments and disbursements to the environmental sector

It is a fact that in a developing country like Ghana where government budgets are always in deficit, the available scarce resources are committed to economic development and the provision of social services rather than environmental protection. Thus aid tends to be a major source of funding for environmental projects. Disturbances in the disbursement of aid

seriously affect the progress of environmental projects. For example, over the period 1993-2010, aid commitments to the environmental sector totalled about US\$352 million, out of which only US\$97.87 million was disbursed, leaving a gap of US\$253.66 million. Environmental aid accounted for 2.21 per cent of Ghana's total aid commitments (US\$1,5907.3) during the period. This is relatively low compared to the allocations to emergency aid (19.24 per cent), infrastructure (16.23 per cent), health (8.3 per cent) and agriculture (7.2 per cent).

Average aid commitments to the environmental sector amounted to US\$19.53 million while average disbursements stood at US\$5.44 million. There are wide variations in both commitments and disbursements; for example, aid commitments to the sector in 1993, 1994, 1996 and 1999 totalled US\$5.28 million, US\$5.98 million, US\$18.20 million and US\$15.92 million, respectively, but no disbursements were made in those years. There seems to be no correlation or consistency between the commitment and disbursement of aid. In 2008, despite a pledge of US\$62.8 million, disbursements stood at US\$13.62 million whereas in 2010 disbursements totalled US\$19.87 million compared to that year's commitment of only US\$22.44 million.

Table 5: Aid commitments and disbursements to the environmental sector, 1993-2010

Year	Commitment (millions US\$-nominal)	Disbursements (millions US\$-nominal)
1993	5.28	0.00
1994	5.98	0.00
1995	38.63	14.24
1996	18.20	0.00
1997	15.50	3.20
1998	15.05	0.80
1999	15.92	0.00
2000	31.81	9.85
2001	28.39	0.63
2002	13.21	1.00
2003	12.97	3.79
2004	12.46	1.69
2005	3.85	2.40
2006	14.78	11.75
2007	4.44	4.53
2008	62.80	13.62
2009	29.83	10.40
2010	22.44	19.87

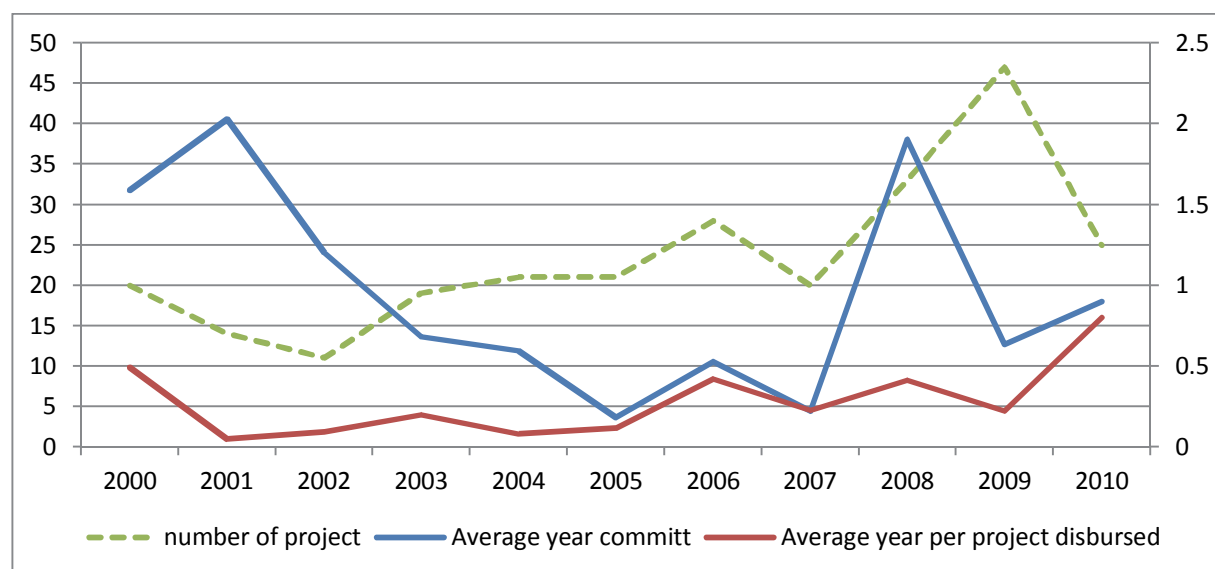
Source: Extracted from AidData.

It is worth noting that deviations between aid commitments and disbursements can seriously affect the success of a country's implementation of aid-financed environmental projects. They also distort the plans and programmes of the environment ministry and related agencies. Figure 16 shows the evolution of average commitments and disbursements in the environmental sector in Ghana from 2000 to 2010.

As can be observed from Figure 16, despite the significant increase in the number of environmental projects (from 14 in 2001 to 47 in 2009), average commitment fell from US\$2.03 million to US\$0.63 million during the same period. This could mean that there was been an increase in the number of small projects that required only minimal funds for implementation. Management of such small projects could put more administrative responsibilities on local personnel and resources. A more worrisome finding is the wide

disparity between the averages of the commitments and project disbursements per year. For example, from 2000 to 2010, the average commitment per year was US\$0.95 million but the average disbursement per year was only US\$0.28 million, a gap of US\$0.67 million. This translates into the non-implementation of projects in a sector where government commitment is low.

Figure 16: Average commitments and disbursements in the environmental sector, 2000-10 (millions US\$-nominal)



Source: Author's estimation with AidData.

Important donors in the environmental sector

Both bilateral and multilateral donors have been supporting the environmental sector in Ghana. As discussed earlier, only 27.81 per cent of environmental aid commitments for the period 1993-2010 were actually disbursed. This could imply that the development partners are not honouring their pledges or that the country is not doing what it should in order for the DPs to provide support, or it may be a combination of both factors. It is therefore prudent to single out the donors who have kept their promises. To support this analysis, the donors were classified into three groups (Table 6).

First are the donors with commitments but no disbursements at all (Group I). There are four donors in this group with a total commitment of US\$24.38 million, representing 6.95 per cent of the overall commitments to the environmental sector for the period 1993-2010. Group II comprises of donors with disbursement levels ranging between 1-49 per cent of their environmental aid commitments. Although this group of eight donors had the highest commitment level (US\$250.0 million or 71.29 per cent of overall commitments), they disbursed only US\$33.58 million (34.45 per cent of total disbursements). Among the members of Group II, Denmark had the highest disbursement rate (19.33 per cent), followed by France (17.70 per cent) and Netherlands (16.76 per cent). The lowest disbursement rate, 4.66 per cent, is recorded for the United States.

Group III is made up of donors who disbursed more than 50 per cent of their aid commitments to Ghana's environmental sector. There are 14 donors in this category with total commitments valued at US\$76.37 million (21.77 per cent of total commitments), out of which US\$63.89 million (65.55 per cent of total disbursements) was delivered. In this group, UNDP scored the highest, with a disbursement rate of 104.3 per cent, followed by IDA

(102.77 per cent). Seven donors—Luxembourg, UNICEF, Sweden, Belgium, Cyprus, Republic of Korea and Spain—had a disbursement rate of 100 per cent.

In terms of the volumes of commitments and disbursements, the International Development Association (IDA), Kuwait and Japan have been the three most important donors to Ghana's environmental sector. Over the years 1993-2010, IDA pledged a total of US\$100.0 million to Ghana's environmental projects and actually disbursed US\$102.7 million. Commitments from Kuwait totalled US\$24.02 million; disbursements amounted to US\$24.00 million, translating into a disbursement rate of 99.94 per cent. Japan's total commitment to the environmental sector of Ghana for the period 1993-2010 was US\$29.45 million of which US\$16.67 million was disbursed, resulting in a disbursement rate of 56.56 per cent.

Table 6: Level of disbursement by donors, 1993-2010

Groups	Commitment (\$)	Disbursement (\$)	Level of disbursement (%)
Group I (no disbursements)			
Switzerland	97,247	0	0.00
OPEC Fund for International Development (OFID)	10,100,000	0	0.00
Nordic Development Fund (NDF)	5,404,094	0	0.00
Global Environment Facility (GEF)	8,778,000	0	0.00
Group I total	24,379,341	0	0.00
% share for Group I	6.95	0	
Group II (disbursements between 1-49%)			
Denmark	5,800,787	1,121,244	19.33
Netherlands	91,713,645	15,369,705	16.76
United Kingdom	69,908,771	8,286,030	11.85
Canada	2,163,901	351,543	16.25
United States	12,608,311	587,835	4.66
Germany		3,901,212	14.45
European Communities (EC)	30,587,361	2,125,915	6.95
France	10,362,861	1,834,551	17.70
Group II total	250,000,000	33,578,035	
% share for Group II	71.29	34.45	
Group III (disbursements more than 50%)			
Luxembourg	64,146	64,146	100.00
Kuwait	24,020,251	24,004,678	99.94
Norway	768,720	739,451	96.19
Japan	29,450,876	16,665,329	56.59
Italy	505,840	464,689	91.86
Australia	5,056	4,634	91.64
UNICEF	732,742	732,742	100.00
Sweden	74,735	74,735	100.00
UNDP	2,653,306	2,767,459	104.30
Belgium	8,015,589	8,015,589	100.00
Cyprus	25,527	25,527	100.00
World Bank – IDA	10,000,000	10,276,728	102.77
Korea	53,372	53,372	100.00
Spain	3,974	3,974	100.00
Group III total	76,374,134	63,893,051	
% share for Group III	21.77	65.55	

Source: Author's computation with data from AidData.

6 Publicly available information on donors

An analysis of various donor information suggests that many DPs are funding projects that are either directly or indirectly related with the environment, as indicated in Table 7. The major problem is the effectiveness of these activities to have a positive impact on the environment.

Table 7: Core areas of focus for the various donors

Donor	Strategic priorities
DANIDA	<ul style="list-style-type: none"> – Human rights and democracy – Green growth – Social progress – Stability and protection.
DFID	<ul style="list-style-type: none"> – Women and girls – Poverty reduction and growth in the north – Climate and environment.
JICA	<ul style="list-style-type: none"> – Agriculture (rice cultivation) – Economic infrastructure (electricity and water) – Health and science/mathematics education – Capacity development in administrative & financial management
AfDB	<ul style="list-style-type: none"> – Infrastructure – Governance – Private sector development – Higher education vocational training
BADEA	<ul style="list-style-type: none"> – Infrastructure, including rural electrification – Rural development and food security – Human resources and the social sector – The private sector
GIZ	<ul style="list-style-type: none"> – Environment and climate change – Natural resource management – Sustainable forest management – Combating desertification – Conservation of biodiversity

Source: Compiled from the author's survey (2013).

Despite the availability of huge international public financial resources supporting environmental activities, particularly climate change adaptation and mitigation programmes, Ghana has been unable to take full advantage of these facilities. This is partly attributed to the accessibility challenges inherent within the funding initiatives, namely: inadequate transparency in disbursement procedures, availability of the majority of funds mainly in pledges and the inability of the country to meet complex eligibility criteria. The fragmented nature of funds hinders efforts to synergize national developmental goals. In addition, the objectives and priorities of many funds are not in agreement with national strategies for environmental protection (EPA 2011).

Ghana has also not been able to benefit immensely from funds for environmental activities, particularly climate change, due to lack of awareness of the existence of such facilities and the country's ineligibility. In many cases, funds pursued have not been approved by fund administrators because of procedural flaws and the inability to demonstrate institutional competency in managing funds. For example, information from *Climate Finance* indicates that the country has successfully secured only about US\$21.3 million of the global pledge of over US\$30 billion for climate change-related action. Ghana's share of the funds, designated

for five mitigation and three adaptation projects, were sourced from only four of the more than 25 international publicly funded initiatives since 2008.

With reference to external aid that goes into consultancies, publicly available information on donors, especially from those who have experience working with them, suggests that much of this aid does not benefit the recipient country, especially with regard to grants. The European Union, for example, advertises its entire range of contracts in Europe, inviting specific European consulting firms to bid for projects. This leaves very little space for developing country firms to participate. Even though most of the contracts stipulate the inclusion of local experts, they are often contracted as junior officers whose influence on the project may be minimal. It has also been argued that the 'experts' brought to work on contracts may not be able to offer the best advice, as many of them depend on recycling existing ideas or those of the local consultants, thus providing very little value addition.

Also, in the implementation of projects, technical issues are to be approved by the benefiting MDA while financial approval is vested with the donor involved. This makes it difficult for the MDAs to have an effective oversight responsibility on the consultants since they may not have the financial clout which could be used to persuade consultants to adapt the right course of action.

There are also situations where the approach and goals of donors are not in tandem with those of the recipient country. In such a case, public officials become involved by virtue of the associated benefits but their interest does not extend beyond the formulation of policies. Also, many donors provide support for the development of policies, programmes and plans but leave the implementation to the government which may not have the necessary funds.

7 Factors that ensure the success or failure of a project and how to improve the odds

To assess the factors that determine the success or failure of environmental projects, DPs were asked to single out two successful environmental projects and two less successful ones as well as the factors related to the outcome. Among the successful projects, the majority were in the agriculture and forestry sectors and linked to rural communities. Positive outcome of the projects included increased incomes and jobs creation potentials, and the contributing factors were the strong commitment by Ghanaian counterparts, good relationship between the domestic and foreign teams, quick and visible impacts, emphasis on the development of the capacity of youth and women, ownership and buy-in of key stakeholders and partners at all levels, leadership and commitment, involvement of both senior management and technical staff, collaboration and partnerships, knowledge and use of the right steps in implementation and the creation of awareness. Project failure, on the other hand, was the result of the use of technology that was alien to the community and the poor knowledge of consultants about the local environment. About half of the DPs also believed that the host country shared their views on the success or lack of projects whereas the rest expressed a contrary view, indicating that some tension existed between the DPs and the host country.

DPs were also asked to consider the major obstacles to achieving a good outcome from the projects. Obstacles mentioned:

- inadequate coordination of interventions
- low commitment of the government of Ghana
- poor quality project appraisal

- inadequate capacity of implementing agencies
- inadequate leadership
- weak country ownership of projects
- weak capacity of the government to meet increasing donor demands
- ineffective monitoring and evaluation systems at sectoral level to measure impacts and fund utilization
- large and fragmented donor interventions and programmes
- improper utilization of funds
- inadequate capacity within the implementing agencies
- weak accountability
- poor commitment to ensure sustainability of projects.

In order to improve aid effectiveness, DPs were asked to provide information on the key drivers that could help to achieve a good impact from a project. Responses given by the DPs included:

- provision of policies, framework for DPs intervention
- Provision of leadership in defining priorities
- ensuring sound and effective monitoring and evaluation systems that use both inputs and output
- development of skilled and motivated personnel
- maintaining the interest of personnel at a high level
- provision of strong leadership of management of Ghanaian counterpart
- commitment to the sustainability of long-term projects
- Ghanaians taking full ownership of projects
- mainstreaming projects into the government's framework to ensure sustainability
- ensuring effective steering structures and cooperation at all levels
- ensuring stakeholder involvement
- ensuring adequate preparation time supported by diagnostic and analytical studies
- showing implementation readiness
- alignment of government and implementing partners to the same guidelines
- government recognizing the DPs as partners, not donors, thus assuming fiduciary responsibility towards donors
- ensuring effective collaborations between units within the MDAs
- ensuring that project development is more driven by implementing partners rather than the DPs.

8 Conclusion

Ghana has made considerable effort with the formulation and implementation of development plans to ensure sustainable development through the integration of economic, social and environmental issues. Over the past decade the government has reoriented the issue of development planning with poverty reduction, and has achieved some, albeit modest, success. Yet, several development and environmental challenges confront the country with respect to energy, transport, agriculture, water, forestry and urban management. In addition, there are a number of emerging issues that make sustainable development difficult. These include climate change, desertification, coastal erosion, energy crisis, water availability, transparency

in the management of mineral/oil resources, biodiversity and ecosystem loss, food insecurity, graduate unemployment, globalization and urbanization.

An analysis of data suggests that expenditure by the government of Ghana in nominal terms has increased consistently since 2000, with about seven sectors weakly linked to the environment taking about 78.78 per cent of all government expenditure. Even though overall expenditure has grown, the rate of increase for environmental expenditures has not kept pace. With respect to external aid disbursements, there has been a consistent increase, with the share of loans exceeding that of grants. Aid disbursements to environmental sectors have expanded and efforts are being made by the development partners to steer more grants instead of loans into environment-related activities.

The AidData dataset indicates that sectors such as emergency aid and other support, infrastructure, health, education and agriculture are the main recipients of aid in terms of project numbers, commitments and disbursements. The environmental sector ranked 11th in terms of the level of funding commitment and disbursements. This yields a disbursement rate of 27.81 per cent for the environmental sector which is lower than the average rate of disbursements for all the 19 sectors (29.03 per cent). The low disbursement rate has made it difficult to achieve overall project and environmental objectives. With respect to the inclusion of the environment, biodiversity, desertification and climate change in overall project formulation and implementation, the data show that the main sectors to take these issues into account are the environment, fisheries, water and agriculture sectors. This indicates the lesser significance of these global environmental problems to the country. In addition, although the environmental and agriculture sectors consider desertification to be primary worry, they do not support action projects directed at its prevention, even though the country is a signatory to the UNCCD.

One important observation of the analysis is the fact that DPs view the non-environmental sectors as requiring more aid than the environmental sectors, despite their recognition that the non-environmental sectors have environmental impacts and their attempts to address these in their activities. The rate of the environmental sectors for the non-disbursement of aid is generally higher than that of the other sectors, a fact which adds to the sector's lack of aid.

Publicly available information suggests that many donors are interested in financing environmental projects but the efficiency of their support through aid tying, complex administrative processes, and poor coordination among others, makes it difficult for recipient countries to benefit fully. Analysis of resources provided by various creditors indicates that International Development Association (IDA), US Millennium Challenge Authority (US-MCA), African Development Fund (ADF), China Exim Bank, China, FORTIS, SOGE, Canada, KBC Bank, European Union (EU) and United Kingdom (UK) are the major aid providers in terms of total resource provided in Ghana from 2008-11.

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