

Opportunities and constraints for biofuel Production in Mozambique

By: Joel das Neves Tembe, Aristides Baloi, Emilio Tostão (CEPPAG-UEM), Giles Henley (ODI)

Introduction

- Mozambique has a well developed policy framework for biofuels production and consumption, but is yet to develop a biofuels market.
- Commercial experience of investments cultivating feedstocks to date suggests sugarcane is the most promising biofuel feedstock candidate; opportunities exist for commercial success while reducing rural poverty.
- This paper aims to (i) identify the potential for biofuel feedstock production and (ii) understand land tenure system and how together with formal legal requirements moderate access to land for biofuel feedstocks.
- Methods include reviews of recent experiences of large farm establishment, interviews (focal groups, private farmers, decision makers, community leaders, sugarcane company, CEPAGRI), and desk research.

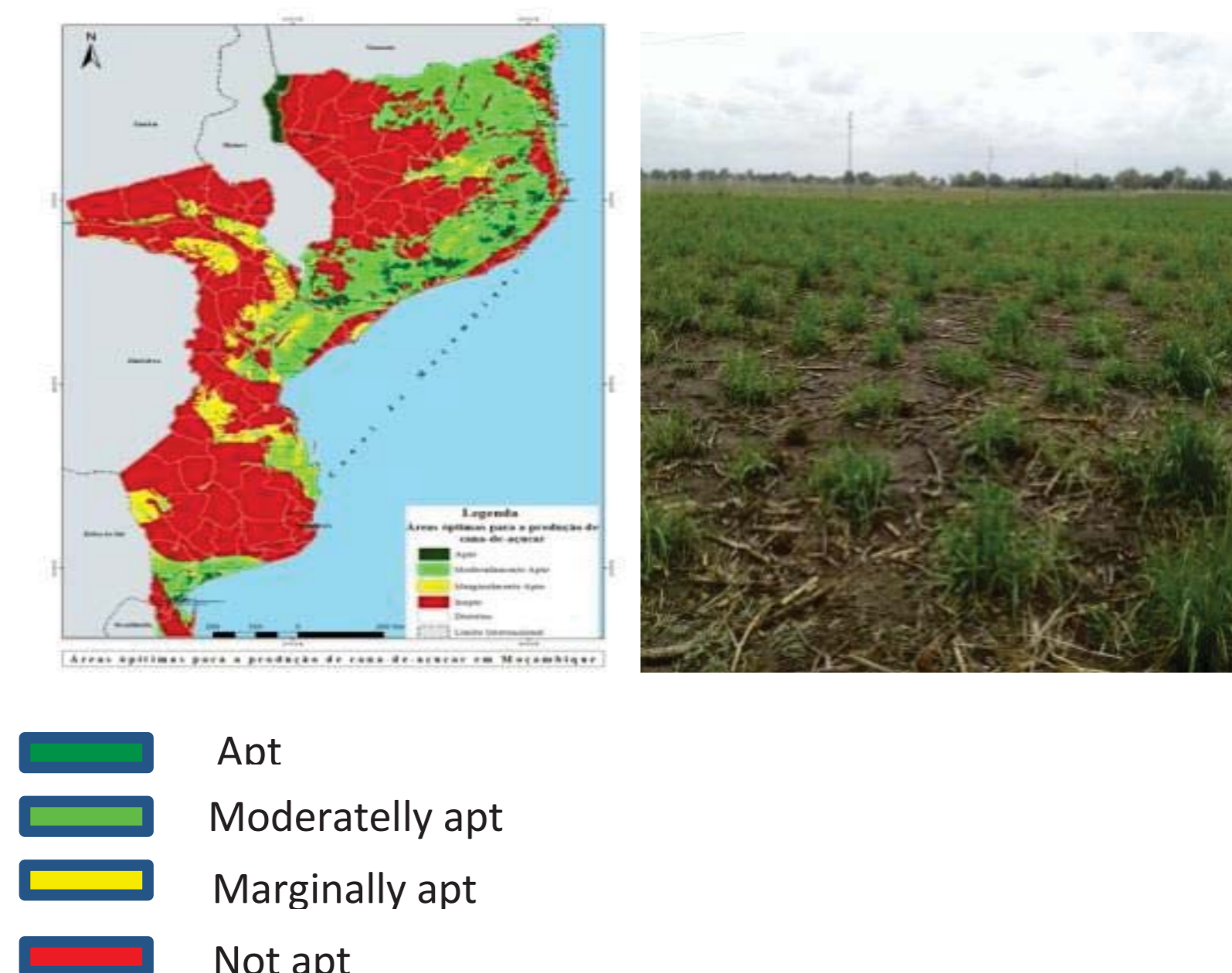


Figure 1: Photo of participants in community leader's interview

Results:

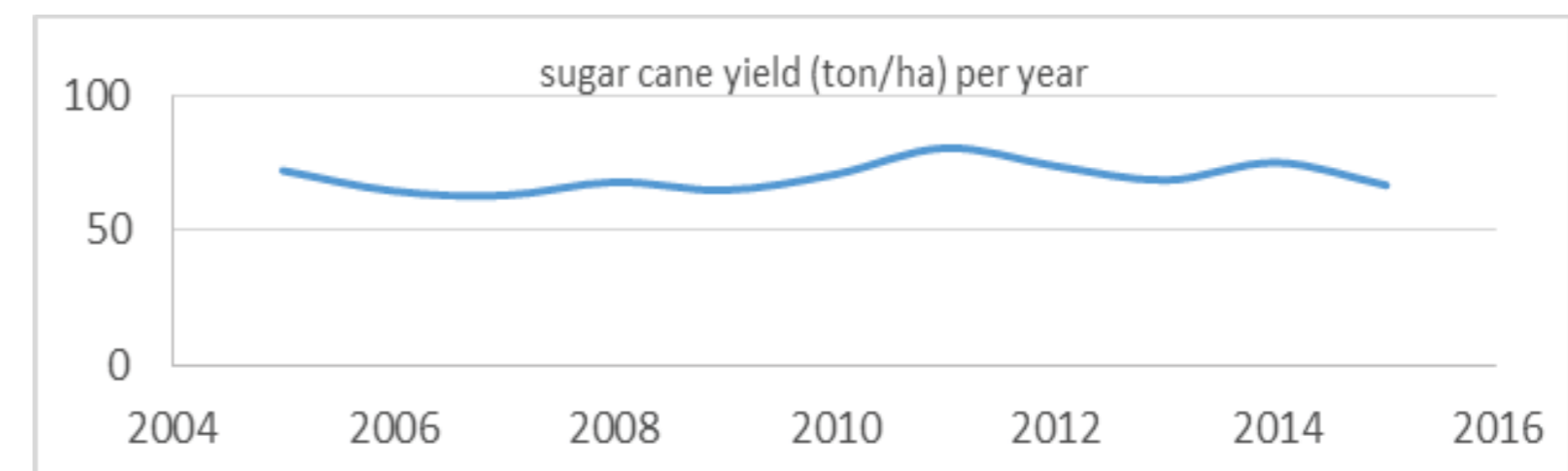
- Suitability map and current area estimates of sugarcane production;
- Analysis of social benefits and costs associated with production.

Figure 2: Potential for Sugarcane production



- Apt
- Moderately apt
- Marginally apt
- Not apt

Figure 3: Sugarcane yields (ton/ha per year): 2005-2015



Source CEPAGRI 2016

Land tenure and access

- The tenure system in Mozambique includes the traditional customary system and conventional system
- Locals may access land in the community through inheritance processes (young, un-married women's), allocation by local leaders, and "borrowing practice".
- Outsiders may access land by expressing interest to the government and to community.

Resettlement compensation

- A legal process exists for resettlement and compensation but relies heavily on investors taking the lead.
- The proposal of resettlement conditions and compensation is discussed and agreed among communities and the investor.
- The local government plays a role of identifying and allocating new land to displaced community for resettlement and other social facilities.

Social Constraints

- Large scale models appear to offer little in limited spillovers to surrounding communities.
- Although there is a legal opportunity for farmers and investors to enter into partnerships, this rarely occurs because most communities have no DUAT.
- There is very low capacity to monitor the land provided for feedstock production due to deficient sharing of information among institutions of land management.
- To be more sustainable farmers need to produce at least 5ha of sugarcane. This limits participation by smaller farmers (including female headed households).
- Delays by companies delivering on their social responsibility commitments may act as a barrier for the community participating in feedstock production

Conclusions

- There is significant potential for feedstock production and communities are willing to join feedstock production.
- There is need to enhance the participation and qualitative engagement of the community in exploring investment opportunities and the negotiation process.
- Current models of public and private provision of goods to raise sugarcane yields among outgrowers are underway: its too early to tell if these have been successful.
- Meeting domestic ethanol blending mandates and regional demand in a sustainable manner will require better management of land.