



# Development and implementation of the Biofuels Sustainability Framework in

## Mozambique

### Presentation

by

**Marcelina Mataveia**



**Ministry of Energy**

**National Directorate of New and Renewable**

**Energy**

**Germany, Berlin**

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Opportunities for sustainable bioenergy development : National  
experiences and global exchange



# INTRODUCTION

Mozambique is seen as a promising country for biofuel production. The country has favourable growing conditions, and the availability of land, water and labour contribute considerably to the country's biofuel production potential





# MOTIVATION

- ❑ Contribution for National Agenda of Poverty Alleviation, and to reduce the impact of the international market, adding value to agriculture products to be used as feedstock for biofuel production;
- ❑ Opportunity to introduce new vigour to agriculture sector, the main source to reduce poverty, especially in rural areas;
- ❑ Opportunity to select and adopt new technologies and methodologies for adequate agriculture and industry development;
- ❑ Provide to the small growers an opportunity for income generation and respond to their energy needs,
- ❑ Strengthen technologies centres and research development;



# ACTIVITIES DEVELOPED

Raw material	Sustainability criteria	Legal framework	Investment
Agro ecologic Mapping 1:250000 (complete in 7 province, ongoing in 3 province)	Sustainability frame work (principles; Criteria, Indicators) complete and ongoing pilot test	Biofuel policy and Strategy ( approved 2009)  National Commission of Biofuels (Approved 2010)	Procedure for Evaluation of Investment Proposals (approved)
Integrated Natural resources management (ongoing)		Biofuels regulation (Approved 2011)	



# BIOFUEL SUSTAINABILITY FRAMEWORK

- ❑ The production of biofuels crops can also result in negative environmental and socio-economic impacts, such as changing land-use patterns and competition with food production.
- ❑ In order to deal with these impacts, some countries (UK, Netherlands), multi-stakeholder platforms (Roundtable for Sustainable Biofuels) and supra-national institutions (European Union, EU) have developed sustainability criteria for biofuel production.
- ❑ The implementation of such biofuel sustainability criteria will have clear consequences for biofuel production in Mozambique, and for the biofuel investors in the country that intent to export part of their produce to countries in the EU .



# PROPOSED PRINCIPLES and CRITERIA (cont)

## **Principle 1: Biofuel operations shall respect all applicable laws, regulations and legal procedures**

- 1. Biofuel operations shall comply with all applicable laws, policies and strategies and with all existing customary and informal rights related to the use and access to land, water and other natural resources.
- 2. Biofuel operations shall not violate human and labor rights (Labor Law: Law No. 23/2007).
- 3. For the purposes of this Article indicators set out in Annex I shall be obeyed.



# PROPOSED PRINCIPLES AND CRITERIA(CONT)

## Principle 2: Biofuel operations shall contribute to local development, while minimizing health risks

- 1. Community consultation shall be based on free, prior, and informed consent, through a consensus-driven and well-documented process (Land Law: Law No. 19/97; Land law regulations: Decree No. 66/98; Technical annex to the land law regulations: Ministerial Diploma No. 29-A/2000; Land planning law: Law 19/2007).
- 2. Biofuel operations shall contribute to local socioeconomic development
- 3. Biofuel operations shall minimize risks for public health and ensure hygiene and safety at the workplace.
- 4. For the purposes of this Article indicators set out in Annex II shall be obeyed





## Proposed Principles and criteria(cont)

### **Principle 3: Biofuel operations shall contribute to energy security**

- ❑ 1. Biofuel operations shall contribute to a sustainable diversification of the national energy matrix (Biofuels policy and strategy: Resolution No. 22/2009; Biofuels blending regulations: Decree No. 58/2011); Biofuels technical regulations: forthcoming; Regulations for licensing activities of production, storage, export, transport and commercialization of biofuels: Ministerial Diploma forthcoming).
- ❑ 2. For the purposes of this Article indicators set out in Annex III shall be obeyed.





## Proposed Principles and criteria(cont)

### **Principle 4: Biofuel operations shall be economically and financially viable**

- 1. Biofuel operations shall be economically and financially viable (Investment law: Law No. 36/95; Investment law regulations: Decree No. 36/95; Project application form; Procedures for the presentation and appreciation of investment proposals involving extension areas above 10.000 hectares: Resolution No. 70/2008).
- 2. For the purposes of this Article indicators set out in Annex IV shall be obeyed.



# PROPOSED PRINCIPLES AND CRITERIA(CONT)

## **Principle 5: Biofuel operations shall not compromise local food security**

- 1. Biofuel operations shall not compromise local food security by maintaining the availability of and access to staple food.
- 2. For the purposes of this Article indicators set out in Annex V shall be obeyed .



## Proposed Principles and criteria(cont)

### **Principle 6: Biofuel operations shall contribute to improved agricultural and industrial productivity**

- Biofuel operations shall continuously improve agricultural and industrial productivity and the effective use of resources.
- Biofuel operations shall facilitate technology transfer and knowledge sharing to smallholders.
- . For the purposes of this Article indicators set out in Annex VI shall be obeyed.



# PROPOSED PRINCIPLES AND CRITERIA(CONT)

## **Principle 7: Biofuel operations shall reduce the risk of environmental degradation**

- 1. Biofuel operations shall contribute to the reduction of greenhouse gas emissions (GHG) as compared to fossil fuels (Biofuel policy and strategy: Resolution No. 22/2009).
- 2. Biofuel operations shall carry out an Environmental Impact Assessment (Environmental law: Law No. 20/97; Regulation about the environmental impact assessment: Decree No. 45/2004; General directive for the elaboration of environmental impact studies: Ministerial Diploma No. 129/2006; Manuel of procedures for environmental licensing; General directive for the public participation process: Ministerial Diploma No. 130/2006; Forest and wildlife law: Law No. 10/99).



## PRINCIPLE 7(CONT)

- ❑ 3. Biofuel operations shall minimize negative impacts on biodiversity, ecosystem and conservation values
- ❑ 4. Biofuel operations shall minimize the soil and air pollution (General directive for the public participation process: Ministerial Diploma No. 130/2006).
- ❑ 5. Biofuel operations shall minimize negative impacts on water resources (General directive for the public participation process: Ministerial Diploma No. 130/2006).
- ❑ 6. For the purposes of this Article indicators set out in Annex VII shall be obeyed



# INSPECTION OF NEW BIOFUEL PROJECTS

It is the responsibility of CPI, MINAG, ME and MICOA (inter-ministerial team) to perform monitoring activities using the following mechanism:

## **12 months after the start of the project:**

- ❑ a. 0% – 60% implementation of the indicators = non-compliance with the framework. Send a warning and attach all the improvements to be made within 6 months. An extra monitoring visit is carried out in the 18th month.
- ❑ b. 61% – 99% implementation of the indicators = compliance with the framework. Send a warning and attach all the improvements to be made within 1 year to comply 100% with the framework.



# INSPECTION OF NEW BIOFUEL PROJECTS

## **18 months after the start of the project:**

- a. In case of non-compliance with the framework, send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework.

## **24 months after the start of the project (acquisition phase of the definitive DUAT):**

- a. In case of non-compliance with the framework, cancel the fiscal benefits and do not award the definitive DUAT until 100% compliance with the framework. Send a warning and attach all the improvements to be made within 6 months to comply 100% with the framework. An extra monitoring visit is carried out after 6 months.





# INSPECTION OF NEW BIOFUEL PROJECTS

- ❑ In case of force majeure, the biofuel operator consults CPI (national/provincial level) to examine the case and decide on whether to grant the tax benefits.
- ❑ c. In case of force majeure, the biofuel operator consults MINAG (national/provincial level) to examine the case and decide on whether to grant the definitive DUAT.
- ❑ 4. The monitoring of biofuel projects that comply 100% with the framework is carried out biennially



## PILOTING THE BIOFUEL SUSTAINABILITY FRAMEWORK (ongoing activity)

### Project objectives for pilot

- ❑ Build up experience amongst biofuel companies and relevant government institutes with the application of the biofuel sustainability framework for Mozambique by carrying out pilots in the field, and;
- ❑ Evaluate these experiences and formulate practical recommendations to industry and to the inter-ministerial biofuel group.

### Vision – why a pilot?

- ❑ 1.The biofuel sustainability framework provides Mozambique with a powerful and practical tool to assess and monitor biofuel projects
- ❑ 2.The sustainability framework is a thorough and comprehensive work. It would, however, benefit from piloting
  - ❑ >to determine its value and feasibility on the ground, and
  - ❑ >to augment its practicality
- ❑ 3.Piloting is extremely important given the limited available monetary and human resources at both the companies and the government organisations involved



## CLUBES of AGRICULTURE PRODUCERS AND BIOFUELS FOR LOCAL ENERGY NEEDS-ADPP (Cabo Delgado Province)

- Apart from the need to produce oil for home use, *Jatropha* is being grown as a live fence around food crop fields as one part of passive medications against human-animal conflict.





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# THANK YOU !

## Ministry of Energy

[www.me.gov.mz](http://www.me.gov.mz)

Address: Av. 25 de Setembro 1218,  
Caixa Postal 1381

Tel: +258 21 357657

Fax: +258 21 357668

E-mail: [mam@me.gov.mz](mailto:mam@me.gov.mz)