

**GBEP Working Group on Capacity Building
Study Tour for Capacity Building
3rd Bioenergy Week**

Medan, Indonesia, 25-29 May 2015

**Summary of Sessions on
Regulatory Frameworks and Sustainability**



REGULATORY FRAMEWORKS

- Most countries in the region have put in place biofuel mandates with stepping up targets.

HOWEVER:

- There tends to be limited coordination among different decision-making levels;
- effective implementing measures are still lacking in some cases; and
- oftentimes production has fallen short of mandates, due mainly to lack of adequate feedstock supply.

SUSTAINABILITY – OPPORTUNITIES

(1)

The growing demand for liquid biofuels can lead to a number of benefits, including:

- New market outlet for farmers;
- agricultural development;
- economic development and increased value added generation;
- job creation;
- reduced dependence on fossil fuels and fossil fuel imports; and
- climate change mitigation.

SUSTAINABILITY – OPPORTUNITIES

(2)

Household level biogas systems:

- Increased access to modern energy services; and
- reduced dependence on traditional biomass, with environmental benefits (e.g. avoided deforestation and reduced emissions) and social benefits (e.g. improved health and education).

Industrial level biomass-based heat and power generation:

- Increased quantity and quality of power supply;
- displacement of fossil fuels; and
- climate change mitigation.

SUSTAINABILITY – CHALLENGES

(1)

Inadequate feedstock supply, due to:

- Low agricultural productivity, especially among smallholders;
- lack of adequate infrastructure/logistics, e.g. storage facilities;
- lack of robust supply chains for biomass and residues; and
- market uncertainty and price volatility.

SUSTAINABILITY – CHALLENGES

(2)

Sustainability issues still requiring consideration:

- Land-use change / GHG emissions / biodiversity;
- methane emissions from POME;
- low efficiency/productivity of feedstock production and processing;
- potential competition with other uses of crops and residues, e.g. food, feed, fertilizers; and
- uncertain/insecure tenure rights.

In addition, challenges related to the **implementation** of **sustainability requirements** and **certification**

SUSTAINABILITY – ACTIONS

(1)

- Conduct thorough **assessments** of local energy **needs** and of sustainable biomass/bioenergy **potentials**, taking into account all relevant environmental, social and economic dimensions and related trade-offs;
- ensure **multistakeholder engagement** in bioenergy planning and decision-making;
- ensure stable, long-term **policy frameworks**;
- streamline and speed-up **authorization/licensing procedures**;
- phase out fossil fuel **subsidies**;

SUSTAINABILITY – ACTIONS

(2)

- Promote **sustainable agricultural intensification**, e.g. through the introduction of improved varieties, technology transfer and exchange of good practices;
- if feedstock expansion necessary, prioritize **low carbon stock areas** and avoid displacement of **staple crops**;
- promote the **integrated production** of food, feed, biofuels and biomaterials through an efficient use of land, biomass and residues;

SUSTAINABILITY – ACTIONS

(3)

- Invest in improved **infrastructure and logistics**
- Promote **methane capture** and biogas production from **POME**;
- Promote the establishment of robust and efficient **supply chains** for biomass and residues;
- promote the **inclusion of smallholders** in bioenergy supply chains through inclusive business models; and
- strengthen the **capacity of smallholders** in order to increase their productivity and help them comply with sustainability requirements.

Terima Kasih

Thank you

Andrea Rossi

Programme Officer – GBEP Secretariat

andrea.rossi@fao.org