Netherlands Programmes
Sustainable Biomass: Smallholder certification in biomass supply chains

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www.rvo.nl/biomass
40 projects in 20 countries

United States
- Project: “urban wood” for wood pellets
- Project: 138,987 tonnes produced and successfully sold

Mexico
- Project: Bioenergy from sugar cane

Guatemala
- Project: Bioenergy from sugarcane

Honduras
- Project: Bioenergy from sugarcane

Panama
- Project: Bioenergy from sugarcane

Colombia
- Project: Bioenergy from sugarcane
- Project: 250,000 tonnes of sugarcane

Argentina
- Project: Bioenergy from sugarcane

Brazil
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

Spain
- Project: Bioenergy from sugarcane

Turkey
- Project: Bioenergy from sugarcane

Zambia
- Project: Bioenergy from sugarcane

Ukraine
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

Sierra Leone
- Project: Bioenergy from sugarcane

Mali
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

South Africa
- Project: Bioenergy from sugarcane

Tanzania
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

Mozambique
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

Indonesia
- Project: Bioenergy from sugarcane
- Project: 1,000,000 tonnes of sugarcane

Focus on sustainability, innovation and international
The NPSB project portfolio

Unprecedented portfolio in terms of variation in biomass projects:

• 20 countries

• 10 types of biomass

• Different business models: from outgrowers to large scale plantation types

• Import chains and local use of biomass

• Developing biomass production chains:

• Use of various certification schemes

• Consortia include business, NGO’s, researchers
Our support programme

Sustainability and certification
- Guidance documents: how to choose a certification system
- Food security

Biomass feedstocks
- Alternative feedstocks
- Jatropha assessment

Financing
- Climate financing
- Support on business cases

Monitoring of biomass streams
BioESoil allows farmers and advisors to calculate the impact on soil quality of bioenergy production.
Welcome at the screening tool for eco-friendly charcoal production from alternative feedstocks.

At least 80% of the African population depends on traditional biomass resources such as charcoal and firewood for household energy use. Most charcoal is produced in forests near urban areas, where most charcoal consumption takes place. Charcoal production is an important cause of deforestation, one of the most urgent environmental problems of Africa.

One of the solutions is to promote the use of alternative feedstocks for wood charcoal. Examples are charcoal dust, harvest residues, processing residues and invasive species. So far, the use of wood charcoal alternatives has been limited since its production requires additional techniques and investments and need an organization structure that needs to compete with the existing, usually informally organized charcoal sector that requires few investments.

This screening tool gives information and insight into the potential of charcoal production from alternative feedstocks. The screening tool consists of four modules, that cover feedstock, market and technology section and production costs.

Please ACT and select a module

Module 1: Feedstock selection
Module 2: Market selection
Module 3: Technology selection
Module 4: Production costs determination

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The Alternative Charcoal Tool is developed by BTG on behalf of NL Agency. The tool can be downloaded and used by third parties. Reverse engineering and/or modification of the Alternative Charcoal Tool is not allowed without the express written authorization of BTG Biomass Technology Group BV.

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Smallholder certification in biomass supply chains

Objectives
To provide insight in:
• Motivations to include smallholders in certified biomass supply chains
• Risks and challenges of smallholder certification
• Strategies to enable a successful certification of smallholders

To develop:
• A background report and guidance manual

Carried out by: CREM
Methodology

• Desk research: literature, pilot project reports, etc
• Input from experts (international survey, interviews)

Including experiences in sectors other than biomass
(e.g. food related initiatives)
Defining a small holder

Not one definition, however, often related to:

Farm size, limited resources, depending on household members for labour, subsistence orientation

In the context of certification/this project:

A farmer that faces significant constraints to become certified that the farmer cannot overcome alone, due to limited land area, resources, knowledge, skills etc.
## Benefits & Challenges

### For smallholders

**Benefits**
- Higher income
- Improved farm management
- Improved health and safety
- Better business opportunities
- Empowerment

**Challenges**
- Financial challenges: high initial costs
- Technical: meeting the certification criteria
- Imposed cooperation
- Limited market perspective

### For business

**Benefits**
- Security of supply
- Market access requirements
- Improved agricultural practices
- Social license to cooperate

**Challenges**
- Delivery risks
- Financial risks: no economy of scale, investment risk
# Strategies to facilitate certification

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Actions</th>
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| **Scoping phase**      | - Gain insight in local context  
                          - Assess the feasibility of smallholder certification                                                                                 |
| **Preparation phase**  | - Motivate the farmers  
                          - Provide short term incentives  
                          - Build trust  
                          - Strengthen farmer organisations                                                                                                       |
| **Implementation phase** | - Offer group certification  
                          - Simplified tools and procedures  
                          - Reduce costs (but not no-cost certification)  
                          - Increasing access to finance  
                          - Training: increase profession skills                                                                                           |
Preparation phase

1. Provide short term incentives
   - e.g. technical assistance, logistical support, monitoring of benefits

2. Build trust
   - Start with GAP and organisation

3. Strengthen farmer organisations
   - Be realistic and flexible!
Implementation phase

- Offering group certification
  *a skillful group manager is needed, see ISEAL producer group models*
- Reducing costs
  *is not no-cost certification, intrinsic benefits are needed*
- Simplifying and adjusting criteria and procedures
  *keep useful records, phases approach*
- Increasing access to finance
  *smallholders should be timely paid, and e.g. smallholder fund*
- Increasing professional skills
  *a modular approach, peer to peer learning*
Jatropha Certification in Tanzania (Diligent)

The project:
• 50,000 outgrowers (20,000 km²) to produce jatropha for the Netherlands market (aviation)
• Hedges and intercropping
• Certification of the smallholders (Netherlands NTA 8080)

Conclusions:
- Sustainability assessments show positive results
- However, certification proofed to be too difficult: EU standards do not fit African realities
‘Excess governance’ demand: source of frustration

- Soil quality sampling not feasible
- Certification costs too expensive

Universal standards versus niche standardization

Local versus international chain
Fair Trade certification of jatropha

Focus on 3 fair trade criteria, additional to the criteria in sustainable biomass standards:

- Food security
- Improved access to energy for local population
- Economically feasible
Fair trade (2)

Mixed cropping systems works for food security
Jatropha seedcake is as good fertilizer than organic manure

Business case:
- Local use (mini grids and transport) are best options
- Export of jatropha for international market is not feasible
- Potential for Jatropha local product use with carbon credit ‘export’
Bonsuco certification Brazil - Solidaridad

**Development of Producer Support & Loyalty Tool**
Focus on performance improvements, over time certification

Self assessment tools helps farmers to better understand possible improvements

- Farmers cannot be forced into certification, and no price premiums
- Building trust and a positive agenda on better performance is needed
Conclusions

• A scoping phase is essential: the local context and enabling environment determines the chances of success
• A lot can be learned from other sectors than the biomass sector
• There are benefits in smallholders certification
• Benefits are in the process of certification
• But: certification can be difficult and costly; and is not always needed
• Certification systems play an important role to make smallholders certification a success
Green matter magazine

Read our magazine!
www.rvo.nl/biomass/greenmattermagazine

Coming soon:

Analysis of Sustainable Biomass Production and Use:
Lessons learned from the Netherlands Programma Sustainable Biomass 2009 – 2013

Check our website!
www.rvo.nl
Facility for Sustainable Entrepreneurship and Food Security (FDOV)

The Facility for Sustainable Entrepreneurship and Food Security - FDOV (part of the Public-Private Partnership facility) stimulates public/private partnerships within the sphere of food security and private sector development in developing countries.

In concrete terms, this means that governmental parties, industry and any NGOs and
teach others become partners, working together to create and maintain projects
that can lead to food security.
More information?

www.rvo.nl/biomass

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