A multistakeholder learning & guidance initiative:

Towards sustainable jatropha

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Jatropha

Today, high expectations exist about the role jatropha oil could play as biofuel and source for renewable electricity generation, in producing countries and potentially as an export commodity for those countries.

Facts and figures:

The name “jatropha” is usually used to refer to the species Jatropha Curcas, although there are approximately 170 known species of the plant. Jatropha is at present still a wild plant – it is not cultivated. It belongs to the Euphorbia family. Jatropha originates from Mexico and Central America, but has spread all over the world. Names used can also vary per region or country. In French (used in Mali f.e.) it is called “pourghère”.
The fruits of jatropha have an “American Football” type of shape, of about 40 mm length, each containing 3 seeds (on average), which look like black beans. The seed weight per 1000 seeds is about 750 grams, which is equivalent of 1333 seeds per kg on average.

When the seeds are crushed, the resulting jatropha oil can be used in a standard diesel car, while the pressed residue (cake) of the seeds is a good fertilizer and can also be sued for biogas production.

Jatrohpa is a small tree (up to 6 m height). Its lifespan is more than 50 years.
The appearance of the plants in a hedge can vary a lot. You may find plants with no leaves (dormant position) beside plants with green leaves. Both the availability of water and sunlight have influence on this effect.

From: website FACT

Jatropha is being hailed by scientists and policy makers as a potentially ideal source of biofuel. Jatropha grows almost anywhere, even on gravelly, sandy and saline soils. It needs little rainfall so it can be planted in places where food does not grow well. The plant and its seeds are non edible (toxic) to animals and humans and are therefore used worldwide as hedges (living fences) in fields and settlements.

Jatropha hedge

Jatropha can also be planted beside other crops farmers grow, like millet, peanuts and beans, without substantially reducing the yield of their fields It protects plants against wind erosion and keeps animals out. The roots also form a protection against water erosion.

Poor farmers living on a wide band of land on both sides of the equator are planting it on millions of acres, hoping to turn their rockiest, most unproductive fields into a biofuel boom. They are spurred on by big oil companies like BP and the British biofuel giant D1 Oils, which are investing millions of dollars in jatropha cultivation.[1]

The need for criteria for sustainable jatropha production

In recent years various multi-stakeholder initiatives have been initiated to deal with the sustainability risks of large scale production of specific commodity crops. Examples include the Round Table on Sustainable Palm Oil, the Round Table on Responsible Soy, and the Better Sugarcane Initiative. These initiatives have generally started from a situation in which industries were confronted with negative publicity about their unsustainable practices, such as clearance of rainforests and land right conflicts with indigenous people. Production of jatropha has not yet led to the large scale damaging effects that other crops historically have. The jatropha sector therefore has a unique opportunity to define sustainability standards at its present early stage of development.

In addition to the abovementioned multi-stakeholder initiatives, various European governments are now developing sustainability standards for biomass which is used for bio-energy applications. Governments have indicated that for the detailing of their criteria, they would like to adhere as much as possible to existing industry standards, e.g. RSPO for palm oil (meta standard approach). For jatropha this is not yet possible, as no specific sustainability criteria have been developed. This entails a danger, namely that jatropha projects cannot adequately be assessed against future government criteria.

If current plans and initiatives for large-scale, industrialised jatropha developments will be implemented, it is likely that environmental and socio-economic impacts of the industry will increase, and similar sustainability discussions as with other oil crops will arise. This raises two questions:

1 From: New York Times 090907, Mali's Farmers Discover a Weed's Potential Power

- What are potential sustainability issues (both environmental and socio-economic) with jatropha production?
- Is it necessary or desirable to develop criteria for sustainable jatropha production (and eventual certification)?

Multistakeholder meeting 10 September 2007, Amsterdam

These two questions have been discussed in a multi-stakeholder meeting at the Royal Tropical Institute in Amsterdam, on 10 September 2007, organised by BioX and Van Marwijk Advies. Participants included Dutch companies involved in jatropha production and use, research & development, together with NGOs (refer to Annex 1 for participants' details).

The meeting concluded the following:

- Current operational jatropha projects are either small-scale - in terms of acreage/tonnage - or large-scale involving many smallholders/outgrowers. Large-scale, intensively mechanised projects are not operational yet, although there is a lot of publicity around planned projects;
- Current projects seem to score relatively well with regards to sustainability aspects, in particular in relation to socio-economic aspects. In depth assessment and benchmarking of existing projects would be required to allow a more specific evaluation;
- Many plans exist for industrialised type of jatropha projects in various countries on different continents. It is the participants' perception that sustainability aspects are in many cases not an integrated element of investors' projects' evaluation: as a result of the current hype, the sole fact that 'it is jatropha' seems to cover any questions on sustainability;
- Implementation of large-scale, industrialised type of projects without appropriate sustainability due diligence entails a serious danger of unsustainable practices, which – after becoming public - will in turn damage the sector as a whole;
- Participants agree that guidance for assessing sustainability aspects of jatropha projects is required, and that it would be worthwhile to develop this guidance in a private sector multi-stakeholder initiative, including private sector, NGOs, research institutes from both producer and user countries. Participants have different views on what exactly this guidance should entail, how detailed it should be (e.g. detailed criteria or generic rules of thumb), and how it should relate to other initiatives for sustainable biomass, like European government initiatives such as Cramer Commission, existing certification schemes such as FSC, or Round Tables such as for palm and soy.

During the meeting, it was agreed that BioX and Van Marwijk Advies would write a proposal for follow-up steps towards developing sustainability guidance. The underlying proposal sets out initial thoughts for the objectives, activities and organisational aspects for such a process.

Main objectives:

This *Towards sustainable jatropha* initiative will deliver criteria and practical guidance on sustainable jatropha practices to organisations involved in the production, processing, trade and use of jatropha, and to governments and other stakeholders such as NGOs and project financers (banks). The initiative will be organised as a multi-stakeholder learning

process, which guarantees that the criteria that will be developed are supported, are just, make sense, and will be used in practice.

It is proposed to organize the initiative as a project with a total execution period of 6-8 months. This relatively short time frame will not only guarantee a focused approach of all participating, it also meets the growing and urgent demand for information by governments and banks.

The initiative has three related objectives:

1. Developing a set of criteria for sustainable jatropha production. These criteria should be
    a. broadly supported and credible
    b. practical and realistic in a business context
    c. easily understood and supported by stakeholders.

2. Promote the implementation of the criteria, with companies and in producer countries.

3. Communicate what has been learned and developed.
   Communication is a key element in this process. Knowledge and experiences with (sustainable) jatropha will be communicated. Best practices and solutions to practical problems related to jatropha production will be shared. Criteria will be communicated to stakeholders. By giving a lot of attention to communication real guidance on sustainable jatropha production can be given.

At this moment there is no intention to develop an internationally accepted *sustainable jatropha certificate*. This now seems too complex and too time-consuming.
But once the actual project has been successfully finalized and evaluated, the cooperating companies and NGO's might come to the conclusion that the development of a certificate is a necessary and useful next step.

Target group

The main target groups for this project are companies involved in the production, trade, processing and end use of jatropha oil.

A second target group are donors and financial institutions, financing jatropha initiatives worldwide, and obliged to proof that the projects they finance are sustainable.

A third target group are governments which are in the process of specifying criteria for the production and import of sustainable biomass/bio-fuels. In addition, the Roundtable on Sustainable Biofuels will be approached.

Implementation and management structure

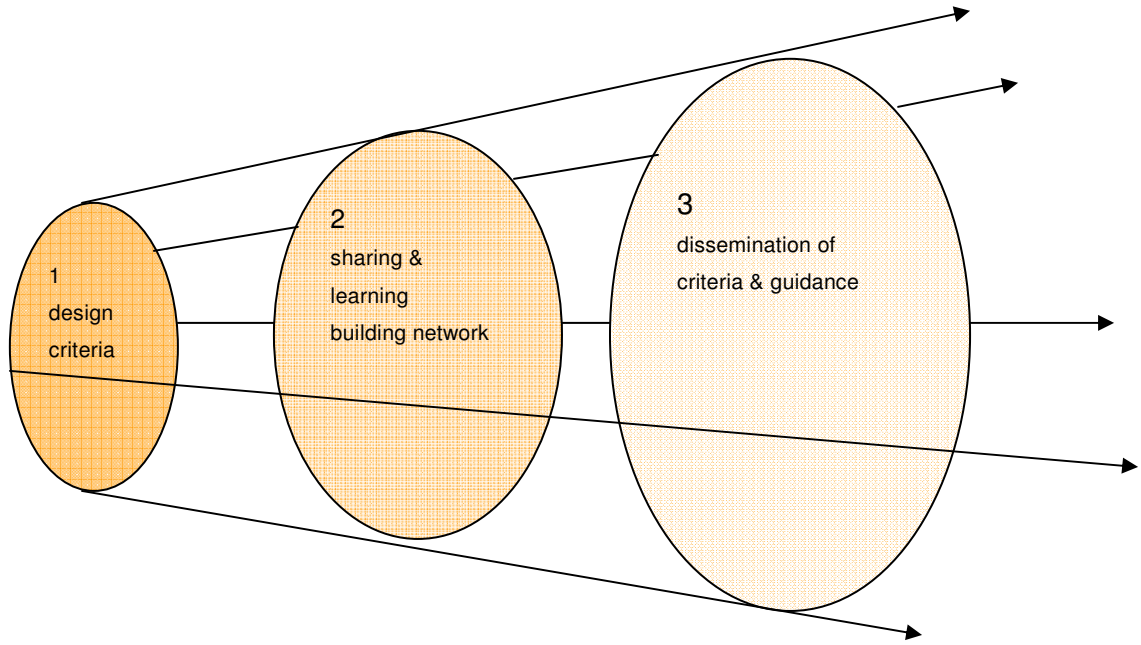
It is envisaged to establish a Steering Group for this initiative, comprising of representatives of at most 10 companies/organisations, including producers, (potential) end-users, NGOs and research institutes. The Steering Group may include all or some

present at the Amsterdam meeting, together with other interested and relevant organisations.
The Steering Group will oversee the project definition, execution and follow-up, and will decide on major steps throughout the project.

The Steering Group members will sponsor the project in kind and financially (terms to be detailed further). In return, they will dispose of all information, products and contacts the initiative generates, and be allowed to refer to their Steering Group membership in corporate communication and otherwise.

The day-to-day project management will be done by Van Marwijk Advies, a consultancy specialised in multi-stakeholder processes (in FSC timber, RSPO palm oil) and public-private partnerships. The advantage of hiring an external consultant is not only that it brings on board specific expertise with comparable processes, but that it guarantees serious time commitment to the project. Van Marwijk Advies is accountable to the advisory board.

Spread and guidance
The initiative starts with a core group, but will gradually spread and work towards hearing, serving, influencing and guiding the big international players (companies, NGO's, governments) worldwide.



steering group: kick off initiative workplan design criteria	→	web-based tools for sharing & learning, discussion, information meetings with broader group of companies/NGO's/banks/ researchers/projects refining criteria develop guidance	→	dissemination of criteria guidance & information sinking in of results design follow-up international workshop
t= 0		t=4 months		t=8 months

This initiative will be a multistakeholder process. So who is participating and whose voices are heard in different phases of the project is extremely important, and will be subject of discussion in the Steering Group.

Traditionally in Mali, jatropha seed is collected by women

Other than existing Roundtable type of initiatives, this project will put great emphasis on the development and use of web based tools for exchange, learning and communication between stakeholders involved, and to limit the number of large (international) physical meeting.

Activities

The following activities will executed, partly in parallel:

1: Inventory jatropha initiatives

The initiative starts with making an inventory of relevant organizations, people and projects working on or with (sustainable) jatropha, with an international perspective. The parameters of their jatropha initiatives will be described, like the (expected) results; means; social, ecological and economic production conditions for production; the challenges. All this information will be put in a database.

2: Development of criteria

Elaborating on, and in accordance with, the Cramer Criteria and the Roundtable on Sustainable Bio-fuels/Lausanne, criteria for sustainable jatropha will be developed and determined by the Steering Group. The criteria will be product, region (country) and context specific. The direct and indirect effects of jatropha production, like displacements of other uses/crops, will be taken into account.

The criteria will be discussed (through web discussions or in live meetings) with other important stakeholders from the public and private sector, also from producer countries. Their experiences will be listed and shared, and they will be stimulated to test the criteria in their projects. The criteria will be refined.

The (interim) results of the *Towards sustainable jatropha* initiative will be communicated to important European government stakeholders (EU, national governments), as to assist and influence European biomass/bio-fuels standard setting and policy making.

The criteria will be translated into a brief checklist which is easy to apply in an international business setting - for example the “10 questions” anybody working on/with sustainable jatropha should have to answer positively before claiming the sustainability of the crop and its products.

3: Recording the external environment

Important developments in the external environment will be analyzed and translated for this initiative and its audience. An example is the European biomass/bio-fuels policy.

Other experiences with developing and implementing comparable sustainability certificates/standards, like FSC timber, Utz Certified and RSPO palm oil, will be listed and relevant lessons will be translated and shared.

4: Development of a portal (or website)

A portal or a website will be built and actively managed, as an environment for sharing and learning of experiences, research, projects, organizations and people. The database (see 1) will be the heart of this portal/website.

5: Development of tools and events

Easy and user friendly tools which will give guidance to practitioners, like a Manual, will be developed.

By the end of the project period an international workshop where results are shared and international support can be built, will be organized.

Products

The following products (results) will be made:

a. A set of criteria for sustainable jatropha production; checklist with the “10 questions”.

b. A database with information on: existing (and planned) jatropha projects/companies/organizations/people (who is doing what?)

c. A document with an overview of relevant (European) policies and sustainability standards on the production and use of biomass/bio-fuels.

d. A portal/website, where information and experiences on sustainable jatropha production are actively exchanged.

e. Information materials on sustainable jatropha and this initiative (flyer + fact sheets).

f. A manual on sustainable jatropha production, which gives guidance to practitioners and users.
(Example of a Manual: *Handboek FSC Hout in de bouw*. A Manual which fits to the sector, the product and the needs of the users)

Timing

The project will start by the end of 2007 and end in September 2008.

For more information:

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Annex I Participants at meeting on 10 September 2007

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Apologies from:
Johan Verburg (OxfamNovib)
Jacob Winter (CordAid)
Daan Dijk (Rabobank)
Florian Winckler (GEXSI)
Bas de Bruin/Silvan de Boer (Eneco)