

GEXSI program outline

Jatropha Biofuel 2006 - 2008

Promoting investments with social and economic benefits

Program 2006

Progress Report and revised program 2007(draft)

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GEXSI and its partners work to make biofuels from Jatropha a sustainable business for the benefit of the rural poor and investors alike.

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Executive Summary

A growing number of investors consider investing in jatropha biofuel projects. The Global Exchange for Social Investment (GEXSI) partners with like-minded organizations to facilitate investments which benefit the rural poor, the natural environment, and investors alike. We envision jatropha to serve as a driver for economic development in economically marginalized regions of our world. To contribute to this goal we have identified the following key products which we will be developing: a social investment portfolio that allows scaling up of promising initiatives, guidelines for pro-poor investments in jatropha as well as strengthened partnerships between social entrepreneurs, civil society organizations, governments and the development aid community.

Our unique market position – at the interface of social entrepreneurs, social investors and international development organizations – enables us to successfully promote and implement this project.

1 The GEXSI Jatropha Biofuel Initiative

Program objectives. To align people's needs with investor's rationale it requires development investments, i.e. needs investments that provide economic and social benefits. Jatropha is a common plant in the tropical and sub-tropical regions of our world. Its potential as a future source of biofuel has just been acknowledged making large investments in this emerging market are likely to occur soon. Many of those countries that are home to jatropha are economically not favored. This makes jatropha a likely driver of economic development in these areas. At the same time, to allow the rural poor to reap some of the benefits, it needs development investments.

GEXSI's jatropha program aims at promoting development investments in this new source of biofuel. The overall **goal** of this program is to contribute to the Millennium

Development Goals by enhancing ecologically sensitive, pro-poor investments in jatropha biofuel in the developing world.

We focus on social entrepreneurialism. Investing in social entrepreneurship builds a financially sustainable path towards the Millenium Development Goals. Social entrepreneurs (e.g. non-governmental organizations, self-help groups, or grass roots entrepreneurs) develop business concepts which service the local poor and offer economic, social, and ecological benefits. Often, these business concepts require some initial support during start-up, but become financially sustainable after this phase. By using market forces for social purposes project's need for support decreases and with it grants dependency. They move from "aid to market".

Jatropha – Biofuel production on marginal soils. Jatropha, a plant which was long known for its medical and domestic uses, is nowadays being acknowledged as one of the most promising biofuel plants. Several international companies, governments, and civil voluntary organizations have already begun to implement Jatropha pilot projects. Jatropha grows on marginal semi-arid and arid lands. Lands that are prone to erosion, if not being protected by some kind of plant cover. For farmers Jatropha offers the opportunity of combining soil conservation with cash-crop production.

Jatropha offers a win – win scenario for businesses and the rural poor. The worldwide rise of microfinance schemes provides the proof of concept that the private sector is capable to finance pro-poor investments. The same can become true for Jatropha. Options that could be explored are combining Jatropha production by the local communities with advanced purchasing guarantees or the pooling of several small Jatropha enterprises to achieve the necessary scale.

These examples clearly demonstrate the potential to combine investor's profits with people's needs. On the other hand, experiences with previous large investments involving substantial changes in land use cover demonstrate that there are pitfalls to be avoided.

2 Our program focus

Investing in Jatropha – In need for best practices. Soon large scale investment in Jatropha will occur. So, providing tools to make investing in Jatropha an opportunity for the poor and investors alike and that assist investors in avoiding challenges like those outlined above is a timely undertaking. If developed jointly by investors, businesses, and civil society, these guidelines will gain the necessary validity.

The program will identify ways to align people's needs and investor's profits, while ensuring environmental sustainability. To do so the project will answer the following seven questions:

1. How to frame larger scale jatropha biofuel projects in a way that **the local population benefits** (e.g. no displacement of food production) and that there will be no harmful effects on the environment?
2. How to create jatropha based **local value chains** through adapted technologies?
3. How to replicate, bundle, and finance successful **community-based initiatives**?
4. How to make use of **carbon-finance** co-funding schemes (CDM)?
5. How do **regulatory frameworks** in different parts of the world impact on jatropha biofuel projects?
6. How to speed up **agricultural research** on jatropha and related biofuel crops? How to promote the dissemination of research knowledge?
7. What are projects to be recommended to **social investors** based on the criteria defined in this process?

3 How we work

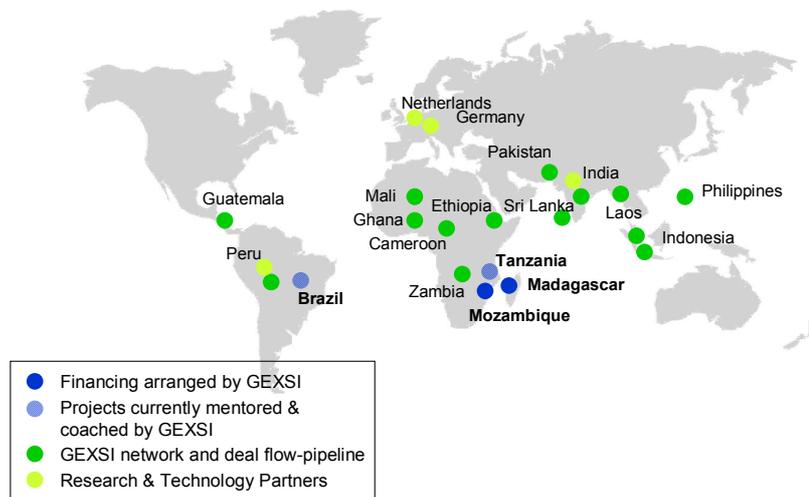
In order to answer the questions outlined above, GEXSI assists jatropha projects to move beyond the pilot stage ("from aid to market"), by providing expertise, project development capacity and guiding rules to entrepreneurs, non-governmental organizations, and investors, with a view to advance pro-poor investments in jatropha in countries of the south. With our activities we

- Build on the work that is already being done by different parties on different levels. There is no need to reinvent the wheel but there is a need to **jointly identify** synergies. Please refer to figure 1 for a geographic distribution of projects and to the lists of project partners in the annexes.
- Heavily rely on projects **and on-the-ground experiences**. If knowledge gaps exist in specific areas, project will conduct case studies, feasibility studies and pilot projects.
- Act as an **open exchange platform** composed of several working groups (guidelines for pro-poor investments, handbook, CDM methodologies, research tasks etc.). These working groups will not hold meetings behind close doors but will encourage participation by all stakeholders, i.e. investors, large businesses, social enterprises, NGOs and, last but not least, communities.

- Foster **South-South** co-operation between the various parties involved in developing, implementing and financing Jatropha projects as well as the research and political organizations involved.
- Be characterised by an open dissemination of the acquired knowledge.

The success of this approach will be measured by the volume and the development impact of social investments in jatropha biofuel projects based on the criteria and best practices elaborated within this process.

Enhancing Sustainable Jatropha Projects worldwide



GEXSI's unique market position. GEXSI has access to a unique network of social entrepreneurs, investors, development aid agencies and research organizations. This market position enables us to:

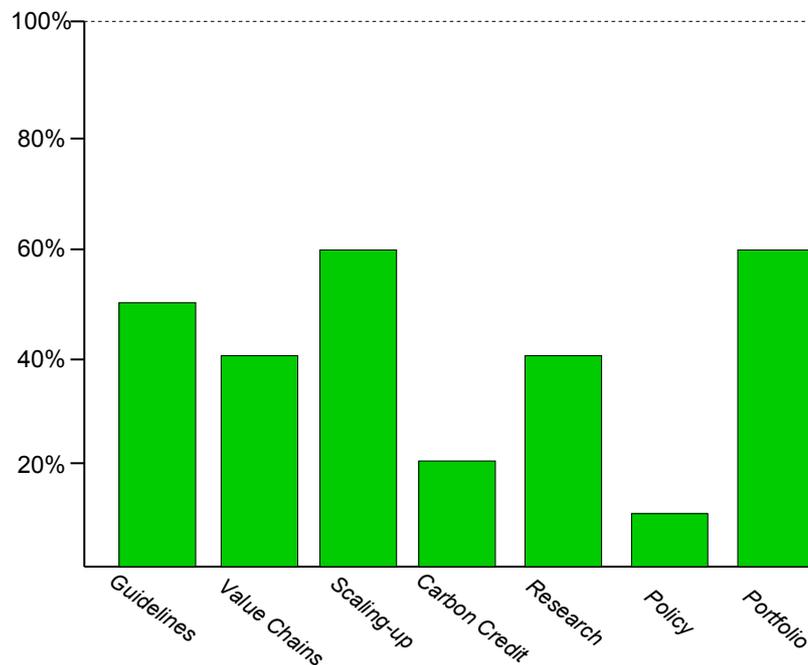
- **Create a conducive environment** to facilitate the move of social entrepreneurs into the market: We establish networks with other initiatives, facilitate the exchange with technical support, and provide easy access to business information (e.g. potential partners, business plan awards).
- **Broker Development Investment Deals:** We assist social entrepreneurs in the development of financial concepts and in negotiating with private investors and development finance.

4 Implementation

These deliverables will be achieved through a set of working modules. The working modules are organized around the questions outlined in section 2.

Interim report: Percentage of 3 year targets reached

As of June, 2007, we assess the progress after the first 12 months of our 3-year jatropa work program as follows:



We currently have secured about 20% of the resources (mainly in-kind support) needed to further implement our work program.

The working modules described in the following pages sketch both

- the positive results we have achieved by now, as well as
- the key tasks and priorities we have defined for the next 12 months

covering the time until the end of the initial 3-year program (31 December 2008).

Guidelines for sustainable jatropha projects

Working Module 1

Aim: To agree on minimum standards for large scale investments in jatropha that are shared and agreed upon by all stakeholders. These minimum standards will ensure that these projects do not harm the local population (e.g. food versus oil conflict) nor the environment.

Rationale: Previous projects that involved substantial changes in land use cover often did not fully take into account the livelihood needs of those living in the project area (e.g. disregard of land rights of the local communities or their need for subsistence production). Nor did they pay sufficient attention to the ecological complexities. The high fossil fuel price makes investment in biofuels a highly profitable business. Currently several large scale investments in biofuel plants are being implemented or prepared. Since jatropha grows in the tropical and sub-tropical regions of our world, i.e. in regions that are often economically not favoured, protecting the livelihoods of the rural poor in these areas is a must to ensure that their already precarious situation is not worsened. The need for environmental protection goes along with this.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<ul style="list-style-type: none"> Based on our work on pro-poor jatropha investing, GEXSI has been invited to be a founding member of the multistakeholder dialogue on sustainable jatropha. This process is initiated by a Dutch energy company and a well-renowned consultancy specialised in multi-stakeholder processes and public private partnerships in value chains like FSC timber and RSPO palm oil. The official launch of this initiative has taken place on 30 June 2007 at the Schokland-event' ("Het Akkoord van Schokland") under the auspices of the Dutch Minister for Development Cooperation Bert Koenders. GEXSI is an active member in the multistakeholder dialogue on sustainable jatropha and member of steering committee. GEXSI has inserted social and ecological criteria along its preliminary guidelines in the funding scheme for the 300ha jatropha project in Madagascar, for which we have arranged the financing in July, 2006. 	<p>GEXSI is an active founding member in the multistakeholder dialogue on sustainable jatropha and member of steering committee. In this context we strive to</p> <ul style="list-style-type: none"> identify criteria which allow win-win situations for both the local poor and international investors participate in meetings and workshops of this forum and possibly conduct own consensus building workshops with investors, entrepreneurs, NGOs and research institutes on minimum standards and performance indicators for best practices from our own jatropha network broadening the basis of this stakeholder process by liaising with other jatropha-related organizations (such as the Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-arid Ecosystems in Africa – COMPETE) Promote these guidelines within the GEXSI community and investments facilitated and undertaken by us.

Costs

- to be determined -

Jatropha – Regional Value Chains through Adapted Technologies for the use of pure jatropha oil

Working Module 2

Aim: To create employment opportunities by establishing regional value chains based on the direct use of jatropha oil in adapted engines (stationary and mobile)

Rationale: A large variety of adapted technologies that makes use of jatropha oil is already available. Examples are local diesel electricity generators that run on jatropha oil, jatropha stoves and lamps. However, no systematic stocktaking exists and approaches to link these technologies to jatropha production have been sporadic. At the same time, these technologies respond to the needs of the poor in many locations. Linking the production of these goods to the local production of jatropha allows generating regional value chains that expand employment opportunities.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<ul style="list-style-type: none"> • We have established working relationship with companies which specialise in the conversion of engines to run on pure plant oils: ELSBETT AG and Vereinigte Werkstätten Pflanzenöltechnologie (VWP) • We have conducted an initial feasibility study on the opportunities to introduce a jatropha cooking stove (Protos / BSH) in East Africa • We actively mentor and coach 2 projects which both focus on the direct use of jatropha oil, enhancing local value chains: safiAnzania (Tanzania), JSL Analavory (Madagascar) • We have supported a UK based financial organization in setting-up a company focusing on the production and local sales of jatropha oil in Zambia and Mozambique • GEXSI has facilitated the first large-scale industrial crushing/oil milling test of jatropha which has taken in August 2007. This test has provided us with valuable and detailed information on the quality standards for pure jatropha oil with regard to the direct use in engines • GEXSI has supported the development of a test trial to run a diesel generator (targeted for markets in East Africa) on 100% pure jatropha oil. 	<ul style="list-style-type: none"> • To develop a pilot project which demonstrates the feasibility and commercial viability of adapted technologies based on jatropha (most likely in Tanzania or Madagascar) • To develop a oil quality standard which allows to run engines on 100% pure jatropha oil • To further build up expertise on oil milling technologies suitable for the developing world • To develop a pilot project linked to a GEXSI jatropha project promoting the use of jatropha cooking stoves (as a means to save costs, protect the forests and reduce indoor air pollution).

Costs

- to be determined -

Scaling-up of successful community based initiatives and outgrower schemes

Working Module 3

Aim: To make existing decentralized jatropha activities and grassroots enterprises fit for the market. This will allow their up-scaling providing income and employment opportunities in some of the neediest places of our world.

Rationale: Often, social enterprises evolve out of the work of non-governmental organisations, self-help groups, or grass roots entrepreneurs. Their business concepts service the local poor and offer economic, social, and ecological benefits. Frequently, these business concepts require some initial support during start-up, but become financially sustainable after this phase (they are in the need for what GEXSI calls “blended financing”, i.e. a mix of hard and soft financing). Social enterprises at the community level offer income opportunities for those in desperate need. This income is spent locally creating positive feed-backs for the local economy. GEXSI has identified initial partners who work with smallholder farmers (outgrower schemes) in several countries in East and West Africa as well as in South East Asia. Coaching these social entrepreneurs and assisting them in becoming fit for the market offers the opportunity to build up knowledge for further grassroot jatropha projects.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<p>GEXSI has successfully arranged for the financing of a 300 ha community based project in Analavory, Madagascar. The scheme is operated by a social business, with revenues feeding a community social fund which will finance both community projects and the replication of the scheme in further villages. Achievements are:</p> <ul style="list-style-type: none"> • Identifying of a socially driven investor to provide an unsecured loan on very soft terms • Project development: GEXSI closely works with the German-Malagasy team, providing both technical and financial expertise • Field trip to monitor and report on progress (May 2007, i.e. 6 months after project start) • Strategy to further expand and replicate this successful approach <p>In addition, GEXSI team members have visited projects in Tanzania, Mozambique and Zambia as the nucleus for the replication of similar coaching and mentoring schemes.</p>	<p>Madagascar:</p> <ul style="list-style-type: none"> • Provide agronomical expertise and expertise on carbon credit schemes to the project • Identify grant support for purchase of oil mill • Develop pilot project for direct use of jatropha oil • Develop business plan for scaling up and replication <p>Replicate successful coaching and mentoring in</p> <ul style="list-style-type: none"> • Africa: Tanzania, Mozambique (with further projects are currently under review) • Asia: Philippines, Indonesia, Laos
<p>Costs</p>	
<p>- to be determined -</p>	

Jatropha Carbon Finance

Working Module 4

Aim: To expand jatropha projects by identifying carbon co-financing opportunities.

Rationale: Biofuel is a CO₂ neutral source of energy. Assuming that energy demand would have otherwise been met from fossil energy sources, projects should be eligible for carbon-offset financing schemes (e.g. CDM - clean development mechanism). However, many questions remain open: How to certify decentralized projects? How best to develop and disseminate country-specific methodologies? What are the prerequisites to include reforestation and substitution of fossil fuels in carbon credit schemes? It needs to be investigated under which conditions afforestation and fossil fuel substitution with jatropha oil may be included in carbon finance schemes.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<p>Building up our knowledge base via</p> <ul style="list-style-type: none">• Interviews with organizations specialised on carbon credits, with regard to both the regulated and the voluntary market: One Carbon / EcoFys, Perspectives, EcoSecurities, ForestFinance, atmosfair, PPM500, Climate Change Capital, NewValues etc.• Interviews with project partners who work on carbon credit schemes with regard to reforestation (in Tanzania, in Peru).• We have successfully identified a suitable carbon credit scheme for projects currently coached and mentored by GEXSI	<ul style="list-style-type: none">• Disseminate existing know-how of carbon credit schemes for grassroots jatropha entrepreneurs among our partners• Replicate and scale-up carbon scheme among our partners• Identify with CDM partner suitable methodologies that take into account the specific requirements for outgrower schemes

Costs

- to be determined -

Agricultural research on Jatropha (and its by-products)

Working Module 5

Aim: To increase the profitability of jatropha projects through improved, high-yielding jatropha crops and through the sales of by-products based on jatropha press cake

Rationale: It is a rather recent phenomenon that jatropha's biofuel potential is acknowledged. So, agricultural research has not dealt with jatropha extensively yet. This means that in comparison to other cash crops jatropha has a huge untapped potential. With comparatively small research efforts large increases in yield can be achieved. The same applies for the jatropha press cake which can be used, among others, as an organic fertilizer, as an input for anorganic digestion (biomass electricity generation), as a pellet to burn (on industrial scale or household level), or – in the non-toxic variety – as fodder for animals. Finally, there exists little knowledge on suitable intercropping schemes as well as on alternative energy tree crops which help to diversify and may be better suited to local conditions.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<ul style="list-style-type: none"> • GEXSI has signed a MoUs with The Energy and Resource Institute (TERI), India, with a view to to support the South-South know how transfer between South Asia and Sub-Saharan Africa on jatropha. • We have established working relationship with other major jatropha biofuel research initiatives such as the a) FACT Fuel Foundation in the Netherlands and the 2) the Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-arid Ecosystems in Africa – COMPETE. • We have build up a network of international agronomy experts to help supporting our jatropha entrepreneurs, and have started to disseminate this knowledge to our project partners. • GEXSI has been provided with seeds of a non-toxic variety which we have disseminated among trusted partners, to boost further research and dissemination. 	<ul style="list-style-type: none"> • Facilate access to research programs or initiate research program to the benefit of GEXSI's jatropha entrepreneurs • Promote the use of suitable seeds via exchange of seeds and know how between the projects • Identify suitable uses for the press cake (research, pilot projects) • Follow-up on the GEXSI initiative on non-toxic jatropha

Costs

- to be determined -

National Policy Environment and its Consequences for Jatropha Production

Working Module 6

Aim: To understand how national policies impact on the profitability of jatropha investments. Based on this understanding, to derive recommendations regarding best policy practices for specific jatropha related development objectives.

Rationale: The regulatory framework in different parts of the world (taxation, subsidies, quality standards) determine the profitability of specific jatropha uses. For example, they determine whether it is more profitable to export jatropha or to sell it on the home market or whether to refine jatropha oil into biodiesel or whether it is more profitable to use the oil to run diesel engines for off-grid energy services. Strategically phrased, if a policy maker would like to achieve certain jatropha related policy objectives, some policies are preferable to others.

Currently, countries adopt a large variety of policies. Knowledge about their impact is anecdotal. At the same time, these different policy environments provide a unique learning ground that warrants scrutiny. Through an exchange among practitioners from different countries their experiences could be made available to others.

Achievements (07/06 – 06-07)	Targets (until 12/08)
<ul style="list-style-type: none"> • Taking stock of regulatory framework in Madagascar, Tanzania, Mozambique, and Zambia • Analysis of social biodiesel program in Brazil • Monitoring of world market price fluctuations of pure plant oils 	<ul style="list-style-type: none"> • To take stock on existing regulatory frameworks (case studies) in countries of projects which GEXSI coaches / mentors. • Facilitate learning and exchange on policy options • Initiate and support policy dialogues between development aid, entrepreneurs, and policy-makers to promote favourable legislative frameworks in countries where jatropha is produced (and not yet consumed on a broad scale)

Costs

- to be determined -

Social Investment Biofuel Portfolio & Investment Vehicles

Working Module 7

Aim: To prepare up-scaling of successful pilots by facilitating access to commercial finance as well as by creating biofuel investment vehicles that will invest in jatropha projects.

Rationale: Social entrepreneurs coached by our program need access to hard financing to up-scale their activities. This can be achieved when they are included in a social investment biofuel portfolio

Achievements (07/06 – 06-07)	Targets (until 12/08)
<ul style="list-style-type: none">• Development of a portfolio comprising investment opportunities up to 50m EURO which meet GEXSI criteria; the portfolio includes both investment opportunities of third parties as well as projects which are coached and mentored by GEXSI• Support of launch of a commercial jatropha biofuel investment vehicle – Viridesco Ltd. – investing in own plantations in Southern Africa (in particular: Zambia)• Brokerage of a 125,000 Euro loan to JSL Analavory Biofuels, a social business in Madagascar, coached by GEXSI• Scaling-up of Madagascan company via a refined, commercially oriented, company structure (JSL Biofuels Madagascar) run by members of the GEXSI Biofuels team and local partners	<ul style="list-style-type: none">• Enhancing social biofuel investments in projects reviewed by the GEXSI team• Facilitating the launch of a biofuel investment vehicle co-managed by the GEXSI team

Costs

- to be determined -

6 Team

6.1 The Global Exchange for Social Investment

The GEXSI team brings together long-standing, worldwide development experience and draws upon a range of local and international organizations and partners for additional expertise. The launch of GEXSI was sponsored by a consortium of individuals and organizations from the private and public sectors: Foursome Investments, Schwab Foundation for Social Entrepreneurship, Bain & Company, Open Society Institute, Deutsche Bank, and the German Federal Ministry for Economic Development and the GTZ.

Core team

Dr. Maritta von Bieberstein Koch-Weser

Maritta Koch-Weser is CEO of the Global Exchange for Social Investment-GEXSI. Mrs. Koch-Weser worked for almost 20 years at the World Bank, where she was closely associated with the build-up of environmental and social programs and policies. In her most recent World Bank assignment she was Director for Environmentally & Socially Sustainable Development for the Latin America & Caribbean Region. Following her World Bank assignment, she served for two years as Director General of IUCN -The World Conservation Union. Mrs. Koch-Weser is also President of Earth3000, an international non-profit organization founded in Germany in 2001. Earth3000 supports innovations in governance for environment and development. She holds a Ph.D. from the Universities of Bonn and Cologne, taught Anthropology and Latin American Studies at George Washington University in Washington D.C., and carried out extensive field research in Brazil.

Dr. Andreas Renner

is a founder and partner of GEXSI LLP and runs GEXSI's Berlin office. His key achievement is the building up of GEXSI's Development Investment Unit. Having brokered pilot investment deals in social enterprises in Ecuador, Bolivia and Madagascar, he now manages a deal flow pipeline comprising about 20 projects in three continents – with a strong focus on tropical biofuels. Before he joined GEXSI, Andreas Renner was Project Leader at an international consultancy where he managed, among others, the "Global Water Project Exchange", an international initiative aiming at developing international business partnerships to resolve water problems in areas affected by water stress. Andreas Renner holds a PhD in economics and has published various articles and books on market-based approaches to sustainable development.

Florian Winckler

Florian Winckler joined GEXSI in 2005. Since then he has consistently build up an impressive network of jatropha research and project partnerships. He studied International Relations at the London School of Economics and Political Sciences, History and International Law at Heidelberg University. He has a strong background in conflict analysis and international development. Before he joined GEXSI in 2005 he worked for a political consultancy and for an EU-funded conflict prevention project.

Associated Experts

Nirilalaina Andriamiharisoa

Niri Andriamiharisoa has launched JSL Biofuels SARL, a Malagasy-German company which produces pure plant oils based on jatropha. Jointly with the GEXSI biofuel team Niri further develops and expands his operations in several locations in Madagascar. Niri has a diploma in Industrial Engineering of the Technical University Berlin as well as a diploma in software engineering. Before starting JSL Biofuels, he worked as a project developer for a German energy consultancy as well as for the German-Malagasy consultancy Ombiasy. Niri lives half time in Berlin, half time in Madagascar where he leads his local JSL team.

Dr. Andreas Boehring:

Andreas Boehring is the founder and CEO of safiAnzania. While preparing the groundwork for safianzania as a leading jatropha company based on long-term partnerships with local and smallholder farmers, he works as a senior policy advisor for the Ministry of Natural Resources & Tourism, advising the Tanzanian government in increasing the efficiency of the forest sector. Boehring has a strong background in farming and agriculture, with academic qualifications farming economics, agronomy & soil science, agroforestry, rural development and extension. Having worked with government agencies, parastatals, private businesses and international organizations with long-term assignments in Zambia, Benin, Indonesia, 5 SADC countries & Tanzania, Boehring has acquired proven skills in leading successfully large, multi-disciplinary teams with diverse ethnic backgrounds but also projects and whole programs for more than 16 years. Between 1997 and 2003, Boehring was based in Malawi working for an international organization as regional team leader for the scaling-up of the use of agroforestry among poor farming families in Tanzania, Malawi, Zambia, Mozambique and Zimbabwe. This work included coordinating a regional network of over 100 partners from government, NGO's, CSO's and the private sector as well as facilitating marketing linkages for tree products.

Peter Griffee has 38 years of post-graduate multidisciplinary experience in production of annual and perennial crops generally, including major and underutilized species. Peter Griffee retired in April 2006 from being a senior officer, industrial crops, at the UN Food and Agricultural Organization, Rome. He now consults governments, corporations and non-governmental organizations on the agronomy of biofuel crops in the developing world. His key focus is jatropha. Apart from the scientific and international development aid background, Peter Griffee has managed a 120,000 ha plantation in Brazil. Peter Griffee has lived 19 years in Brazil and has worked in Zambia (3 years), St. Lucia (3), Tunisia (3), and Italy (10).

Reinhard Henning is a biologist by training and one of the most acclaimed experts worldwide in the field of jatropha. Prior to running his consulting agency (www.bagani.de), Mr Henning worked with German Development Agencies with projects in Western Africa (Cote d'Ivoire/ Mali) that pioneered in using jatropha for energetic purposes already during the mid 80's. For the last 25 years, either in his capacity as senior expert for various projects of the GTZ (German Agency for Technical Cooperation) or as a free-lance consultant, he advised jatropha projects of various sizes and approaches worldwide on all issues surrounding jatropha (please see his CV

in the annex for a comprehensive reference list). Mr. Henning is also member of the Advisory Board of JSL Biofuels Madagascar.

Klaus Elsbett is managing director of the ELSBETT AG, the pioneer of pure plant oil technologies for modern diesel engines. Building on the engine construction expertise of his father and company founder, Klaus Elsbett has adapted engines to run on pure plant oil (including jatropha) since the 1970s in countries such as Mali, Brazil or Indonesia.

6.2 Partners

In implementing this program we are co-operating with several entrepreneurs, social investors, research organizations and development aid agencies. Short descriptions of the jatropha projects we currently support or review for a potential inclusion in our work can be found in the Annex.

GEYSI Jatropha Network – project status report (June 2007)

Annex A 1 (AFRICA)

No.	Region	Country	Type	Size	Status	Personal Knowledge	Interest in Network	Interest in Funding	Complementary Dev Aid Potential
1	East Africa	Madagascar	Community based plantation (social businesses)	300ha	planted in 2006	yes	yes	yes	yes; company is a social business which aims to replicate its community based approach
2	East Africa	Madagascar	Outgrower scheme based on wild jatropha	n.a.	outgrower scheme started in 2007 (15 tons pilot completed)	yes	yes	yes	yes; very strong impact on poverty reduction
3	East Africa	Madagascar	Plantation + outgrower schemes in 3 clusters	8,000 ha	feasibility study and contracting ongoing	yes	yes	yes	yes; strong impact on poverty reduction (feasibility study under-funded)
4	East Africa	Tanzania	Outgrowers + contract farming	2,000 small-holders	operations since 2006	yes	yes	yes	yes; very strong focus on working with smallholder farmers
5	East Africa	Tanzania	Franchise scheme	20,000 ha	1,000 ha implemented; scaling-up in preparation	yes	yes	yes	- to be clarified -
6	East Africa	Tanzania	Plantation and outgrower scheme (croton)	60,000 ha	Feasibility study exists, project start t.b.d.	yes	yes	yes	yes; strong focus on integration of smallholder farms
7	East Africa	Zambia	Plantation + contract farming	800 ha plus	Financing secured, project not started yet	yes	yes	no	option to add on outgrower scheme with smallholders
8	East Africa	Mozambique	Plantation + outgrower scheme	10,000 ha	3 year old 50 ha pilot; scaling-up planned	yes	yes	yes	framing of outgrower scheme
9	East Africa	Ethiopia	Plantation + outgrower scheme	3,000 ha	Feasibility study under way	no	(yes)	yes	- to be clarified -
10	West Africa	Mali	Community based scheme	1000 ha	Project start Sept 2006; potential to scale under	no	(yes)	n.a.	yes (project based on former GTZ project)

					review				
11	West Africa	Cameroon	Plantation + outgrower scheme	up to 100,000 ha	Planning phase, currently under review	no	yes	yes	- to be clarified -
12	West Africa	Ghana	Plantation + outgrower scheme	2,000 ha	Small pilot existing; scaling-up under review	no	yes	yes	- to be clarified -
13	Southern Africa	Namibia	outgrower scheme	Some hundred hectares	Small pilot existing; scaling-up under review	yes	yes	yes	
14	West Africa	Cameroon	Plantation + outgrower scheme	up to 10,000 ha plantation	Nurseries in place, 2000 ha being already planted out	yes	yes	yes	

GEXSI Jatropha Network – project status report (June 2007)

Annex A 2 (ASIA)

No.	Region	Country	Type	Size	Status	Personal Knowledge	Interest in Network	Interest in Funding	Complementary Dev Aid Potential
1	South Asia	Pakistan	Pongamia outgrower scheme	tbd.	feasibility study in preparation	yes	yes	yes	yes; strong focus on poverty alleviation
2	South Asia	India	Jatropha and Pongamia plantation + outgrowers	1,000 ha plus	project implementation since 2007	yes	yes	yes	- to be clarified -
3	South East Asia	Laos	Decentralized outgrower scheme, local energy supply	up to 100,000 ha	community outgrower schemes under way; processing and distribution not yet established	yes	yes	yes	yes; local energy supply, rural electrification
4	South East Asia	Philippines	Professional outgrower scheme	up to 100,000 ha	Nursery & management established; scaling-up in preparation	yes	yes	yes	yes; poverty alleviation, local energy use in remote areas

5	South East Asia	Indonesia	Outgrower Scheme	n.a.	feasibility study in preparation	yes	yes	yes	yes; local value chain
6	South East Asia	Indonesia	restoration of former mining areas	Small	800 ha – 3,000 ha planned for initial project	yes	yes	tbc	- to be clarified -
7	South East Asia	Shaba/ Malaysia	outgrower scheme	Some hundred hectars	Small pilot existing; scaling-up under review	yes	yes	yes	
8	South East Asia	Vietnam	outgrower scheme	Some hundred hectars	Small pilot existing; scaling-up under review	yes	yes	yes	

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Annex A 3 (LATIN AMERICA)

No.	Region	Country	Type	Size	Status	Personal Knowledge	Interest in Network	Interest in Funding	Complementary Dev Aid Potential
1	Central America	Guatemala	Cluster of Plantations	500 – 1,000 ha	Project start 2005	yes	yes	tbd	- to be clarified -
2	Central America	Honduras	Community-based plantation (incl castor oil etc.)			no	yes	no	yes; local economic development
3	South America	Peru	plantation & outgrower scheme	10,000 ha	Feasibility study + business plan + initial contracts existing	yes	yes	yes	yes; local economic development
4	South America	Brazil	Plantation + outgrower scheme (social biodiesel program)	10,000 ha	Land secured; project start in late 2007	yes	yes	yes	yes; project implemented jointly with biodiversity protection scheme of larger 22,000 ha area

Research and Technology Partners (selection):

TERI – The Energy and Resource Institute, India

FACT Fuels Foundation, The Netherlands

COMPETE - Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-arid Ecosystems in Africa (EU network)

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