BIOFUEL PARTNERSHIPS:
from battleground to common ground?

The effects of biofuel programs on smallholders' use of land and rights to land in four countries

With a foreword by Marcus Colchester

The Hague (The Netherlands), 2012

Colophon

Authors:
Jorge Quiñónez (Funder, Honduras)
Darío Oyuela Sandino (SNV, Honduras)
Evelyn Hernández Martinez (SNV, Honduras)
David Erazo López (AGROENHSA, Honduras)
Marcel Gomes (Repórter Brasil, Brazil)
Verena Glass (Repórter Brasil, Brazil)
Annemiek Schrijver (freelance researcher, The Netherlands)
Hermawansyah (Lembaga Gemawan, Indonesia)
Laili Khairnur (Lembaga Gemawan, Indonesia)
Starjoan D. Villanueva (AFRIM, The Philippines)
Dicky de Morrée (Cordaid, The Netherlands)
Otto Hospes (Wageningen University and Research Centre, The Netherlands)

Photography: Funder, SNV, Repórter Brasil, Lembaga Gemawan, AFRIM, Annemiek Schrijver

Design: Forest&Bold (Antwerp, Belgium)

This publication and the preparatory writeshop were financed by Cordaid

ISBN/EAN: 978-90-73726-74-1
NUR: 961

Table of contents

Acknowledgements

back to table of contents

This publication is the product of a writeshop and was made possible by the concerted efforts of the following persons and organizations:

- The participating authors (see list of contributors for further details)
- The scientific coordinator, Otto Hospes (Wageningen University)
- The editor, Frank van Lierde (Cordaid)
- Logistic support, Albertina Rocha Delgado (Cordaid)
- The writeshop coordinators, Kor Voorzee and Dicky de Morrée (Cordaid)

We are grateful for:

- The financial and logistical support of Cordaid
- The English language editing by DUO
- The lay-out and graphic design by Forest&Bold

Foreword

back to table of contents

Biofuels have indeed become a battleground between exponents of different notions of sustainable development. To some, biofuels are no more than misguided vehicles for land grabbing and deforestation that are gobbling up the lands of indigenous peoples and small farmers, laying waste farmlands, undermining food security, wreaking impoverishment and landlessness, and provoking protest and the ensuing repression and human rights abuses in response. To others, biofuels represent an escape from fossil fuel dependency, a green investment opportunity, a way of saving or even generating foreign exchange, and a new environmentally responsible road to rural development and poverty alleviation. Both sides can point to significant bodies of evidence to substantiate their arguments. The overriding conclusion that should be drawn from this hyper-polarized debate, however, is that it is not the crops or the technologies that are intrinsically evil or good, but rather the way they are developed that leads to good or bad consequences on local communities and their environments.

This useful collection of six case studies by Cordaid partners in four countries helps bring out some key lessons to back up this conclusion. In some circumstances, indigenous peoples and small farmers are being badly victimised by biofuel schemes. When their land rights are not secured, when corruption or negligence by state agencies gives lands to companies without regard for local peoples' land rights and livelihoods, when smallholders get trapped in debt and dependency on investors and processors, when farmers are provided poor extension and when there are no effective means of redress or rule of law, then biofuel schemes are a detriment to the lives of local people, sometimes a devastating one.

In other situations, biofuel schemes can bring both social and environmental benefits. When land rights are secure, local government is supportive, community consent is given, credit is provided on fair terms, mixed farming systems are enhanced and not replaced by monocrops, where markets are local and accessible, contracts are transparent and fairly negotiated, agricultural extension services and training are adequate and surplus land is available, then biofuel schemes are being welcomed by the small farmers they target. They can be a means of improving their lands, incomes, and security of livelihood.

The experiences documented in this report encompass a whole variety of crops, including castor beans, jatropha, cassava and oil palm. Each crop has its potential and limitations, and each is better or more poorly suited to certain environments, growing systems and markets. But the underlying lesson that emerges from the case studies is that it is the political, institutional and legal frameworks that are the main determinants of impact of these biofuel schemes on local people. Biofuels are designed to be a new source of energy, but if the conditions are not right or not corrected, their development will favour the rich and powerful and further dispossess and disempower those whom current systems make poor and powerless.

This report comes as an intense global debate rages about how to ensure that agribusiness development leads to fair and sustainable outcomes. Like it or not, agricultural expansion and intensification is unavoidable as the global population passes the seven billion mark, markets expand, diets diversify, non-renewable energy sources run low and new uses, such as biofuels, are found for crops. There is overwhelming evidence that it is exactly because the critical conditions for success identified in this report are so rarely achieved, that most agribusiness expansion today is causing 'land grabs'.[1]

This has led to a proliferation of standard setting: the agribusinesses themselves have adopted new voluntary standards in roundtables[2], investors have adopted new 'Farmland Principles'[3], the FAO, the International Fund for Agricultural Development, the World Bank and the United Nations Conference on Trade and Development have adopted 'Principles for Responsible Agricultural Investment (RAI) that Respects Rights, Livelihoods and Resources'[4], governments working through the FAO are now adopting 'Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests'[5], while the various bodies in the UN Human Rights system have issued numerous reports and new guidance on the need for a human rights-based approach to agricultural development. The problem is that for the very reason that these standards are international and voluntary in nature, they do not directly challenge or change the laws and policies or the practices of governing elites in developing countries, nor the activities of investors and land developers. This is why national human rights bodies in developing countries are calling on states to reform their laws and policies to secure indigenous peoples and local communities' rights[6].

1 Anseeuw, W., L. Alden Wily, L. Cotula, and M. Taylor, 2012, Land Rights and the Rush for Land: Findings of the Global Commercial Pressures on Land Research Project, International Land Coalition, Rome.

2 Such as the Roundtable on Sustainable Biofuels, the Roundtable on Sustainable Palm Oil, the Roundtable on Responsible Soy, Bonsucro, etc.

3 http://www.unpri.org/commodities/Farmland%20Principles_Sept2011_final.pdf

4 http://www.responsibleagroinvestment.org/rai/node/256

5 http://www.fao.org/nr/tenure/voluntary-guidelines/en/

6 See, for example the Bali Declaration on Human Rights and Agribusiness, available at http://www.forestpeoples.org/topics/palm-oil-rspo/publication/2011/bali-declaration-human-rights-and-agribusiness-southeast-asia-

As the findings and recommendations of this report make clear, the biofuels boom will only benefit local communities and indigenous peoples when it comes with national and local changes in the way lands are developed. A shift away from large schemes towards smallholder production is a first step, but many smallholder schemes themselves are inequitable and disempowering, and in many countries the trend is towards further marginalization[7]. Challenging such systems so local peoples' rights are secured and farming can develop on terms chosen by farmers will require strong social movements, a supportive civil society at the national level and international solidarity. The authors of these studies provide good examples of what we all need to do.

Marcus Colchester, Director[8]
Forest Peoples Programme[9]

7 For example, see John McCarthy, Piers Gillespie and Zahari Zen, 2011, 'Swimming Upstream: local Indonesian production networks in "globalized" palm oil production,' World Development, in press.

8 marcus@forestpeoples.org

9 www.forestpeoples.org

Introduction

back to table of contents

By Dicky de Morrée

BACKGROUND TO THIS REPORT

Recent years have seen a rapid and accelerating expansion of biofuel production. This biofuels boom is being largely driven by governments' concerns about high oil prices, prospects for rural development, export opportunities and its potential for climate change mitigation. But alongside potential positive outcomes, concerns are also being voiced about the role of biofuels in recent food price rises and the negative impact on access to land for people who depend on land-based agricultural livelihoods.

Cordaid began working on the theme of small producers and energy crops in 2008. This work sought to promote integration of small producers into value chains in order to increase their income and to enhance access to local energy. It also sought to reduce the risks of energy crop production, especially the damaging impacts of investments in large scale monoculture production that often marginalizes smallholders and local communities. Eventually, Cordaid identified some 15 partner organizations in Asia, Latin America and Africa seeking to integrate small producers into biofuel value chains or – particularly in the case of large scale monoculture energy crop production – reduce smallholders' risk of being marginalized. As work progressed, it became clear that for energy crops to be beneficial to smallholders, the security of land tenure was essential.

The introduction of biofuel projects and programs, be they small-scale or large scale, leads to new production models and related changes in smallholders' land rights and land use. Formerly stable systems of customary property and use rights are under pressure from new claims from external, commercial actors. The uncertainty of land rights is increased by the fact that ownership and use rights for most agrarian land in Asia, Latin America and Africa are simply not registered. Where resource claims of local users, governments and incoming biofuel producers clash, the spread of commercial biofuel production may result in poorer groups losing access to the land on which they depend. This in turn may have a negative impact on local food security and the economic, social and cultural dimensions of land use. However, there are also some promising approaches under which large- or medium-scale and small-scale production can co-exist. In these situations, secure land rights for smallholders put them in a stronger position in their negotiations with larger players in the biofuel value chain.

Surprisingly, despite the importance of the land issue in relation to smallholder energy crop production, with the exception of a few studies (see next article in this report) very little has been published on this subject; likewise, it is hardly mentioned in international biofuel policies or the various sustainability schemes for biofuels. In 2011 the Center for International Forestry Research (CIFOR) published a paper on seven EU-approved voluntary sustainability schemes for biofuels. It concludes that although respecting land rights is a social sustainability criterion, it is quite unlikely that any of these schemes will actually protect the existing land rights of smallholders.

OBJECTIVES OF THIS REPORT

Against this background the central objective of this report is to identify practices and policies (of government, business and civil society organizations) that can directly and indirectly help smallholders to secure their rights to land, to keep or gain control over the use of land and to be included in value chains on favourable terms.
In order to achieve this objective, six cases in Honduras, Brazil, Indonesia and the Philippines were analyzed for insight into how smallholders were included in different production models for energy crops and how the conditions of their inclusion affected land use and land rights. The case studies were also used to gain insight in how and why smallholders' access and rights to land change as a result of biofuel production.

SCOPE AND LIMITATIONS

This report focuses on the local experiences of smallholders in different areas in four countries with the effects of the introduction of energy crop production on their land rights and land use. The involvement of smallholders takes different forms in different production models: as independent producers, linked to a plantation through contract farming, and linked to a plantation through the plasma nucleus scheme. This report tries to relate the production models to certain consequences for land use and land rights. As this report focuses on land rights and land use, other effects of the energy crop production such as on food security or on ecosystems are not addressed in depth in this report. Other limitations of the report are that it does not include a case study from Africa, and that the experiences at local and national level are not linked to the international policy context (including sustainability and other relevant standard-setting processes).

OVERVIEW OF REPORT

The report starts by giving a thematic overview with an introduction to the central theme of changes in land use and land rights of smallholders as a result of a biofuel program or project. It defines the central concepts of production models and property rights and lists a number of lessons on biofuels, smallholders and land rights from earlier studies. The thematic

overview is followed by the six case studies. The report ends with the main conclusions on the extent to which our findings confirm earlier studies or provide new insights. Finally, it gives recommendations to governments, companies and civil society organisations.

ABOUT THE PRODUCTION OF THIS REPORT

This report was produced using the writeshop methodology, developed by the International Institute for Rural Reconstruction (IIRR) in the Philippines. A writeshop is a participatory process used to produce a publication in a short time. To that end, a writeshop team was formed consisting of authors from several of Cordaid's partner organizations in Honduras, Brazil, Indonesia and the Philippines, a scientific coordinator from Wageningen University, an editor from Cordaid and two other Cordaid staff members. This report was produced after three rounds of critiquing and redrafting of the texts of the articles, during the writeshop, which took place from 28 November – 2 December 2011 in The Hague.

REFERENCES

German, L. & G. Schoneveld (2011) *Social sustainability of EU-approved voluntary schemes for biofuels. Implications for rural livelihoods*. Working paper 75. CIFOR, Bogor, Indonesia.

Biofuels, smallholders and land: exploring production models and property

By Otto Hospes

INTRODUCTION

The last decade has set the stage for the worldwide proliferation of biofuel policies, programs and projects. This proliferation has been driven by various motives that have each fuelled and framed the policies, programs and projects in specific ways. These include environmental motives (like reducing greenhouse gas emissions), economic motives (like agricultural sector development), political motives (like reducing dependence on fossil fuel production and imports) and development-oriented motives (like poverty alleviation or smallholder development) (Mol 2007). National governments in both the North and the South have been leading drivers of the proliferation of biofuel policies, programs and projects by setting more or less binding targets for national production and offering fiscal and financial incentives for the production of bio energy. Attracted by these incentives, companies and banks have increased their investments in biofuel production. Non-governmental agencies and social business actors have launched biofuel projects to offer smallholders new economic opportunities and promote environmentally sustainable ways of production at the same time.

Whatever motive has driven biofuel policies, programs and projects, and whatever actor was the kick-starter, main driver or engine, the worldwide proliferation has come along with new use of land, new use of crops, or accessing existing agricultural land for energy cropping. In many countries and regions, the new land use is taking place on idle lands, wastelands or poor soils. New crops are often cultivated on not-so-poor or fertile soil. Biofuel production and accessing land for energy cropping has increasingly targeted both agricultural and forested lands.

The new or increased use of land and crops for biofuel production has not gone uncontested. Fierce debates have emerged on the pros and cons of using crops and agricultural or idle land for energy production. Sharp rises in worldwide food prices in 2008-2009 intensified the debate on the use of food crops or agricultural land for energy production (Eide 2008, Sachs 2007). Biofuel production and policies have also come up in the debates of engaged political economists and political ecologists as a new dimension of agrarian change and neo-liberal policies (Borras et al 2010). In the recent international conference on global land-grabbing held in Brighton, foreign investment into large scale biofuel production emerged as a major issue.

PRODUCTION MODELS

Governments and business have developed different production models for the new use of land, the new use of crops, and the expansion of biofuel production into agricultural or forested lands. These production models have defined or re-defined the use of land and land rights in several ways. The model that has been embraced by national governments and business alike despite the increasing controversy surrounding it is the large scale plantation model, in which biofuel companies control (or try to control) all aspects of production and processing (also referred to as the "nucleus estate" model, see Bijman et al 2009, p. 6). Alongside this model, there are at least four other production models, each of which has a role or place for smallholders:

1. Small-into-large models, in which a large plantation incorporates the production of small-scale farmers. An example is the nucleus-plasma plantation model in Indonesia: smallholders use a part of their land (plasma) to produce crops for themselves and transfer the right to harvest crops from the remainder of their land to the owner of the mill (the nucleus, i.e. the plantation company).
2. Contract farming, in which biofuel companies enter into a contract with independent small-scale farmers. The partnership models used by energy companies in Brazil are an example: small-scale farmers plant an oil crop on their land and conclude a short-term or long-term contract with a company.
3. Smallholders as independent producers of the energy crop and owners of the processing plant (as can be found in Honduras).
4. Tripartite arrangement of smallholders, a cooperative and an energy corporation, in which smallholders are members of a cooperative that concludes buy-sell contracts with an energy corporation (as can be found in Honduras, the Philippines and elsewhere).

These models may be found side-by-side in the same country. Also, direct and indirect relationships or institutional arrangements between small-scale farmers and biofuel companies may be made in parallel. Finally, different institutional arrangements may be made between different key players of value chains (like processors, banks, farmer cooperatives, etc.).

PROPERTY RIGHTS

Every production model defines or re-defines property rights. Property rights refer to the composite of rights to land, crops and/or other natural resources, like water and seeds (Benda-Beckmann et al. 2003). The conceptualization of property as a

"bundle of rights" serves two purposes: first, it is to emphasize that different actors can have different rights with regard to the same resource or space. Two types of land rights are the right of use or harvest and the right of alienation (transferring ownership rights through the sale of land). Other rights are the right of access, the right of land management and the right of exclusion (right to refuse people to access the land). An institutional arrangement between a small farmer and a large scale processor on the production of biofuels may define or re-define the use or use rights for the land or the crops but not the right of alienation or right of full ownership.

Secondly, the notion of property as a "bundle of rights" serves to emphasize that tensions may arise when different actors exert different rights to the same source or space. In theory, the temporary right to use land or a crop does not pose a threat to the full ownership right. However, a long-term right to use the land or long-term obligation to dedicate the land or the crop to biofuel production may imply a de facto transfer or erosion of full ownership rights.

RESEARCH QUESTIONS

Surprisingly, very few studies provide insights into how biofuel programs and projects have affected the use of land and the rights of land of smallholders. Likewise, only a few studies have explored how different production models have differently affected land rights and use of land. Finally, while the proliferation of biofuel programs and projects entails new use of land, crops or forests, the subject of ownership has been sorely neglected in the various policy and development debates on biofuels in relation to issues such as food security or land grabbing. In many respects, these programs and projects have barely been considered from the perspective of the realities on the ground. This study attempts to redress this.

The central question is: how have smallholders' land rights and uses of land changed after the introduction of biofuel projects and programs? Specifically:

1. How have different models of biofuel production affected smallholders' rights and use of land?
2. How has the change of smallholders' rights of land affected the use of land, and vice versa: how has change of the use of land affected smallholders' land rights?

To address these issues, we will present six case studies, each exploring how a production model has affected rights and use of land by smallholders in a specific context. All case studies but one are related to the production of biodiesel and the use of oil crops for this purpose, the exception being a case study on cassava for bioethanol. The oil crops are jatropha, palm oil and castor bean. The cases come from Brazil, Honduras, the Philippines and Indonesia.

Before we present these experiences and lessons, we want to provide an overview of earlier studies that describe how rights and use of land have been affected by the introduction of biofuel projects and programs, and more specifically, the differences in this respect between the various production models. This will allow the reader to compare and contrast the authors' experiences and identify what new insights the cases present. At the same time, this helps to identify what insights are still lacking and needed to both increase our understanding of both the changes in land rights and land use by smallholders as a result of biofuel projects and our ability to identify how smallholders can secure land rights and land use under the various production models.

Community of San Jose de las Marias, Choluteca, Honduras, August 2010. Don Toribio Izaguirre shows jatropha cultivation in association with sweet potato (Ipomoea batatas).

LESSONS ON BIOFUELS, SMALLHOLDERS AND LAND RIGHTS FROM EARLIER STUDIES

Until now, very few studies have directly addressed the question of how biofuel projects affect rights and use of land by smallholders. The two that do are an FAO report (2009) on small-scale bioenergy initiatives and a series of publications by IIED (Cotula et al. 2008; Sulle and Nelson 2009; Nhantumbo and Salomão 2010) on biofuels and land access.

The FAO report (2009) is based on 15 case studies from 12 countries in six regions in Asia, Latin America and Africa. One of the three bio energy types covered in the study is biofuels or energy crops. The two other bioenergy types included are natural bioresources (that is, naturally growing plants which are not cultivated by humans) and bioresidues (that is, wastes from agricultural, forestry or industrial activities).

With regard to land and resource rights, the FAO reports that these are "a crucial concern, particularly in bioenergy projects involving cultivation of energy crops or access to natural bioresources" (FAO 2009, p. 30). With respect to land rights, the FAO concludes that "different situations are again notable in the cases covered, varying primarily by country based on the land reform and allocation systems within each country, and sometimes between each actor in the chain" (ibid). The report identifies three categories of the security of rural producers. In some cases small farmers enjoy "secure land ownership titles". In other cases small farmers have "a lease on land issued by a company on condition of adherence to a contract negotiated with producer associations or have usufructuary rights". Still other cases are characterized as "unclear or no land tenure" (p. 31). Property rights of smallholders differ widely in the 15 cases. Smallholder rights to land can be full and secure in some situations but limited and unclear in others. Unfortunately, the FAO report does not provide insights into different production models and how they affect land rights and land use by smallholders.

The first publication of IIED (Cotula et al. 2008) on biofuels and land questions whether the biofuels boom is driving exclusion of poor people, or more specifically whether poor people are losing access to land as a result of biofuel programs and projects. On the basis of literature review and interviews with key informants, the authors conclude that the rapid spread of commercial biofuel production "may result – and is resulting – in poorer groups losing access to the land on which they depend" where "competing claims exist among local resource users, governments and incoming biofuel producers" (p. 2). Discussing different production models, the authors conclude that "large scale privately owned plantations are not the only economically viable model for biofuel feedstock production." Having noted this, they recommend that "producer's associations, governments and investors may want to explore alternative business models such as joint equity in production and processing" (p. 3).

The IIED country report on biofuels and land access in Tanzania (Sulle and Nelson 2009) identifies three existing and emerging production models:

1. large scale plantations, with biofuel companies controlling all aspects of production and processing;
2. contract farmers and independent suppliers – with biofuel companies entering into contracts with local farmers;
3. hybrid models – combining the production of large plantations and small-scale farmers.

The authors conclude that "there are fundamental differences amongst biofuel companies and their business models, and their impacts on local land access" (Sulle and Nelson 2009, p. 59). The model that is likely to create the most frequent negative local impacts and grievances is the model of large scale plantations. "Local people do not understand the process, or their rights and opportunities; land valuations are carried out using inadequate criteria and benefits are promised by companies but not incorporated into a written contract. Of most concern is the high level of risk taken by communities where the proposed investment relies on the transferred land to be used as collateral for bank loans, prior to compensation being paid" (ibid, p. 4).
The authors further conclude that the most promising model from a local livelihood and land access perspective is the model of contract farmers and independent suppliers. "Companies [...] engaged entirely in contracted and independent smallholder production of biofuel crops appear to have no direct negative impacts on local land access – though more subtle changes in land access within the community may still occur in the longer term" (p. 59). The authors do not draw conclusions on the hybrid model.

The authors point to "alternative land holding structures such as village land trusts or equity-based joint ventures" that "hold promise for future ways to stimulate private investment and allow for greater collaboration between investors and local communities" (Sulle and Nelson 2009, p. 4).

Oil palm harvest in the Brazilian Amazon.

The IIED's Mozambique country study on biofuels and land access (Nhantumbo and Salomão 2010) does not intend to assess how different production models affect rights and access to land, but highlights problems with competing claims on resources and lack of institutional coordination: "Poor planning and lack of compliance with existing land use plans, and lack of proper institutional coordination among sectoral government agencies are resulting in conflict between different resource uses (e.g. biofuels, food, conservation, tourism) and users (e.g. biofuel investors and local communities)" (p. 3). Related to this, the authors conclude that threats to community rights over land and other resources result from the "inability to enforce the provisions of the progressive legislation that regulates natural resource manage-ment, protects community rights and reconciles the interests and rights of competing resource uses" (ibid, p. 4). Having noted the lack of institutional coordination among sectoral government agencies, the authors propose developing "more accurate agro-ecological zoning" (ibid, p. 4).

With regard to cropping on marginal land in Mozambique, the authors maintain that, "The claim often made that feedstock for biofuels can be commercially grown on marginal land is misleading" (Nhantumbo and Salomão 2010, p. 4).

The authors conclude that the effectiveness of community consultations as a tool to protect community rights remains questionable. They also did not come across "genuine and enforceable partnership agreements between investors and communities" in their case studies in Mozambique (ibid).

REFERENCES

Benda-Beckman, F. von, Benda-Beckman, K. Von, and Wiber, M. (Eds). 2006. "Changing properties of property." Berghahn Press.

Bijman, J., Slingerland, M. and Baren, S. van. 2009. *Contractual arrangements for smallholders in biofuel chains; a case study of Jatropha in Mozambique*. Policy brief as part of partnership programme between the Netherlands' Ministry of Foreign Affairs and Wageningen UR on Globalisation and Sustainable Development.

Borras, S.M., McMichael, Ph. and Scoones, I. 2010. "The politics of biofuels, land and agrarian change: editors' introduction." *Journal of Peasant Studies* 37(4): 575-592.

Cotula, L., Dyer, N. and Vermeulen, S. 2009. Fuelling exclusion? *The biofuels boom and poor people's access to land*. International Institute for Environment and Development and FAO.

Eide, A. 2008. *The right to food and the impact of liquid biofuels (agrofuels)*. Report published for the FAO, Rome.

Sachs, I. 2007. *The biofuel controversy*. UNCTAD report.

Mol, A.P.J. 2007. *Boundless biofuels? Between vulnerability and environmental sustainability. Sociologia Ruralis* 47(4): 297-315.

Nhantumbo, I. and Salomão, A. 2010. *Biofuels, land access and rural livelihoods in Mozambique*. International Institute for Environment and Development and FAO.

Sulle, E. and Nelson, F. 2009. *Biofuels, land access and rural livelihoods in Tanzania*. International Institute for Environment and Development and FAO.

Case study 1: Honduras

back to table of contents

Energy crops, partnerships and new opportunities - Experiences in the Southern Part of Honduras

By Darío Oyuela, David Erazo and Evelyn Hernández

INTRODUCTION

The southern part of Honduras has one the highest poverty rates in the country. It is characterized by climate and soil conditions that are extremely adverse for traditional food crops such as maize (*Zea maiz*), beans (*Phaseolus vulgaris*) and sorghum (*Sorghum vulgare*), crops that are the basis of local food security and rural incomes.

The prevailing soil and climatic conditions in this region are characterized by isolated rains and long periods of drought. This area is known as the "corridor of the longest heat wave." On top of all this, farming communities have to deal with massive deforestation and degraded soils, caused mainly by unsustainable cultivation practices. These conditions severely restrict agricultural production and negatively impact not only food security but also on economic, social and environmental security.

This paper addresses two key questions concerning this part of the country:

- How has the introduction of jatropha (*Jatropha curcas*) on infertile and poor soils changed the use of smallholders' lands?
- How has the new production model offered opportunities to small farmers to improve their income under these adverse circumstances?

To this end, the authors present:

- a brief description of implemented projects;
- the experiences related to the land rights and land use changes;
- participation of smallholders in the value chain; and
- finally, the conclusions from these experiences.

ENERGY CROPS: NEW OPPORTUNITIES?

Under the assumption that smallholders can take advantage of the potential use of their lands for new economic opportunities, in late 2009 SNV launched the CORDAID-supported project "Production of biodiesel with an inclusive business approach" with the goal of increasing incomes of small producers through proper management and use of agro-forestry resources, and by linking them to the value chain of a jatropha oil processing company.

Subsequently, in June 2010 the Royal Embassy of Denmark approved a second SNV project called "Reforestation of degraded areas in the South Zone of Honduras". The goal of this project is to mitigate the effects of climate change through reforestation and sustainable production of jatropha on degraded land or land in the process of degradation.

The joint purpose of both projects is to establish smallholder cultivation of jatropha on 400 hectares of mostly idle or unproductive soils. SNV provides technical advice related to better agricultural practices, the establishment of sustainable plantations, partial investment in management of the jatropha plantations and the exploration of carbon credit certification.[10]

SMALLHOLDER LAND RIGHTS

Six years ago farmers in the area set up a cooperative named CARPROSUL. The two projects referred to above work with two different kinds of smallholders, independent ones and those associated with CARPROSUL.

These smallholders are in possession of small plots of land classified as *ejidos* (municipal property), provided to the producers under the limited rights of *Dominio Útil o Dominio Pleno*, meaning they do not own the land, but they have the rights of use and benefits of the land. The farmers can become owners of the land after 20 years of "peaceful possession", a legal term denoting that there are no officially registered conflicts between the land user (farmer) and the land owner (municipality).

Property rights under this legal agreement cannot exceed 25 hectares in the rural area. This is why producers that are part of the projects produce on 1 to 25 hectares each.

A minority of the participating smallholders do have collective land titles. These titles are granted by the National Agrarian Institute (INA) as part of the process of agrarian reform.

SELECTION OF PEOPLE, SELECTION OF LAND

Historically, smallholders have used their land for migration agriculture (that implies moving from one plot to another until it

10 According to the definition of forest in Honduras, jatropha meets all the requirements for classification as a tree, so there is an option to enter into the voluntary carbon market as a reforestation process.

is no longer possible to do so). This traditional form of agriculture is based on the practice "slash-and-burn", meaning the regular removal of the vegetative cover and subsequent burning to establish traditional crops. This has led to massive deforestation and accelerated soil erosion, and ultimately to a decrease of land fertility and of agricultural capacity.

This decline of productivity and the inefficient use of land, cultivated mainly with basic grains, have driven people to abandon their lands. Once they have abandoned their land, farmers cannot explore other productive possibilities like forestry due to lack of education and financial means.

Community of San Jose de las Marias, Choluteca, Honduras, December 2010. Members of the farming enterprise organization are technically assisted in situ for the proper management of jatropha plantations.

In order to change this inefficient use of land, several parties (including smallholders and SNV) introduced a new jatropha production model. This project was partly motivated by a 2007 SNV study, which showed the big potential of jatropha on degraded and poor land, as this native species is highly resistant to extreme climate and soil conditions. Don Geovanny Zepeda, president of the CARPROSUL cooperative: "The introduction of jatropha is a blessing. Many farmers possess several hectares of often very poor land on which they cannot grow traditional food crops like maize, sorghum or sesame. With jatropha they can make a more efficient use of their land. From 14 hectares perhaps only three and a half are used."

One of the key phases of the jatropha projects was the selection of participating farmers and areas. SNV and CARPROSUL decided to give priority to the interests of local farmers. The decision was made to first make a selection of participating smallholders and then to designate the areas. Ten of the 29 community groups of CARPROSUL responded positively to the idea. This low acceptance was due to negative experiences with the introduction of new crops in previous years.

The goal of the first project was to cultivate 200 hectares with jatropha. The participating farmers combined did not represent enough land to reach this target, so SNV and CARPROSUL decided to give independent smallholders the opportunity to join the project. From that moment there were two types of farmer within the group of participating farmers.

By May 2010, 150 participating small farmers had been selected and the goal of 200 hectares had been met, but there were more local farmers who wanted to participate. These farmers were put on a waiting list. In June 2010, the farmers on this waiting list became the participating smallholders in the second project. By the end of 2010 some 368 smallholders (72% men and 28% women cultivating an average of 1.08 hectares of jatropha) were actively participating in the jatropha project.

There were several basic criteria to select the producers. These were:

- In addition to fertile land for basic food crops, farmers needed to possess some deforested, degraded or very low fertility land.
- Farmers had to show active interest in cultivating jatropha and to choose one of the following production models: forest plantation, intercropping or live fences. In this way farmers were given the opportunity to use jatropha as an additional source of income.
- Farmers had to agree to dedicate a maximum of 5 hectares for jatropha cropping, in order to properly manage their land and their crops (jatropha is an extremely labour-intensive crop).
- Farmers had to show a commitment to implementing SNV best environmental practices.

Municipal Environmental Unit authorities designated and certified specific areas as deforested, degraded or in the process of degradation and therefore suitable for jatropha cultivation. These became the project areas. Don Teófilo López, an independent smallholder who participates in the project: "We were told that it was an important requirement that the land had to be already deforested. We were asked never to cut down trees for jatropha cultivation. We had to respect and protect existing vegetation."

In some areas the project did not work well because the soil was below sea level, clay-based and very damp because of excessive rainfall. Not even jatropha could grow on such degraded soil. This led SNV and CARPROSUL to change the selection methodology: first select land and afterwards make the selection of participating farmers. "We do not want to sell or pawn our land," explains Don Geovanny Zepeda. "A lot of farmers leave their bad lands and migrate to the cities. We want to stay here in Choluteca, even if it is dry and poor. With this jatropha project we can now first select our degraded areas for jatropha cropping. This gives us the opportunity to stay on our lands. Now degraded lands become suitable lands."

Since the projects started, only three smallholders have changed their minds and abandoned the project.

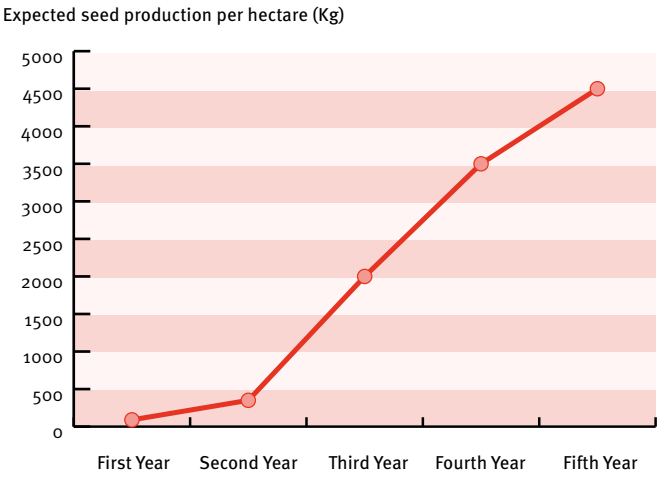
SOCIO-ECONOMIC AND ECOLOGICAL EFFECTS

The change in use of land in 400 hectares planted with jatropha is beginning to have some socio-economic effects. It generates seasonal employment for some of the cultivation activities; it creates job opportunities for men and women in an area with high unemployment rates. Don Vicente, one of the farmers: "The

problem is not finding people who want to work, the problem is getting the money to pay their wages. This is a daily problem because wages are paid on a daily basis."
Another important positive effect is that jatropha cropping helps smallholders diversify and increase their incomes at the family level. According to Don Emilio, member of the Monitoring Board of CARPROSUL, "With two hectares of jatropha, in this first year I harvested and sold 227 kilograms of seed so far, meaning an income of 80 US dollars[11] ..."

The expectation was the following:

Proyections of Jatropha Production in Honduras



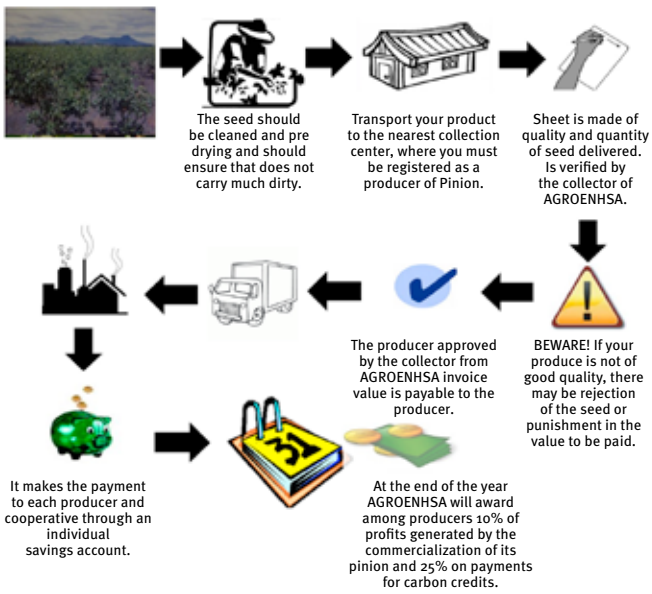
In addition to income generation, plantations established on slopes (about 98% of the cultivated areas of the projects) help diminish the impact of heavy rains, reducing soil erosion and facilitating rain infiltration. This will have a positive impact in a region known for its environmental vulnerability[12] (droughts, floods, landslides, etc.). Recently, due to heavy rains, smallholders in the region lost more than 90% of their maize and sorghum and sesame and bean harvests were completely lost. Jatropha, on the other hand, is very well adapted to the extreme conditions of southern Honduras.

VALUE CHAINS AND INCLUSIVE BUSINESS APPROACH

There is a third strategic partner in the projects, Honduras Agro Energy Corporation (AGROENHSA). This company is responsible for the purchase of the jatropha seeds of smallholders who participate in the projects.

SNV, CARPROSUL and AGROENHSA have established a relationship of trust. Trust building is part of the socio-economic inclusion approach, which is a central principle of the projects and the production model. All parties established a cooperation agreement to look for economic alternatives, based on an active, equitable and reciprocal partnership, leading to improved incomes and self-employment conditions for the smallholders and business opportunities for the company.

Production model scheme:



Based on the above, AGROENHSA and CARPROSUL have signed a buy-sell contract to purchase 100% of the jatropha production for an initial period of 10 years, automatically renewable for 20 additional years. The contract ensures smallholders a fair price that offers a profit margin for both the smallholders and the company. This margin is pre-determined for both sides by a Technical Committee.

This Technical Committee has the authority to define the standards of jatropha quality, pricing and marketing. The starting price is 255 USD per ton of seed. This price can be raised when the petroleum price exceeds 100 USD per barrel.

One result of the inclusive business approach in the negotiations was that AGROENHSA agreed to pay CARPROSUL 10% of its profit from processing and marketing of raw material provided by CARPROSUL and its affiliates. In addition, AGROENHSA gives the smallholders 25% of the net income AGROENHSA receives from the sale of carbon credits obtained through the production and processing of jatropha for renewable energy.

The company is also responsible for providing technical assistance to the producers. The company is required to sell seedlings with high genetic potential at a price below market price. Additionally, AGROENHSA has a responsibility to provide post-harvest technology design (pulped and dried fruit and seeds).

At present AGROENHSA is buying seeds from the smallholders at a price that is higher than the contract stipulates (USD 350 per ton). This is not only because the price of petroleum currently exceeds 100 USD per barrel. It is also meant as an incentive for participating smallholders to continue with the project, since both parties have a win-win relationship.

11 The minimum monthly wage in Honduras is 250 USD.
12 Next to Bangladesh and Burma, Honduras figures highest on the Global Climate Risk Index (www.germanwatch.org)

Community of La Cayuya, Choluteca, Honduras, December 2010. Miguel Hernández shows the first fruits of jatropha cultivation (8 months old plantation).

WHAT HAS CHANGED?

So far, the projects have not had a significant impact on the land rights of smallholders. But in the future the contract signed between CARPROSUL and AGROENHSA could affect the land rights of smallholders, since they have a long-term agreement. The agreement stimulates them to use and work land they have *in dominio útil o dominio pleno*, and this can eventually allow them to acquire their property titles.
Land use, on the other hand, has changed for smallholders in the southern part of Honduras with the introduction of jatropha. Today participating smallholders have a promising opportunity to increase their income with a new energy crop. The project has turned adversity and environmental hardship into ecological and economic opportunities. Today, thanks to jatropha, 368 farmers are taking advantage of poor soil and extreme climate conditions.

In short, the production model offers smallholders the opportunity to improve their incomes through a more effective use of land and allows them to exploit areas that have been abandoned for many years.

REFERENCES

German Watch. GlobalerKlima-Risiko-Index 2012 (für die Jahre 1991-2010).
http://www.germanwatch.org/

SNV. *Biodiesel production from Jatropha curcas with an inclusive business approach in sustainable farming*. Internal working paper.

SNV. *Climate Change Mitigation Initiative: Reforestation of degraded areas in the South Zone of Honduras through the sustainable cultivation of Jatropha curcas (Pinion)*. Internal working paper.

Case study 2: Honduras

back to table of contents

Beyond the fuel versus food controversy: the case of Gota Verde in Yoro

By Jorge A. Quiñónez, Peter Moers and Titus Galema

INTRODUCTION

As Honduras does not produce any fossil fuel itself, it heavily relies on imports. This dependency pressures the country to look for alternatives. In 2003 and 2004, several foreign missions demonstrated the possibility of using biodiesel or pure oil as a substitute for fossil diesel. In 2006, the Dutch NGO Social Trade Organization (STRO) took the initiative to explore the possibilities and the feasibility of biofuel production in Honduras with the involvement of small producers. The biofuel project, launched in January 2007, was called Proyecto Gota Verde (Green Drop Project) and was implemented in the department of Yoro. Setting up a small-scale biofuel production for local energy consumption is meant to create employment, stabilize income sources for small farmers, reduce their dependence on loan sharks, avoid soil erosion, protect water sources and increase food production.

Fuel is an essential input for food production (agricultural mechanization, transport, processing). In many developing countries the fuel supply is irregular and unreliable, especially in rural areas. Local biofuel production can stabilize the fuel supply and thus contribute to food security.

This was evident in 2008 in the Yoro region itself, when fuel shortages caused major interruptions in the ploughing activities, while farmers associated with the Gota Verde project were able to continue preparing their land for production.

The Gota Verde project has attracted a lot of attention, both nationally and outside of Honduras.

KEY QUESTION

The key question of this paper is: ***Is the production of biofuels using the model of intercropping as developed in Yoro, a good alternative for helping small producers increase their income without threatening their food security?***

Before presenting the project and the production model, we will first provide some background on the national biofuel policy.

THE NATIONAL BIOFUEL POLICY

Even though the Government of Honduras has written and approved a law for the production and consumption of biofuels, it is not really supporting energy production from biomass. The majority of electrical energy in Honduras is still generated in thermal plants running on fossil fuel. Palm oil production and sugarcane are large scale alternatives for biofuel production in the country, but the are still only marginal as energy sources.

This policy is changing little by little. There are some small indications that in the near future bioenergy will be considered a real option. For example a Technical Biofuel Unit has been installed in the Ministry of Industry and Commerce. Meanwhile, overseas companies have shown interest in investing and developing biofuel production in Honduras, mostly in jatropha production. Honduras still has a lot of marginal land suitable for jatropha.

Although the government has shown interest, there are still no functional policies in place.

THE GOTA VERDE PROJECT AND THE NEW USE OF LAND

The project was initiated by STRO and the Foundation for Rural Enterprise Development (FUNDER), a Honduran foundation that seeks to transform local farmers into competitive rural entrepreneurs through capacity building. The project intervention zone is located in the north of Honduras, in the Yoro department (one of the 14 departments of Honduras). This department has eleven municipalities of which three have been selected for the biofuel project because of their low poverty indexes and availability of marginal lands with favourable biophysical conditions for oil crop cultivation. The department of Yoro has a population of approximately 480,000 (projections for 2006) of which some 30% can be considered as the Economically Active Population (EAP) (SINIMUN, 2005, Honduras).

In the Yoro region the selected villages are Morazán (34,000 inhabitants), Yoro (74,000) and Sulaco (14,000). So far, 350 hectares of jatropha have been established since 2007. The main activities of the project are: technical assistance to the small farmers and processing of the jatropha seeds into Pure Plant Oil (PPO). This oil can be transformed into biodiesel, soap and biopesticides.
The farmers were selected through a process of personal meetings, invitations, visits to pilot plots and group meetings. The smallholders are the owners of their own land, so they have the rights to the land. The project is based mainly on individual owned land areas, but in some cases collectively owned land areas were also included.

The project involves 388 small and medium-sized farms farmed by their owners (on average 1-3.5 ha per family), farmers with low investment capacity and low socioeconomic standing. Some 10% of the participating farmers are women. The project founded *Biocombustibles de Yoro SA* (BYSA), a company created to commercialize the biofuel products and basic food crops. Today 185 farmers are shareholders of this company. The farmers' main activity remains the production of basic grains for food (maize, beans, etc.), selling the surplus - whenever possible - as a source of family income. Jatropha can be seen as an additional crop that will increase their income and support energy security in the region. The intercropping production method has also resulted in food production being boosted.

Jatropha intercropped with maize in Yoro.

Gota Verde was designed as a pilot project and depending on its results, it will be replicated in the near future in other regions of Honduras.

ORGANIZING SMALL FARMERS INTO FOOD AND ENERGY PRODUCERS

The project was planned by several European NGOs (STRO, HIVOS, FACT Foundation, Dajolka, IEEP, AGERATEC) and implemented by FUNDER, a Honduran foundation specialized in co-investing in farmer-owned or co-owned rural enterprises (it has a portfolio of more than 22 enterprises). The original concept was to start as a monoculture project with jatropha as the only crop. The conclusion after the first (monoculture) jatropha plantations was that farmers were producing less food. Since the jatropha plant does not produce a significant amount of fruits during the first four or five years, farmers prefer to dedicate their time to short-cycle crops as a source of food and income, especially maize and beans.

As a result, weeds take over the jatropha plantations, growth is delayed and yields drop. To address this problem, Gota Verde decided to introduce a mixed cropping scheme (intercropping), leaving four to five meters of space between the jatropha rows for the farmers to grow beans and maize or other crops. Maintenance and fertilization of these grains also benefits the jatropha crop. In turn, the jatropha hedges reduce pests and diseases and also function as wind breakers. In Honduras most farmers only farm part of the arable land they possess. In fact, according to estimates, Honduras only cultivates 30% of the 2.8 million hectares appropriate for agriculture. Asking small farmers why they do not plant all of their lands, the problem most frequently cited is the lack of access to credit. Financial institutions are very reluctant to finance basic grain production, especially to small farmers who tend to consume (and not sell) a large part of their production. As a result, many farmers sow with minimal inputs or are forced into deals with middlemen ("coyotes") that rake in a large proportion of the farmer's margin.

To deal with that reality, a credit fund was created to help the producers to plant both the jatropha crop and the basic food crops. To obtain this credit the producer has to be willing to plant jatropha, otherwise the credit will not be approved. Jatropha can provide a stable financial basis to make small farmers independent from (unwilling) financial institutions or (exploitive) loan sharks, although external support remains necessary at first.

To organize the producers according to the FUNDER methodology, a farmer-owned biofuel processing enterprise was set up with the name Biocombustibles de Yoro, S.A., with FUNDER initially holding 51% of the shares of the enterprise, giving it the position of "watchdog" supervising the progress of the project and making sure that objectives are met. Its task is also to help overcome the initial phase of distrust among farmer-shareholders. After the enterprise has been consolidated both organizationally and financially, FUNDER plans to sell its shares to local investors. No shareholder (except for FUNDER) is allowed to have more than 5% of the shares.

BYSA began providing loan access to farmers that normally would not be considered by the traditional financial institutions. BYSA offers a collective guarantee (production capacity, buildings,

well-founded business plan, assured markets, technical assistance) that individual farmers cannot offer. BYSA can also obtain discounts for buying inputs at wholesale prices.

Field inspection of young jatropha plants in Yoro.

CONCLUSION

After four years of implementing the project of intercropping jatropha and basic grains in the Yoro region, we can answer the question we raised at the beginning of this article.

It is quite clear that the small producers have raised their income thanks to the project. Once the small farmers are part of the project and decide to work with the jatropha crop, they are provided with loans to plant basic grain crops. Before the project, access to any credit programme was either not possible or, where it was, the credit available was not adequate for the farmers. The sale of the grain surplus on the local market gives the farmers a good profit, allowing them to buy basic needs like food and clothes. The average net income per crop ranges between USD 150.00/ha of bean per producer, and USD 425.00/ha for maize. In addition, some small producers (those whose jatropha plantations are older) are already receiving some income from the selling of the jatropha seeds to BYSA. The benefits received by the producers are and will be bigger once the jatropha plantations reach maturity.

It is clear that the situation of the farmers has improved as compared to prior to the project. This conclusion is supported by the data in the tables below (BYSA, Honduras, 2011).

TABLE 1
Economic Data for Beans

Description	Before Project	After Project
PRICE USD/qq	30.00	30.00
PRODUCTION qq/Ha	15.00	25.00
PRODUCTION COST qq/Ha	450.00	600.00
TOTAL INCOME USD/Ha	450.00	750.00
PROFIT USD/Ha	0.00 -	150.00
Cost/benefit	1.00	1.25
Rate of Return	0.00%	25.00%
Cost per Unit Produced USD	30.00	24.00

BYSA, Honduras, 2011

TABLE 2
Economic Data for Maize

Description	Before Project	After Project
PRICE USD/qq	15.00	15.00
PRODUCTION qq/Ha	40.00	70.00
PRODUCTION COST qq/Ha	425.00	625.00
TOTAL INCOME USD/Ha	600.00	1050.00
PROFIT USD/Ha	175.00	425.00
Cost/benefit	1.41	1.68
Rate of Return	41.18%	68.00%
Cost per Unit Produced USD	10.62	8.92

Intercropping instead of pure (monoculture) jatropha plantations in Yoro has demonstrated that food availability has never been at risk; on the contrary, the production of staple foods has actually increased during the project. In other words, in the case of Yoro jatropha is the smallholder's future.

Without any doubt, jatropha is a good bio alternative for the production of fuel. However Gota Verde being a long-term project (due to the nature of the jatropha plant), it is still too early to conclude that this is the best alternative for fossil fuel or whether this kind of production model of biofuel can create and stimulate local economies.

One thing is certain, however. If the government does not adapt existing policies and plans for implementation to stimulate biodiesel production, Honduras will continue to be extremely dependent on imported fossil fuels.

Case study 3: Brazil

back to table of contents

Same, same, but different - A case study on the impact of biodiesel contracts on family farmers in Bahia

By Annemiek Schrijver

INTRODUCTION

Brazil has been a leader in the production of biofuels for more than forty years. The country is already a major producer of sugarcane for bioethanol, and biodiesel has been gaining ground fast. Nowadays, many state authorities see biodiesel production as the answer to a number of problems. In 2004 the Brazilian government's Ministry of Agriculture, Livestock and Resources (MAPA) and the Ministry of Agricultural Development (MDA) launched the PNPB (Programma Nacional de Produção e Uso de Biodiesel, or National Program for the Production and Use of Biodiesel). Production of biodiesel would decrease the country's dependency on the import of energy and reduce CO_2 emissions. Additionally, former President Luiz Inácio Lula da Silva underlined the opportunities of biodiesel production for smallholders. Smallholder inclusion in the biodiesel production chain would lead to increased integration within the value chain and be a significant shift in the economic and social organization of these smallholders to improve their living conditions by creating a secure and stable market for their produce. Integrating the smallholders within the biodiesel chain, social inclusion, has been officially formulated as the main goal of PNPB.

In order to achieve social inclusion and increase production and demand, several instruments have been built into PNPB. Firstly, the law introduced an obligatory mixture of biodiesel in diesel fuel (2% in 2008 and 5% in 2013; being that in 2011 6% had already been attained, targets may be adjusted to 10% in 2014 and 20% in 2020). Secondly, in order to stimulate producers to buy raw material from smallholders and in the process promote their participation, the social fuel seal was implemented. Biodiesel producing factories gain tax benefits and subsidies when buying a certain amount of their primary input from family farmers. Finally, partnerships have to be created between growers and producers through contracts. The contracts are meant to secure both the production of primary material by the family farmers and the processing of the crops into biodiesel by biodiesel producing companies.

KEY QUESTION

Most family farmers live in Brazil's northeast. This being one of the country's poorest regions and highly dependent upon agriculture, the farmers here are given special attention. But the question arises to what extent the signing of contracts between these family farmer producers and biodiesel companies has led to social inclusion of the farmers. Another key question is to what extent such social inclusion within biofuel value chains has affected land rights and land use. To address these questions, we present the case study carried out by De Smet (2010) on the biodiesel program implementation in the northeastern state of Bahia. This study allows us to analyze the changes in the relationship between family farmers and their land after joining PNPB under a specific kind of contract.

THE PLAN: SOCIAL INCLUSION BY CONTRACTS

The main instrument used to reach social inclusion is the contract. Contracts can be made in several forms and between a number of actors: private companies, municipalities as representatives of PNPB, state institutes providing technical assistance and conducting research, federations and confederations which are legally entitled to represent the farmers and have a controlling function, investment banks, and finally trade unions and farmer cooperatives. The farmers themselves are not directly involved in this contracting process; they, in turn, have contracts with their farmer cooperative. Furthermore, NGOs cannot be included within this contracting process, as they are not entities that can legally represent the farmers.

This case study will focus on contracts between companies and farmers registered within the DAP (*Declaração de Aptidão ao Pronaf*) database. Farmers in this database, maintained by Pronaf (*Programa Nacional de Fortalecimento da Agricultura Familiar*), declare that they are family farmers officially registered as owners of the land, that they are actually using the land, and that they primarily use family labour. The contracts stipulate that the companies provide funding for seed (castor and food crops) and seedlings in the case of the oil palm, technical support, a guaranteed minimum price (10% above the market price at the signing of the contract), transportation of the produce, and a secure market to sell their produce. Furthermore, the farmers can request a loan from the bank. The contract is initially a one-year agreement with the option for a five-year extension. With a five-year contract, the farmer is obliged to sell his or her produce to the company for a set price. Technical assistance is provided by governmental institutes. These institutes tell the farmer how much to plant, how to combine the oil crop with food crop production, what soil management practices to follow, and how to harvest the produce.

THE OUTCOME: EXCLUSION OF CONTRACTS

In Jussara, in the Irecê region in the state of Bahia, many farmers are currently producing traditional oil-crops, such as *mamona*

(castor bean, *Ricinus communis*). Castor bean has been cultivated for decades by family farmers. It is distributed locally and reaches the cosmetic and chemical industry through various middlemen. Once the farmers have harvested bags of castor bean, they bring the bags to the middlemen by bike or by horse. The middlemen give the market price of that day for castor bean, minus two to four reais. Over time, a cultivation and distribution structure is formed between the middlemen and the farmers, based on long-term relationships of trust. Common to castor bean production is its intercropping system with cassava. Castor bean as well as cassava are both security crops: they provide the farmers with a minimum income and secure local food production. Other crops are beans, maize, cotton, cassava and sorghum.

Smallfarmer in the Northeasten state of Bahia grows castor bean as an alternative for economic sustainability.

The introduction of the PNPB contract with Petrobras as biodiesel producing company, however, changed the use of the castor bean, as it came with major changes in land management and decision making processes, as well as distribution and marketing systems. For agricultural practices, the contracts stipulated that the company would provide for seed (both food and castor bean) and technical assistance. But as a result of financial problems the farmers did not receive credit in time to take pre-sowing soil measurements, and the (mainly low quality) seed was delivered late. Additionally, technical assistance was substandard, mainly due to too few technicians being available for the number of farmers in the project. Castor bean production was low and the harvest was poor. As the contracts had no disaster clause, there was no insurance to make up the shortfall for the families. The harvest was in fact so poor that the amount of produce was too small to make it worth the cooperative's while to come to the village to collect, so the farmers had to take it to the city themselves and sell it directly to the cooperative, which under the contract did not even pay for it in cash. "No, it is all a big fuss just for those few extra reais per bag," one PNPB-contracted farmer said.

Furthermore, the farmers prefer to maintain their traditional intercropping system. Even though the companies support intercropping production systems, intensive castor bean production was pushed by the local governmental institutes with the promise that the biodiesel value chain would give the farmers higher prices and a stronger and secure output market. However, intensive production means devoting more time and resources to castor bean cultivation. In times of drought though, farmers prefer to dedicate these resources to food crops. As a result of these difficulties encountered with producing for a biodiesel company, in addition to an existing value chain for castor bean which is embedded in daily life and which has a long history of creating mutual trust relationships, farmers preferred to stay out of the contracts. They find the existing value chain as more secure and in line with their daily needs of food and income.

CONTRACTS ROOTING IN THE LAND

The contract between farmer cooperatives and biodiesel companies is said to be inclusive and covers almost all aspects of production and distribution. On the part of the farmer, this generates a great dependency on the company, the governmental institutions and the technical assistance organisations. The contract means a significant shift in decision-making power on lands worked by the family farmers. Of course, the existing value chain also had its restrictions in the production and distribution system, but it gave the farmers more freedom to decide on each step in accordance with the goal of minimising risks to secure their livelihoods. Though the biodiesel contract offers the prospect of a stable and secure market, it transfers the right to such decisions to one single partner. And when that single partner cannot comply with the contractual agreements, the farmer loses trust and does not want to participate.

The federations and farmer representation groups have frequently argued that PNPB mainly used the family farmers as producers for the primary material in order to allow these companies to maintain their tax benefits. It is the companies who decide what happens on the farmers' land, and what happens to their produce. As one farmer describes: "At the moment, the contracts signed are only covering the production and exchange of the seeds. Even though Petrobras allows discussions and negotiations [...] Petrobras is the final entity that makes the decisions, which sometimes are not supported by the movements." (pers.com. Fernando da Silva MST, 2009). This statement makes clear that within the contracting negotiation and implementation processes, Petrobras is the main player deciding on the priorities and the conditions of biodiesel crop production.

If access to land is to be defined as a "bundle of rights," family farmers lose decision-making power over their own land by entering in the biodiesel agreement. Through the contract they give away this right and put the land management decisions in the hands of others, leaving them with little or no control. With this in the balance, many family farmers see inclusion within the biofuel value chain as neither beneficial nor desired. From PNPB's perspective, this may be called social exclusion, but that does not necessarily make it so. Firstly, farmers might choose not to become part of a project (self-exclusion). They are already part of traditional value chains and the social and economic relations that come with it, in this case the palm oil and castor bean value chains. Secondly, PNPB inclusion leads to exclusion on decision-making power over their land, the land which is of utmost importance to their subsistence.

Couple of smallfarmers in Bahia left alone by their sons who needed to work elsewhere to garantee the economic survival of the family.

TIME TO WARM UP

PNPB has made the partnership contracts the embodiment of social inclusion. These contracts were designed to reach the obligatory mix of biodiesel, which entailed a huge increase in biodiesel production within a few years primarily driven by smallholders cultivating the same crops on the same lands they were already farming. There is one difference though: the targets on oil crops were set much higher than warranted by the productivity of the family farmers in those crops. The contracts were geared towards intensive production in order to have the farmers supply the primary material. But this went too far for the farmers, as they felt (whether this was the reality or not) that the production of the oil crop took too many of their resources away from food crops. Likewise, partly because of the existing market for castor bean and partly due to insecurities within the biodiesel market, it proved difficult to engage the farmers in the biodiesel market, as it seemed to go against local practices and conveniences. Therefore, the contracts did not succeed in creating inclusion, because the farmers appeared to prefer to exclude themselves. The speed of the implementation of the program may have been another reason for the difficult transition. Perhaps the process needs time to warm up. We also see that the path to social inclusion envisioned through PNPB (production of primary material for biodiesel) might lead to exclusion in important segments of farmers' livelihood, in this case the right to the direct management of their land, which is entirely handed over to other contracting parties. While this might not be a problem as long as the contracting parties respect and comply with the contract, one must question whether handing control over land to biodiesel companies can be considered to be social inclusion.

REFERENCES

Abramovay. *A political-cultural approach to the biofuels market in Brazil*, Faculty of Economics and Administration University of São Paulo, São Paulo, Brazil. 2008.

Almeida F. *Biodiesel: uma análise econômica e ambiental*, Universidade Estadual de Santa Cruz, Desenvolvimento Regional e MeioAmbiente, Ilhéus Bahia, Brazil. 2006.

Almeida et. al. *Apropriação dos recursos naturais e o Programa Nacional de Produção e Uso do Biodiesel*, BahiaAnálise e Dados, Salvador V. 16 Nr. 1 (79-88) Bahia, Brazil. 2006.

Hospes, O. and Clancy, J. *Unpacking the discourse on social inclusion*. In: Helmsing, B. and Vellema, S. eds. Value chains, inclusion and endogenous development: contrasting theories and realities. Routledge Press. 2011.

MCT *Programa Brasileiro de Biocombustíveis: Probiodiesel*. Ministério da Ciência e Tecnologia, Rede Brasileira de Biodiesel, Brasilia, Brazil. 2003.

Nass et. al. *"Biofuels in Brazil: An Overview"*, Crop Science Society of America Madison USA. 2007.

Pires, M. et. al.*Biodiesel: uma nova realidade energética no Brasil*. Bahia, Análise e Dados, Salvador, Brazil. 2006.

Schrijver A. *Biodiesel in Bahia: Exploring narratives on biodiesel production*, unpublished thesis, Wageningen University. 2010.

Smet, K. de. *Biodiesel and social inclusion: unpacking the social inclusion discourse of the Brazilian biodiesel program*, unpublished thesis, Wageningen University. 2010.

Wagenaar, D. *The Brazilian National Biodiesel Program: an example of innovative governance towards the social inclusion of family farmers?*, unpublished thesis, Wageningen University. 2009.

Personal communication Fernando da Silva MST, April 4 2009

Case study 4: Brazil

back to table of contents

New partnerships: promise or poison to small farmers? Palm oil biofuel production in the Amazon

By Marcel Gomes and Verena Glass

INTRODUCTION

The Amazon region is the new focus of one of the main Brazilian biofuel policies. Besides providing the country with a renewable alternative to petroleum diesel, the National Programme for Production and Use of Biodiesel (*Programa Nacional de Produção de Uso de Biodiesel*, PNPB) also targets the development of biofuel crops in family farming lands. The first stage of the policy focused on castor bean in the northeast and the current stage focuses on palm oil in the Amazon. The objective is to include the small farmers in the biodiesel production chain, in order to increase income and create better living conditions in farming communities.

Map of Brazil: pink areas show palm oil plantations in the North of the country.

During the nineteen seventies, the people of Brazil considered the Amazon basin to be a "green desert." The population and the national economy were concentrated in the south and northeast of the country. But times have changed. Today, about 15 million Brazilian citizens live and work in Amazon towns, in hubs like Manaus, an industrial city, and Belém, a commercial town. New waves of migrants have moved to small and medium-sized cities, which have greatly expanded their agricultural and livestock farming. And as long as the price of Amazon land remains relatively cheap, the agrarian reform policy means that the Amazon will be the destination of choice for new rural settlements.

The large presence of small farmers in Amazon – most of them living in poor conditions – has motivated the government to introduce the PNPB in the region, and especially in the state of Pará, where the palm tree has been cultivated for decades. In order to regulate crop expansion, the federal government announced three initiatives in 2010:(1) publication of the Palm Oil Agro-ecological Zoning; (2) a congressional bill to regulate environmental aspects of palm plantation; and (3) launching a programme of incentives for palm production (the Programme for Sustainable Palm Oil Production). At the same time, the government has created a special credit line for the crop, started land titling and played an active part in negotiating conditions for crop expansion with the business sector.

According to the government, this set of measures will stimulate the creation of partnerships between companies and small farmers, one of the main directives of PNPB. When the government launched the programme in 2004, it also announced the Social Fuel Seal, a tax incentive for companies that establish partnerships with family farmers to produce raw material for biofuels. In northern Brazil, palm biodiesel companies are exempt from paying social security taxes (PIS/PASEP and COFINS) if they can demonstrate that at least 15% of their budget is spent on small farmers. According to the government's strategy, that would be an incentive to create inclusiveness for family farming, where families guarantee a certain production volume and companies guarantee the purchase of this volume.

Only seven years after the launch of PNPB, a whole series of changes in land use can be seen in the Amazon. Field research by Repórter Brasil in July 2011 on small farms in the state of Pará reveals that some families have sold their land to palm oil companies or stopped the production of traditional crops, like maize and manioc in order to focus on oil palm cultivation. These changes in land use raise serious questions, and this paper is intended to explore some of the answers. Firstly, in what ways is Brazil's palm oil policy changing land use? And more importantly: are those changes generating any positive impact for small farmers in terms of improving their livelihoods?

PALM OIL "LOCAL BOOM"

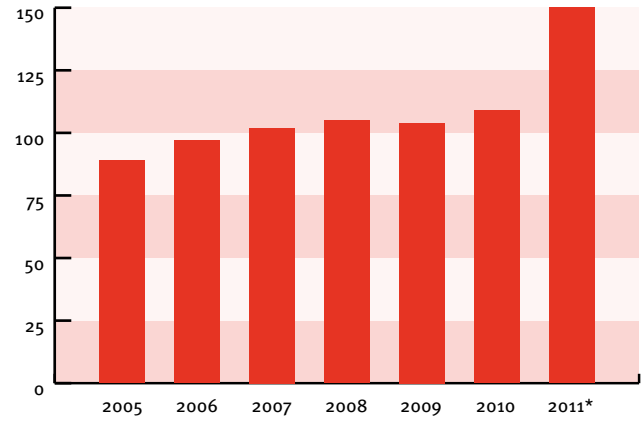
The first experience with the integration of small farmers was an initiative by the private company Agropalma in 2002 at the town of Moju, in the state of Pará. Today, about 180 families are planting ten hectares of palm oil each for that company, for a total of 1,800 hectares. Established in a partnership with the state government, the municipal government of Moju, Banco da Amazônia (Basa) and Embrapa as an alternative for production and income generation

for families, the project has never been directly related to PNPB (despite Agropalma formerly holding the Social Fuel Seal).

Newcomers Biovale, Petrobrás and ADM (Archer Daniels Midland), in turn, intend to produce biodiesel in Pará and to invest in integration projects and in obtaining the Seal (together with the purchase or lease of large areas for their own plantations). In terms of numbers, Biovale talks of integrating 2000 families, Petrobrás, of over 3000, and ADM, of 600. The idea is that each partnering family will plant ten hectares on their own lands under a 25-year contract with the companies. They will borrow up to 80.000 reais (BRL 1 = USD 0.55) in bank loans in order to establish the plantation and start production. This type of partnership spares the enterprise from any expenses with buying and clearing the areas, establishing and managing the plantation, hiring workers and paying their legal rights, but at the same time guarantees farmers that their production will be sold – under conditions and prices determined by the companies. With these newcomers, the palm oil plantation area is set to increase from 109,000 hectares in 2010 to 150,000 hectares in 2011.

Palm oil planted area in Brazil

In 1,000 hectares



* Repórter Brasil estimate

source: IBGE

The government touted family farmers with promises of palm income as high as 2000 reais per month, presented its forecasts for integration projects and set aside credit lines. When this package of "good intentions" failed to materialize in the rural reality, the inevitable questions arose.

We take the example of a community established at a branch on km 16 of the PA 252 state road in the Lower Acará River area, in the municipality of Acará. It is July, and it's hot. Very hot. Marcos Teixeira dos Reis, in his thirties, is home, and his wife, a health community agent, is at work. They are one of the families that took a 65.000 reais loan to plant ten hectares of palm in a partnership with Biovale.

Reis is desperately counting on the promise of a 2,000-reais monthly income after six years of planting palm oil, but right now things are tight. With no one to work the field with him, he estimates he will need to hire two or three other helpers to establish the plantation, clear vegetation to make way for palm trees, and to take care of the plantation. With the 500 reais a month he now receives from the bank as part of the loan, he has to live and pay his workers. It is not enough. "So I hope to find a job in construction to pay the daily workers and unfortunately there will be no time left to take care of our manioc and annatto plantations," he explains. Those plantations are his only source of income today.

THE YOUNG MAN'S DRAMA

What Reis did not tell, however, is that all the work done in recent months was in vain. The young man's drama was only revealed by his neighbour, Jucimara da Conceição. Also a partner of Biovale, she takes us to the cleared area and shows us around. "Do you see those palm seedlings in the middle of the woods? They belong to Marcos. But he planted them on our land by mistake, and now he will have to uproot everything and plant it again. Poor man. And look at that pile of seedlings that were left from the last time he planted, because he just couldn't handle them all." With no money and counting only on his own labour, Reis will not be able to do the tillage that palm demands in its first years (cleaning, fertilising, and pruning the plantation), says Jucimara. And that will substantially damage the productivity of his palm trees in the future. "Without production, there's no money to live and pay the debts. I don't know how he's going to manage," the neighbour comments.

But she and her husband Walmir Matias are not much better off. They received seedlings from Biovale without taking a loan from Banco da Amazônia (Basa) because they have had a 12.000 reais debt with the bank since 1994. "At that time, we planted oranges, but we lost them all in a fire. Then we planted coconut, and that didn't work out." Jucimara says Biovale advanced them 1,500 reais, the seedlings and the fertiliser, and made them sign a promissory note for this assistance. They also held the land deeds, even though they signed no official partnership contract.

Unable to work the plantation by himself, Matias looked for work as a bricklayer at Biovale in order to pay the two farmhands he needed to clear the palm area. The 500 reais the company pays him in three instalments are shared by the couple with their two farmhands. "Which is nothing, for four people. We are going into debt and we don't know how we'll manage to pay them. It's a dreadful situation," says Matias. He says they already plan to sell their family house to pay the original debt to the bank and to pay Biovale, and then try to get a loan from Basa.

AT LEAST ONE "HAPPY END"

On the other side of the PA 252 road, 63-year-old retiree Antonio dos Santos Oliveira is better off. Owner of 125 hectares of land, he also planted ten hectares of palm oil, but the family earns their income from a solid production of annatto, pepper, papaya, coconut, banana, watermelon and orange. As his children have left the property, Oliveira hires labour, which is paid by the property's fruit production. His palm plantation is in good shape.

Family sold its land for the palm oil company and is living now in a poor district of the city of Acará, in the Brazilian Amazon.

In the same city, Jucimara da Conceição is indebted to the bank and to the palm oil company.

With Biovale as intermediary, he took a loan of 52,234 reais from Basa, but he insists that he has no partnership contract with that company. As for expenses, he says he bought 1,430 seedlings at 14 reais each, amounting to an initial debt of 19,600 reais. On top of that comes the fertiliser provided by Biovale every three months and glyphosate (a weed killer) every two months. "For ten hectares, I use 20 litres of weed killer and spend 200 reais," he explains, but he says he does not like the obligation. "That's too much poison going into this land. It kills everything, and then it goes to the water and God knows the damage it will cause in the future."

Asked what he expects from his partnership with Biovale, he speaks guardedly. "I have my other plantations, I can hire other people to work and pay off my debts to the bank. Now, for the other local families, I think it will be a disaster. You know, in the beginning they sent some technicians to provide support - now they never come anymore. The company came to me telling wonderful stories about money and a good future, and I decided to take my chances. But you know what? This palm is not mine. What I do is tillage, but the palm belongs to them."

THE FUTURE

The reality of the microcosm of this small community raises questions about the future of so-called palm oil integration projects. Firstly, some small farmers face difficulties when introduced to commercially viable production of palm oil. The rules of agribusiness give rise to dissatisfaction among small farmers who have been working on the land according to traditional practices.

As a pioneer in the partnership with family farmers and with some eight years of experience in the project, Agropalma's environmental manager Túlio Dias explains that the company has established a very close relationship with partner families, but significant difficulties remain. "We know all their stories, we know their economic conditions, their family issues, but we can't handle all the problems. If farmers are not highly motivated, they won't do well. We have technicians who work exclusively with the families. Today about 10% of the partners are doing badly. Without close monitoring from our side, that would be 30%," he says.

According to Túlio Dias, projects developed by companies such as Biovale and Petrobrás, with over a thousand farmers, are risky. "Even with 185 partners, it is already complicated. We have lots of problems, so imagine what it's like with over a thousand families. A lot of technical support will be needed, and lots of work in the field. If management is poor, output will be lower and final production costs will be higher. That means lower incomes for farmers, and a much higher risk of failure of the project."

That is the case of the family of Maria Conceição de Oliveira and her son Sergio, who have been palm partners with Agropalma for about seven years now. "So far we haven't even saved the money to buy a motorcycle," her son said at the time. Even apart from the 50% take of production that the company keeps every month to redeem the debts with Basa and pay for the fertilisers, the family still has other expenses, she explains, such as pruning the palm plantation and transporting the produce to the company. "At the end of the month, we are left with 400-500 reais [223-278 dollars]. That is not enough for a family of 13."

According to Basa's Resource Management Director Jorge Ivan Falcão Costa, the bank has signed 107 contracts with Agropalma's partners, 57 with Biovale's integrated farmers, 240 with Petrobrás', 30 with Marborges' and 30 with ADM's. The Ministry of Agrarian Development believes that by the end of 2011, about 800 families will have established palm oil partnerships. According to Costa, the bank's guidelines include funding all families that have no unpaid debts (including those who do not have official ownership over their land). The executive does not wish to comment on what steps the bank would take in case the debts are not payed off.

The troubles the small farmers face outline the limits of the palm oil Brazilian policy. The new model of production – involving small-farmers, farming unions, private companies, governments and public financial institutions – can increase the income of some small farmers. But many of them stop producing household traditional food crops or are induced to sell their land in order to pay mortgage debts. If the partnerships can be a promise of prosperity, they can be also a poison for many small farmers who have put faith in the governmental policy.

REFERENCES

Gomes, Marcel et al. *Brazil of Biofuels - Impacts of Crops on Land, Environment and Socie*ty – V. 5 - Animal Fat, Palm Oil, Cotton, Jatropha, Sunflower and Rapeseed. São Paulo, Repórter Brasil, 2009.
(http://www.reporterbrasil.org.br/documentos/brazil_of_biofuels_v5.pdf)

Gomes, Marcel et al. *Brazil of Biofuels - Impacts of Crops on Land, Environment and Society* - V. 2 - Palms, Cotton, Corn and Jatropha. São Paulo, Repórter Brasil, 2008.
(http://www.reporterbrasil.org.br/documentos/o_brasil_dos_agrocombustiveis_v2_ingles.pdf)

Case study 5: Indonesia

back to table of contents

Clearing Land, Fuelling Conflict? Palm oil production in Sambas District, West Kalimantan

By Laili Khairnur & Hermawansyah

INTRODUCTION

Palm oil is one of the most valuable commodities for global biofuel production today. Approximately 10% of Crude Palm Oil (CPO) is used for biofuel as an alternative to fossil fuel. It is also used as an ingredient in food and in cosmetics. World demand for CPO is increasing annually. Indonesia is the world's largest CPO exporting country and supports the oil palm industry on a massive scale, specifically the expansion of oil palm plantation businesses in Indonesia itself. Businesses include private national and transnational companies as well as government enterprises. About 30% of the surface of Kalimantan is being exploited for palm oil production. As Kalimantan is largely a forest area, palm oil production in this part of the world can be considered essentially synonymous with deforestation activities.

At the end of 2004 the Government of Indonesia started the Palm Oil Border Development program, allocating some 1.8 million hectares in Kalimantan and Sarawak to palm oil plantation. This project generated a lot of protests, especially from civil society. Large scale government biofuel programs increase the potential for land conflicts, often between indigenous communities and big companies. They also lead to massive deforestation and cause large scale ecological damage. After persistent civil protest the Ministry of Agriculture announced that the project was going to be cancelled, but the expansion of oil palm plantations in the area continues to this day.

From 2004 on, Sambas district has been the most important expansion area for palm oil plantation in West Kalimantan. It is located near the border with Malaysia and has a population of 538,944. It covers 639,570 hectares[13]. In the last seven years local authorities have issued Location Permits, Plantation Cultivation Permits (IUP) and Land Use Permits (HGU) for palm oil production to some 15 transnational and national companies, for a combined total of 210,756 hectares for CPO production. Based on Kontak Rakyat Borneo and Gemawan data, 30.33% of Sambas district has been allocated for palm oil production. Often, local communities are driven off their land to make place for commercial exploitation.

KEY QUESTIONS

This article addresses two questions:

What is the relationship between the increase of land conflict in Sambas district and the oil palm policy of the Government of Indonesia?

What strategies did the local NGO Lembaga Gemawan employ to address land conflicts in Sambas and what have been their experiences?

EXPLAINING LAND CONFLICT

Government Policies triggering Land Conflict

The policy of palm oil plantation development in Sambas, just like the overall national non-fossil oil policy, is designed to attract maximum industrial investment by private companies. The government of Indonesia is extremely successful in implementing this policy, as it is the biggest producer of CPO in the world. But this economic growth goes hand in hand with an increase of violations of basic human and cultural rights of local indigenous communities.

Existing ecological and social prerogatives contained in the cultivation permit procedures are actually being violated by companies and even governmental authorities themselves. It is common practice for companies to start clearing land without the appropriate approval of the Environment Impact Assessment (EIA) commission. Companies illegally start plantation activities in officially designated forest areas without going through the Ministry of Forestry's approval process for changing the forest status. Companies acquire state, community or private land without the appropriate location permits, and start clearing forest and land by burning without following existing rules and regulations. CPO production and allotment of concessions in Sambas is inextricably connected with bribery and corruption by state officials as well as investors and entrepreneurs.

The investments in palm oil plantation have triggered land conflict and dispute between companies and local communities who cling to the land where they live and grow basic food crops such as rice and cassava and other crops.

These conflicts are increasingly taking place in palm oil plantation areas in West Kalimantan. Local communities try to stand up against land grabbing violence by organising popular resistance

13 Sambas in Figures 2010. www.sambas.go.id

against bulldozing and other clearing actions. But these protests are met by arrests, imprisonments and intimidation by police forces. Meanwhile, the companies, which use civil militias to mobilise support and exert their strength, are rarely subjected to police investigations. In short, land disputes as a result of palm oil expansion increasingly give law enforcement authorities the opportunity to criminalize and muzzle local community leaders who are defending their fundamental rights. In order to help communities to express their basic claims to land and dignity, Lembaga Gemawan organises regular nonviolent public rallies, sometimes before local parliamentary officials.

Since 2006 Gemawan has been monitoring the expansion activities of some plantation companies in Sambas district. The companies are Wilmar International Group, Duta Palma/Darmex Group, Gandaerah Group and Musim Mas Groups. Gemawan and other civil society networks are also monitoring the activity of the IOI group in Ketapang district. One of the main findings of Gemawan is that the close political and economical alliance between local government and industrial CPO investors often push local farming communities into a position of powerlessness and utter exclusion.

Civil society monitoring reports in Sambas district over the period 2006-2012 show an increase of land conflict between palm oil plantation companies and local communities. More worryingly, dozens of villagers have been criminalized by law enforcement forces. In recent years half a dozen local leaders have been imprisoned in response to CPO companies' protests to police. Between 2004 and 2011 there were 128 land conflicts in West Kalimantan and 70 villagers and activists have been criminalized and or imprisoned[14].

Expansion Policies change Land Use

Before the massive expansion of plantations in Sambas district, local communities were able to live on and use their land, their forests and their gardens in an autonomous, self-reliant and prosperous way. They had enough agricultural land, gardens and forests to give future generations a prosperous future. They did not depend on one commodity and could sell their crops in domestic markets. In short, they were living sustainably. But since the government has been promoting palm oil expansion, the position of the community as the owner of its land has been severely weakened, leading to the painfully paradoxical situation of today: local farming communities, the very people who feed the republic, are being repressed and driven off their lands by that very republic. Day by day the buffers of food crop land shrink while CPO plantations expand. Large scale industrial palm oil production requires large land areas, but little local manual labour. The numbers speak for themselves: approximately 80,000 hectares of food crop land in Sambas provide employment for 207,350 smallholders. The 15 large scale national and international plantation companies in Sambas employ only 1,944 people on their total of 199,200 hectares of biofuels only plantations[15]. "We cannot eat CPO, we eat rice," is an often-heard slogan shouted in the villages of Kalimantan.

Palm oil plantation has changed the planting culture of farmer communities. Rice, coffee, pepper, cacao, and other crops have made way for palm oil monocrops. This aggressive switch in agriculture has taken place in the last six years. Government has never seriously taken local farming communities' welfare into consideration. Though people were promised welfare if participating in the development program of palm oil plantation, these promises have never really come to fruition.

Sambas communities whose lands were designated by the state as CPO expansion areas were forced to hand over their land to the state, and as such were made part of the CPO palm oil development program by force. Half of the local farmers refused to give up the ownership and the use of their land; those who did accept the conditions of the CPO program were lured by the promises of prosperity from both the companies and the government.

A smallholder who turns into a monocropping CPO farmer is immediately confronted with many problems related to the crop itself and to the new production model the industry imposes. Few of these smallholders have the necessary experience or skills required to commercially produce palm oil crops, as this crop is new to them. Moreover, in Indonesia the "nucleus-plasma partnership model[16]" between smallholders and companies is in many ways enslaving farmers: smallholders have to hand over 80% of their land to the concession-holding CPO company, in return for program participation. Farmers are forced into indebtedness in order to buy high-quality oil palm seeds, fertilizer, nursery material and technical assistance that allows them to be part of the new agro-industrial program. Community land possession and land control dwindles, and local farmers become indebted and dependent. These partnerships are in reality 25-year stranglehold contracts. After the contract period the farmer is left with only 20% of his of her original land, and has lost not only the skills needed for food cropping but also the access to the credit needed to do it (as banks refuse to extend loans to insolvent smallholders). Even replanting the little land they have left will be impossible once the contract is dissolved.

Kwayan village, March 2011. Residents of three villages try to find an agreement on village boundaries, after concessions of PT Agrowiratama/Musim Mas Group.

14 Statement data of West Kalimantan Civil Society Coalition Letter to Mr. Ben Knapen, during his visit to Pontianak in July2011

15 Sambas Dalam Angka 2010, Rencana Pembangunan Jangka Panjang Kab. Sambas 2005-2025, page. 15

16 See page 6

ADDRESSING LAND CONFLICTS RELATED TO PALM OIL EXPANSION

Lembaga Gemawan acts as a representing party in many land dispute cases. Our authority in these cases is based on the people's mandate. We use several dispute resolution strategies, always trying to use existing opportunities as creatively as possible. For example, for the community in Senujuh village and Sajingan Kecil hamlet in Semanga' village, we use the International Finance Corporation (IFC) complaint instruments as two subsidiaries of Wilmar Group are borrowers of IFC's investment credit fund. IFC has the Complaint, Advisor and Ombudsman (CAO) as the body that handles complaints from people who are affected by IFC investments. CAO is responsible directly to the President of the World Bank. For Kuayan hamlet in Mekar Jaya Village, we are advocating settlement of the case under the New Planting Procedure mechanism of the Round Table on Sustainable Palm Oil (RSPO) because the subsidiary of Musim Mas company is an active member of RSPO. The New Planting Procedure is a mechanism for the fulfilment of the terms of the RSPO Principles and Criteria for members who want to start new CPO plantations.

We are also handling a dispute of the Kaliau village community with the subsidiary of Duta Palma Group, which has been in the communication stage with RSPO after receiving our 2009 complaint through the RSPO Grievance Panel. The Grievance Process fulfils RSPO's need to address complaints against RSPO members in a manner befitting the nature, mission and goals of RSPO.

Another method we use is mobilising farmers from several villages in Sejangkung, Teluk Keramat, Galing and Jawai subdistrict. In this way we build a critical mass of popular support to pressure the Head of District to fulfil the people's demand to revoke the Location Permits and Plantation Cultivation Permit of Sentosa Asih Makmur company.

Sambas, June 2008. Villagers hold a demonstration at Sambas Regent's office demanding to revoke the license of palm oil company PT SAM/Sentosa asih makmur.

These painstaking dispute settling strategies have no guarantee of success, but sometimes actions become victories. An example of such a victory is the 1,493 hectares of community land we reclaimed from the Wilmar Group in 2009 after two years of intense negotiations. Wilmar also agreed to pay a compensation of IDR 300,000 per hectare to the local community and to contribute IDR 40 million per year to a community development fund for a period of five years. In another RSPO member case, Musim Mas gave back 1,200 hectares of community land that was enclaved in the company's concession. In still another case in which we used the RSPO instrument, RSPO forced Duta Palma Group to respect RSPO rules dealing with community land right issues.

CONCLUSION

The Indonesian government has allocated too much land to industrial palm oil production. In the process the government has given away rights, concessions and licenses to companies to the detriment of the interests of local communities and smallholders. As a result palm oil cultivation has led to many land conflicts. The government has never seriously considered the allocation of land for alternative biofuel crops.

Land conflicts between local communities and palm oil companies will increase in number and in intensity if national land use policies continue to focus exclusively on large industrial investment and agro-industrial expansion. This will increasingly harm local communities. As long as people's rights to possess, use and benefit from their own land are not explicitly guaranteed in state law and regulations, local communities will continue to be driven from their home lands and the republic will continue to harm those who feed the country.

In its efforts, Lembaga Gemawan does not focus on one type of dispute resolution but rather on several conflict resolution approaches; these include RSPO, IFC-CAO and Legal Aspects. This strategy has successfully leveraged the power of international networking and local community participation and has used international dispute resolution instruments succesfully.

Case study 6: Philippines

back to table of contents

Land Deals on Biofuels: Good or Bad for Smallholders? A Case Study on Mindanao, Southern Philippines

By Starjoan D. Villanueva[17]

INTRODUCTION

This paper examines the current situation of smallholders involved in the cultivation of biofuel crops in two case study areas in Mindanao, Southern Philippines. It provides insights on how massive land investments in biofuels are affecting smallholders' rights and use of lands. It describes the opportunities, gains and risks for small producers. It further argues that, under prevailing production schemes, these farmers will eventually lose out on the promised long-term benefits of these transactions.

Since the passage of the Biofuels Act in 2007, foreign investments have flooded the Philippines for the development of biofuel plantations, particularly sugarcane, cassava and sweet sorghum for bioethanol production, and coconut and jatropha for production of biodiesel. Mindanao, as the country's food basket, plays a significant role in fulfilling the Philippine government's biofuel targets. As a result, the island's vast agricultural lands are giving way to monocrop oil plantations.

Based on 2008 research by AFRIM (Alternate Forum for Research in Mindanao), at least 429,000 ha of land has been allocated for cultivation of energy crops. This practice of land conversion from food to fuel has sparked controversies in relation to issues of land use and land rights among smallholders. While a number of biofuel farmers have benefited from "growership" arrangements with assemblers or consolidators, others engaged in land lease agreements have experienced hardships particularly from unethical dealings by investors and contractors. There are also reported cases of hunger in farming households that only eat twice a day due to displacement and loss of their lands.

These mixed results require further study and analysis to deepen the understanding of the connections between increasing demand for energy crops and changes in land use and property rights of smallholders. The situation also calls for more "stories from the ground" and detailed accounts of how these land deals actually play out in small farm holdings. An urgent question comes to mind that begs for an answer: What policies and practices of business and government on biofuels have resulted into loss of land access and control among smallholders? The following two cases involving jatropha and cassava growers offer answers to this question. These stories are being shared to draw insights that could shed light on the precarious situation of energy crop producers in the Philippines.

CRAZY OVER CASSAVA IN ZAMBOANGA[18]

The SIGLO[19] Agrarian Reform Community (ARC) in the Municipality of Jose Dalman in Zamboanga del Norte is a beneficiary of the government's land reform program, with around 695 ha of agricultural land distributed to 324 farmers. Smallholders here had been producing cassava for many years before the implementation of the Biofuels Act. Various development aid programs and non-government organizations introduced the technology in partnership with local companies[20] and government agencies. Blessed with good weather and rich soil, Zamboanga del Norte's vast and largely underdeveloped and underutilized agricultural lands offer opportunities for large scale cassava production as input for biofuel and agro-industrial products such as starch, flour, feeds and non-dairy milk. Despite several campaigns in the past for massive cultivation of cassava, it has remained a secondary crop and alternate staple food for farming households. Two factors account for this. Firstly, the unstable security situation has discouraged investors, and secondly, the unscrupulous trading practices of "fly by night" buyers have discouraged most farmers from venturing into cassava production.

Industrial cassava used for biofuels is much bigger compared to the native foodcrop variety.

17 Data for this case study was collected by Abba Kuaman (for Zamboanga cases) and Beverly Besmanos (for Sarangani cases), with desk research provided by Teresita de Leon and the Information Support Services (ISS) Unit of AFRIM. These cases were part of two case studies commissioned by Oxfam and Interpares during the first half of 2011.

18 The province of Zamboanga del Norte is part of Zamboanga Peninsula, which is the largest in Mindanao.

19 SIGLO is an acronym for *Barangays Sigamok, Ilihan and Lopero*. The ARC also includes two other villages, *Barangays Marupay and Dinasan*.

20 Distileria La Tondeña.

All this changed in 2004 when San Miguel Corporation (SMC), a Filipino-owned food and beverage conglomerate, spearheaded a widespread campaign to grow cassava. SMC offered unlimited demand for cassava chips coupled with technical support. The company needed the cassava chips to sustain its venture on feeds, flour, ethanol and other by-products. With such high demand, SMC's processing facility for ethanol production alone required 20 tons of cassava chips, the equivalent of an average harvest of 2.5 hectares, every day. At the time, the recorded production capacity of cassava dried chips in Zamboanga del Norte was only eight tons per day, obviously not enough to cover the cost for operating the plant. Thus, the company had to import additional cassava chips from Thailand and other neighbouring countries.

With technical support from the government through the Department of Agrarian Reform (DAR), the farmers entered into contract growing arrangements with SMC through its organisation, the Sigamok Farmers' Multi-Purpose Cooperative (SFMPC). The partnership went well at the beginning, with SMC providing the technology and DAR supplying the fertilizers as part of the seed capital given to farmers. As the initial stage of production progressed, a memorandum of agreement (MoA) was signed in February 2006. The MoA detailed the responsibilities and commitments of the three parties involved in the project, with SFMPC as the cooperative assembler of all cassava chips produced by the farmer beneficiaries, including those from other cassava-producing ARCs. Under the agreement, individual farmers cannot sell their crops directly to the buying station. Transactions must go through SFMPC as the company's sole authorised assembler. The agreement further assured the farmers of a ready market and a good price for their produce.

The partnership started to crumble when SFMPC failed to meet the quota set by SMC. The long distance between the consolidator and the producers caused delays in the delivery of cassava chips. The cooperative addressed this concern by expanding its buying coverage to nearby cassava producers, making it more convenient and less costly to transport these energy crops. The company, however, responded by moving its buying station to other cassava-producing areas quite far from where SFMPC operates.

After the contract agreement expired, the cooperative decided not to sign another contract with SMC due to the latter's failure in fulfilling its obligation. SFMPC claimed that part of the agreement was for SMC to establish a buying station in Dipolog City, near the plantations. The company complied in the beginning, but later decided to move its buying station to another area without consulting the farmers and the cooperative. Since the project started, SMC has transferred its buying station three times. While another buying station was set up in Zamboanga City, the distance is still very far from the farms and sources of raw materials. Renewal of contract with the company would then be a disincentive for the farmers and the assembler, who will have to bear the increasing transportation cost. With no obligation on the part of SMC to absorb any of this cost, the business venture will eventually incur tremendous losses for SFMPC. The cooperative also complained about the low buying price that the company pays for the raw materials. All these reasons made SFMPC ultimately decide to end the partnership with SMC. To date, the cooperative continues to produce and sell cassava chips to a middleman, another authorised assembler of the company.

GOODBYE TO JATROPHA IN SARANGANI[21]

The case of jatropha growers in Sarangani paints a dismal picture. In 2007 a foreign company, EcoGlobal Bio Oils, Inc., promoted the massive cultivation of jatropha in the municipalities of Alabel, Malapatan and Malungon. The investor's entry was facilitated by local government officials. Individual farmers were lured into land lease agreements[22] and promises of additional income from growing jatropha. The agreement further states that the company will provide seedlings, farm implements, fertilizers and other agricultural inputs, and buy the crops upon harvest. Included in the package is the provision of technical expertise and training on planting, cultivation and harvesting. In the absence of an intermediary organisation or cooperative, the company hired individual area coordinators who encouraged the farmers to utilise their idle or barren lands for growing jatropha. Interested land owners went ahead with negotiating existing tenancy agreements to make way for the investors' demands. Tenants who did not agree to the changes in terms and conditions and the options offered by the landowners were essentially evicted from the farms that they had laboured for years to develop.

Jatropha farmer in Sarangani ponders on where to sell the curcas seeds once his crops are fully grown.

After less than a year in operation, EcoGlobal stopped the project. Alleged irregularities and mismanagement of funds triggered conflicts between area coordinators and smallholders. In the aftermath of the collapse of the project, farms were poorly maintained and as a result harvests were poor. Tensions ran high,

21 The province of Sarangani in the southernmost tip of Mindanao surrounds Sarangani Bay that opens to Celebes Sea.
22 One landowner received PHP 200,000 for rental of 200 ha, excluding labor fees for farm maintenance.

and there were allegations of burning of crops in some areas. Another company, the Philippine National Oil Company-Alternative Fuels Corporation (PNOC-AFC), took over some of the farms left behind by EcoGlobal in 2008. The company paid the farmers PHP 1,700 per ha for weeding and farm maintenance. But after a few months in operation, the company pulled out for no apparent reason, leaving behind unpaid debts and very angry farmers.

In 2010, yet another company, the Curcas Oil Philippines, Inc. (COPI)[23], took over the operations of PNOC-AFC. The jatropha plants were now fully grown. Under new terms and conditions, the company rented the land at PHP 1,000 per hectare per year. It also provided fertilizers and funds for maintenance. Planting fee was PHP 1,700 per hectare for new areas. Once again, tenants who refused these terms were evicted by landowners. And likewise, once again the company aborted the project after only a few months due to alleged irregularities.

Growing jatropha in the area as a monocrop forced the farmers to cut off or stop growing food crops like corn and cassava. When the companies pulled out, the farmers felt very angry and betrayed as they were in a highly vulnerable situation, with no assured buyer or market for their crops. They were also left with less land area available to grow their own food. With no other means of making a living, some growers are now resorting back to producing charcoal, a practice common among subsistence farmers in the area. The majority, however, remain undecided on what to do with their farms as they are bound by the lease agreements that they signed with the companies.

A few farmers are still hoping that, one day, the companies will come back and pay their debts and obligations. Life will be good again, they think, with enough food on the table and money to buy the family's basic needs. Despite everything, these few individuals are clinging to the companies' promises, which included scholarships and free education for the farmers' children if the "jatropha rush" succeeded.

INSIGHTS AND CONCLUSIONS

The above cases illustrate how prevailing institutional arrangements and practices in the biofuel value chain in the Philippines are resulting in changes in land use and indirect loss of rights to land among smallholders. These cases highlight two production models in particular. One is contract farming or the "growership" arrangement as demonstrated by the experience of cassava producers in Zamboanga. The other scheme is the individual land lease agreement as seen among jatropha growers in Sarangani. These production models and practices are quite common among small farming households who, prior to the entry of investors, were cultivating their lands primarily to grow their own food. These farmers were the ones deciding what crops to grow based on their own needs, knowledge and experience in working their lands, with their surpluses making their way to local markets through a web of relationships involving producers and sellers, wholesale buyers, distributors and retailers. Life was simple, but they managed to "get by," augmenting their incomes with seasonal farm work, and working as construction labour in urban areas.

This mode of production has changed over the years with the introduction of corporate farming system tailored to the interests and requirements of a globalized and export-driven economy. In the case of biofuels, the entry of big investors has created a frenzied interest among smallholders who were barely making ends meet with their meagre income from subsistence farming. Unsound national policies and decades of government neglect have created massive poverty and hunger among small farmers in the countryside. The latest report on the country's Millennium Development Goals (MDG) performance supports this claim, with no less than 70 per cent of poor Filipinos living in rural areas.

With no access to credit facilities and capital, smallholders were drawn to joining the biofuels' value chain with promises of assured income from ready-made markets, and employment as workers of their own farms. Everything went well in the beginning. The producers were happy with the "all-out" technical and financial assistance provided by the investors and government agencies, the latter acting as facilitator and broker of these investments. When the partnership started to encounter problems, the cassava farmers were in a better position, with the cooperative as intermediary organization looking after their interests. The jatropha farmers were not as lucky, being left on their own to deal with the risks and uncertainties from these relatively new land deals. Notably, studies conducted on jatropha have always questioned its economic viability under small-scale modes of production like that of the Philippines. The case of Sarangani growers further proves this point.

A closer look at the cassava farmers' case, however, also reveals an inherent weakness in the contract farming arrangement. The company showed that it has the upper hand when it changed the "rules of the game" and moving the buying station to the detriment of producers and the cooperative assembler. The case also highlights the lack of transparency and room for negotiation in the contract, with the company always dictating the terms and conditions even at the start of the so-called partnership. Despite the cooperative's presence, the farmers were not afforded the right to know how the prices are determined by the company. In this onerous contract arrangement, the farmers were treated merely as suppliers and not really as partners with equal rights in the eyes of the company.

These ventures on energy crops clearly show the absence of effective mechanisms and institutional arrangements that can regulate biofuel development and expansion. Short-lived economic gains at this time are far outweighed by the risks of losing smallholders' rights over the use and control of their lands. Existing policies have thus fallen short in providing the necessary safety nets for small farmers, and this has brought much uncertainty to the food security situation of rural communities. We therefore cannot help but continue to question and argue: Are land deals on biofuels good or bad for smallholders?

23 A subsidiary of Dutch company Curcas Oil N.V.

REFERENCES

Alternate Forum for Research in Mindanao, Inc. Agrofuel crops: *Promises of uncertainty?* Bantaaw, 22 (1). 2009. Print.

Department of Agriculture, n.d., Biofuel. [http://www.da.gov.ph/bofuel/biofuel.html (Accessed on 08 October 2008)].

Food and Agriculture Organization, 2008. *The Right to Food and the Impact of Liquid Biofuels (Agrofuels)*, 2008.

Holt-Gimenex, Eric, 2007. *Biofuels: The Five Myths of the Agrofuels Transition*. [http://www.globalresearch.ca (Accessed on 05 October 20100].

Jatropha System Info Services (n.d.). *Frequently Asked Questions Concerning the Jatropha System*. [URL: http://www.jathropa.de/faq-htm (Accessed on 24 November 2008)].

Philippines National Oil Company-Alternative Fuels Corporation, 2010. *Introduction to Biodiesel*. [http://www.pnoc-afc.com.ph/biodiesel.html (Accessed on 06 October 2010)].

Rainforest Action Network, n.d. Agrofuels are not low-carbon. [http://ran.org/content/white-paper-agrofuels-are-not-low-carbon-0 (Accessed on 05 October 2010)].

Rosset, Peter, 2009. *Agrofuels, Food Sovereignty, and the Comtemporary Food Crises*. Bulletin of Science, Technology & Society. [http://www.sagepublications.com (Accessed on 06 October 2010)].

Southeast Asia Regional Initiatives for Community Empowerment (2008). *Agrofuels and the Food Emergency in the Philippines*. SEARICE Notes [http://www.searice.org.ph/SEARICE_Notes_September_2008_Issue.pdf (Accessed on 21 November 2008)].

Conclusions and recommendations

back to table of contents

By Otto Hospes

Conclusions

On the basis of the six case studies, the following conclusions can be drawn with regard to the impact of biofuel programs on smallholders' rights of land ownership and land use. These include an assessment of the findings of other studies in order to evaluate the extent to which our conclusions confirm earlier experiences or provide new insights.

1. Both the land rights and land use have been strongly affected where smallholders have entered into contractual arrangements with a plantation company under the "nucleus-plasma" scheme, which is the dominant production model in Indonesia. With this model, ownership of both the processing unit and the land is in the hands of a plantation company. The smallholders transfer ownership rights to the plantation company and enjoy rights of usufruct for a small part of their former land. These usufructuary rights are not strong. The small farmer is not allowed to cultivate other crops, and is dependent on the plantation company for collection and processing of the harvest.

   This conclusion is close to the somewhat carefully formulated finding of IIED (Sulle and Nelson 2009) on experiences with the model of large scale plantations. They report that this model is "likely to create the most frequent negative impacts and grievances" because "local people do not understand the process, or their rights and opportunities" (p. 59).

2. Also, in those cases where no change of ownership rights is part of the design of biofuel projects or contracts of independent smallholders with processing companies, change of land use may constitute a de facto erosion of ownership rights. The case studies about partnerships and contracts in Brazil reveal the following mechanisms that explain this somewhat hidden effect on ownership rights: firstly, contracts that prescribe what seeds to use and what crop to grow and do not allow farmers to sell any part of their harvest to other buyers or other kinds of buyers, in practice can boil down to transfer of ownership rights. Such contracts undermine the autonomy of small farmers and challenge the farming and cultural practices that are part of their livelihood. Secondly, long-term agreements by companies with small farmers, who agree to deliver their produce for 10 to 25 years, render ownership rights essentially meaningless during this period. Even worse, they risk losing their ownership titles when crops fail, as the third mechanism takes over: a bank may confiscate the land if it has been furnished as collateral for a loan.

   This conclusion offers a new, somewhat unexpected insight contradicting Sulle and Nelson (2009) where they observe, about the production model characterised by contracts with independent producers: "companies which are engaged in contracted and independent smallholder production appear to have no direct negative impacts on local land access" (p. 59).

3. Tripartite arrangements between smallholders, small-scale processing plants and cooperatives (as described in the cases from Honduras) offer best prospects for developing contractual arrangements that do not provide high risks of indebtedness for smallholders or reduction of their autonomy on land use. Two critical dimensions explain this: first, the local or small-scale character of the tripartite arrangements; second, smallholders do not only enjoy ownership rights but gradually turn into co-owners of the processing plant.

   Having noted this, we cannot agree more with the recommendation of Cotula et al. (2008) that "Producer's associations, governments and investors may want to explore alternative business models such as joint equity in business and processing" (p. 3). In Honduras small farmers, investors and processors are developing such models.

4. The lack of clear and effective mechanisms to regulate the production and expansion of biofuels puts small farmers at a loss when confronted with foreign and national investment and their effects, encroaching or taking their land (as is shown in the case study from the Philippines). Lack of protective mechanisms and safety nets makes small farmers vulnerable. In such a situation, the biofuel wave takes the form of a new scramble for land, leaving small farmers behind with no rights and no land. Sadly, after ambitious biofuel projects fail, small farmers have to start all over again and create new agricultural fields from biofuel graveyards.

   This conclusion comes close to the finding of IIED, where it notes that "Poor planning and lack of compliance with existing land use plans" as well as "lack of institutional coordination among sectoral government agencies" are resulting in conflict between different resource uses and resource users (Nhantumbo and Salomão 2010, p. 3).

5. In some situations, the land rights and land use by small farmers are very much defined by one type of production model (as in the case study from Indonesia). In cases where small farmers are independent producers who have contractual relationships with a variety of organisations (like banks, processors, trade unions, cooperatives), small farmers are linked to a web of institutional arrangements (as in the case studies from Brazil). In these situations, different relationships or contracts may exist

between small-scale farmers and biofuel companies, including direct and indirect ones. In addition, different institutional arrangements may exist between different key players of value chains (like processors, banks, farmer cooperatives, etc.). This complexity may pose uncertainties to small farmers but also may provide room to take advantage.

The conclusion on small farmers being linked to different organizations and part of a web of institutional arrangements can be seen as a new insight generated on the basis of our case studies, particularly those from Brazil.

6. It is difficult but not impossible to cultivate energy crops on poor soils. The experiences from the case studies from Honduras show that the following actions can turn energy cropping into something of value to smallholders: first, the development and pooling of agronomic knowledge of smallholders and business on how to cultivate energy crops, like jatropha, under difficult climate and weather conditions on poor soils. Second, giving tillers of the land titles to at least some communal or unused land. Third, accepting and providing opportunities for intercropping (that is: combining food and fuel cropping) to enable smallholders to make money and preserve food security at the same time.

   This conclusion is new and nuanced in two senses: firstly, it contrasts with earlier too simplistic and optimistic views on energy cropping (notably jatropha) on poor soils; secondly, it goes beyond overly negative ones, like those of Nhantumbo and Salomão (2010) who reported that "The claim often made that feedstock for biofuels can be commercially grown on marginal land is misleading" (p. 4). The experiences from Honduras show that production models based on tripartite and local arrangements between small farmers, cooperatives and processing companies can turn energy cropping on poor soils into a viable and equitable business case.

Community of La Cayuya, Choluteca, Honduras, November 2011. Small farmer´s wife participates in the activities of pulping of jatropha fruits using traditional technology.

Recommendations

In this section we recommend a number of policies and practices that can directly or indirectly help smallholders (a) to secure their rights to land, (b) to keep or gain control over the use of land and/or (c) to get included into value chains on favourable terms. The proposed policies and practices have been drawn from the six case studies. The recommendations will be presented per target audience (governments, business and civil society organisations). Because there is no single actor who can alone reorganise biofuel programs and projects and change their effects on use and rights of land of smallholders, it does not make sense to pick and choose one actor-specific set of recommendations. Instead, we consider it critical to think in terms of multi-actor and network approaches to articulate interests, voices and values of smallholders as part of value chains and webs of institutional arrangements.

1. What governments should or should not do?

Many of the difficulties that small farmers face on the ground can be traced back to policies and commitments of the national government.

Ambitious blending targets, financial and fiscal incentives to large companies and foreign and national investors, and allocation of licenses to plantation companies only, have given much room and opportunities for business to expand and control production but much less so for smallholders. Likewise, the concentration of financial, fiscal and legal provisions to one cash crop for large scale bioenergy production, favours monoculture and limits room to develop energy programs for small-scale bioenergy production and intercropping for fuel and food production.

Even worse, these national policies and commitments have directly or indirectly led to transfer of rights over land from smallholders to plantations, reduction of control over the use of land and increase of conflicts over land. Blending targets have proven poorly compatible with smallholder development. Providing financial incentives and concession rights to companies cannot be seen as a guarantee of smallholder development, certainly when a production model is promoted in which smallholders are not part of the value chain or are no more than mere suppliers of raw material.

Biofuel laws and acts are biased towards these policies and commitments and provide few if any provisions to protect smallholders against foreign and national investors as well as large companies that can acquire concessions without consulting civil society organisations or small farmers.
This implies that national governments not only need to drastically reconsider their national biofuel policies, acts and instruments, but more fundamentally their paradigms on development and the ways in which relationships between government, business and civil society need to be organised. Governments should not blindly stick to “business as usual” but seek ways how interests, voices and values of smallholders can be better articulated. This should lead governments to take one or more of the following actions:

- to revise their biofuel policies and legislation to include provisions requiring foreign and national investors and companies to consult civil society organisations and small farmers and to get their advice and consent before embarking on biofuel projects;
- to develop and enforce participatory land use planning methods as alternative ways of allocation of land for energy crops;
- to promote, if not insist on, new decision-making processes on production and processing of energy crops, in which smallholders have a greater say and are considered as business partners and processors of raw material;
- to support experimentation with and development of new production models in which local enterprise and civil society organisations develop new institutional arrangements, that guarantee or secure ownership and usufructuary rights of land of smallholders and seek to develop smallholders into co-owners of processing companies;
- to provide financial incentives for smallholders to produce energy crops as part of intercropping and a premium for companies who buy energy crops from intercropping small farmers.

2. What business should or should not do?

The proposed action of the national government implies that investors and processing companies can no longer continue business as usual. This applies to its relations with government as well as civil society and small farmers.

Instead of focusing their business negotiations with government on the objective of gaining large concessions for land, companies should first talk with small farmers or those who have historically worked the land. This is a promising avenue in at least two ways: first, companies and small farmers can together experiment and develop methods for cultivating energy cropping under difficult climatic conditions or on poor soils; second, they can together develop new institutional arrangements with regard to ownership and use of land, ownership of a processing plant and/or ownership of a marketing cooperative. To prevent indebtedness of small farmers and possible expropriation from their land, banks should also reconsider their standard practice of securing loans with land (titles) as collateral. Together with processors and representatives of small farmers, they should develop alternative forms of collateral (such as insurance schemes). To reduce the risk of crop failure and thus indebtedness, buyers of energy crops should provide technical assistance to small farmers, without making them dependent on high-tech knowledge and inputs.

Instead of dictating institutional arrangements with small farmers and seeking to control the whole value chain - both upstream and

downstream - processing and trading companies should allow small holders the freedom to negotiate favourable contracts on a truly equal basis and to acquire added value. For instance, a company should build the processing plant, not own the plantation. This leaves room for smallholders to exert their rights as owners of land and to gain added value through negotiations as a business partner with the owner of the mill.

Sambas, March 2011. Forest fires have cleared land for palm oil plantations.

3. What civil society should or should not do?

The proposed action of government and companies entails that civil society cannot just concentrate on its role as watchdog of government, companies or both on behalf of small farmers and communities. Civil society also has to evolve as the third partner in discussions between government and business and to prevent unfair land use deals between them. As a partner in new discussions with government and business, civil society has to provide or enable the collection of reliable data and insights on what is happening on the ground. Civil society organisations should aim to develop new production models with local companies, and if possible, with national or international ones. They should prove that "another economy is possible" by getting involved in the development of inclusive business approaches and by discussing equity in the agricultural business for food and energy cropping.

It is not realistic to expect government and business to adopt the proposed action overnight. This means that the following three types of action are still needed for the time being: first, civil society organizations have to continue to provide information and legal assistance to smallholders. This action makes small farmers aware of biofuel acts and the different types of obligations of government and business in respecting rights of small farmers and not dictating the terms or rules of the game. Second, on behalf of small farmers who have lost access to land or find themselves in a legally insecure situation, civil society organisations should explore how to make optimal use of different dispute resolution mechanisms as agreed upon and offered by international agencies or national governments. Third, civil society should remain involved in national and international networks of NGOs and farmer movements to exchange information and insights, thereby empowering themselves to make governments and business to seriously consider the resulting proposals.

List of authors

back to table of contents

Jorge Quiñónez
jquinonezfunder@gmail.com

A graduate of Zamorano University in Honduras and holder of a Master's degree from Oklahoma State University, Jorge has been working for agricultural environmental organizations in Honduras for thirty years. From 1992-1996, he was the executive director of the project Land Use and Productivity Enhancement (LUPE). From 1996 – 2006 he acted as the Executive Director of the Honduran Foundation for Environment and Development, VIDA, a private development organisation providing financial support to local NGOs, local government and grassroots groups working in protected areas.

In 2009, Jorge entered the world of renewable energies working as a consultant for STRO, a Dutch NGO, supporting the Gota Verde project in Yoro, Honduras, which promotes the industrial processing and marketing of sustainably produced energy crops such as jatropha. In 2010, he started working with FUNDER as the manager of the New Gota Verde Center.

Darío Oyuela Sandino
doyuela001@snvworld.org

Darío is a senior expert with more than 35 years of professional experience in the sustainable production of biofuels (energy crops, Jatropha curcas, Attalea cohune, African palm, Crescentia alata), agricultural production, livestock and forestry, agro-forestry and silvopastoral plantation and management, organisational and institutional strengthening, environmental management, strategic planning, and development of small rural enterprises. In Honduras he has held management positions in government agencies such as the National Institute of Vocational Training (INFOP) and the Ministry of Agriculture and Livestock. Currently, he is an advisor for SNV Honduras, in charge of developing inclusive businesses for value chains in biofuel production. He has studied at the National University of Agriculture, Honduras, the Latin American Center for Minor Species, Colombia; Cooperative Business Management, Institute of Iberoamerican Cooperation, Spain; Development and Project Management, Graduate School of University of Pittsburgh, USA.

Evelyn Hernández Martinez
ehernandez@snvworld.org

Evelyn has 12 years of professional experience in project management, strategic planning, institutional reform, advocacy, public policy development and systematisation of experiences related to renewable energy, biofuels and climate change. She has worked for the public sector, NGOs and international organisations like the World Bank and UNDP in several countries in Latin America.

Evelyn is Attorney at Law with a Master's degree in Political Studies (Latin American Foundation for Government and Public Policy), a Master's degree in Public Administration (Instituto Universitario Ortega y Gasset) and advances studies in Government and Public Policy at the Complutense University of Madrid.

Currently Evelyn works for SNV Honduras.

She has been author, co-author and/or coordinator of more than 20 publications in her fields of expertise.

David Erazo López
davidagroenergia@yahoo.com

David has been a biofuels entrepreneur since 2006. He is a pioneer in Central America in the development of plantations oriented towards the production of biofuels and an advisor and consultant in Honduras, Salvador, Mexico and Ecuador in the development of renewable energy projects.

With his company AGROENHSA he works with an inclusive business model in southern Honduras for the planting and production of jatropha oil for the production of biofuels and products that are profitable for his company and his producing partners. His goal is to plant and reforest at least five hectares of extremely poor soil with good genetic material. David is also currently developing a wind energy project in Honduras with the purpose of generating 40 mW of clean energy within five years.

Marcel Gomes
marcel@reporterbrasil.org.br

Marcel Gomes is a journalist and has been coordinator of the Biofuel Watch Center of NGO Repórter Brasil since 2008. He holds a BA in journalism and a Master's degree in political science, both from the University of São Paulo. As reporter and editor, he worked for Brazilian mass media companies and participated of the creation of alternative media projects.

Verena Glass
verena@reporterbrasil.org.br

Verena Glass is a journalist and has been a researcher for the Biofuel Watch Center of NGO Repórter Brasil since 2008. She holds a BA in journalism from University of the State of São Paulo. As activist, she has participated on the board of the civil society campaign against the building of the hydroelectric power plant of Belo Monte, in the Brazilian Amazon.

Annemiek Schrijver
annemiekschrijver@gmail.com

Annemiek is a recent Master's graduate in International Development Studies from Wageningen University. Her thesis was the culmination of her in-depth research in India on local land and water rights of smallholder farmers. She has also researched biodiesel development in Bahia, Brazil. After a one-year stay in Spain, she is currently a freelance researcher and sports coordinator for young refugees in her home town of Wageningen.

Hermawansyah
hermawansyah@gmail.com

Hermawansyah is a former student activist and focuses on issues of empowerment and advocacy. He is the initiator of and is actively involved in various local and national NGO networks. Besides being a consultant for Kontak Rakyat Borneo and Gemawan, he is also a speaker, facilitator and trainer in issues of good governance, policy advocacy, political education & citizenship, paralegals, community organizing and village autonomy.

Laili Khairnur
gemawan_borneo@yahoo.com

Over the last decade Laili Khairnur has been involved in social movements and civil society in West Kalimantan. As a student in Yogyakarta she volunteered in several national NGOs. Besides her specialisation in women's issues, she is also an expert in the issues of corruption, good governance and natural resources management, particularly in relation to forestry and oil-palm production. For the past three years she has been exploring economic development issues, specifically the small-micro business. She has considerable expertise as a facilitator, advocator and campaigner. Moreover, she also has specialised expertise in directing an organisation like Lembaga Gemawan on management and program planning issues. She frequently serves as spokesperson for Lembaga Gemawan and has represented Lembaga Gemawan on local, national and international advocacy.

Starjoan D. Villanueva
starj@afrim.org.ph

Starjoan has more than 15 years of extensive knowledge and

professional experience in peace and development work in Mindanao, Southern Philippines. She has demonstrated achievements in the fields of peace building, local governance, human resource development and social research, incorporating concepts on human rights, gender equality and environmental sustainability. She is highly skilled in training and facilitation, project performance monitoring and evaluation. She has managed projects on coastal resource management, socialized housing, community development and conflict transformation.

Dicky de Morrée
dicky.de.morree@cordaid.nl

Dicky is a policy officer at Cordaid, The Hague. She is currently

working on knowledge development and policy influencing with the goal of making agricultural value chains more sustainable. She holds a Master's degree in agricultural economy and a PhD in human geography. She has done extensive research on smallholder farmers' livelihood strategies in Bolivia.

Otto Hospes
otto.hospes@wur.nl

Dr. Otto Hospes is an associate professor of Public Administration and Policy at the Department of Social Sciences, Wageningen University and Research Centre.

He is currently doing research on governance of sustainability, food sovereignty and food security, and the human right to food. His theoretical and policy-oriented ambitions as a "civic researcher" are directed at (a) the conceptualization and analysis of governance complexity, specifically as an alternative to private governance and its implications for value chain management, and (b) exploring relationships between new forms of governance, politics of scale and social inclusion/exclusion.

He has visited, conducted evaluations and done research in many countries, including Indonesia, India, Sri Lanka, Zambia, Zimbabwe, Tanzania, Kenya and Brazil. He participates and contributes to national and international networks of academics, policymakers and international NGOs.

List of abbreviations

back to table of contents

ADM	Archer Daniels Midland
AFRIM	Alternate Forum for Research in Mindanao (Philippines)
AGROENHSA	Agroenergía Honduras S.A.
ARC	Agrarian Reform Community (Philippines)
BASA	Banco da Amazônia (Brazil)
BYSA	Biocombustibles de Yoro S.A. (Honduras)
CAO	Complaint Adviser and Ombudsman
CARPROSUL	Cooperativa Rural de Pequeños Productores y Ganadores del Sur Ltda. (Honduras)
CIFOR	Center for International Forestry Research (Indonesia)
COFINS	Contribuição para o Financiamento da Seguridade Social (Brazil)
COPI	Curcas Oil Philippines
CORDAID	Catholic Organization for Relief & Development Aid (the Netherlands)
CPO	Crude Palm Oil
DAP	Declaração de Aptidão ao Pronaf (Brazil)
DAR	Department of Agrarian Reform (Philippines)
EAP	Economically Active Population
EIA	Environment Impact Assessment
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária (Brazil)
FAO	Food and Agricultural Organization (of the UN)
FUNDER	Fundación para el Desarrollo Empresarial Rural (Honduras)
HGU	Land Use Permit (Indonesia)
HIVOS	Humanistisch Instituut voor Ontwikkelingssamenwerking (the Netherlands)
IEEP	Institute for European Environmental Policy
IFC	International Finance Corporation
IIED	International Institute for Environment and Development (UK)
IIRR	International Institute of Rural Reconstruction (the Philippines)
INA	National Agrarian Institute (Honduras)
IOI	Industrial Oxygen Incorporated (Malaysian company)
IUP	Plantation Cultivation Permit (Indonesia)
MAPA	Ministry of Agriculture, Livestock and Resources (Brazil)
MDA	Ministry of Agricultural Development (Brazil)
MDG	Millennium Development Goals
MoA	Memorandum of Agreement
MST	Movimento sem Terra (Brazil)
PIS/PASEP	Programa de Integração Social/ Programa de Assistencia ao Servidor Publico (Brazil)
PNOC-AFC	Philippines National Oil Company – Alternative Fuels Corporation
PNPB	National Program for the Production and Use of Biodiesel (Brazil)
PPO	Pure Plant Oil
PRONAF	Programa Nacional de Fortalecimento da Agricultura Familiar (Brazil)
RAI	Responsible Agricultural Investment
RSPO	Round Table on Sustainable Palm Oil
SFMPC	Sigamok Farmers' Multi-Purpose Cooperative (Philippines)
SIGLO	Sigamok, Ilihan and Lopero (three barangays in the Philippines)
SMC	San Miguel Corporation (Philippines)
SNV	Netherlands Development Organization
UN	United Nations