



Dynamics in land tenure, local power and the peasant economy: the case of Petén, Guatemala

by Markus Zander and Jochen Dürr

Paper presented at the
International Conference on
**Global Land
Grabbing**
6-8 April 2011

Organised by the Land Deals Politics Initiative (LDPI) in collaboration with the Journal of Peasant Studies and hosted by the Future Agricultures Consortium at the Institute of Development Studies, University of Sussex

Dynamics in land tenure, local power and the peasant economy: the case of Petén, Guatemala

Markus Zander, Jochen Dürr

Abstract

This article analyses the ongoing process of land grabbing by cattle farmers and drug traffickers in south-eastern Petén, Guatemala and its socio-economic consequences. In the last decade, this process has strongly accelerated due to several factors, which made investment in land more attractive and resulted in sharply increasing land prices. In the 236 communities included in the field study, 30% of all peasant families have already sold their land, some of them hoping to escape poverty, others under often violent pressure from buyers mostly related to the drug trade, who are securing control over large territories. For lack of economic alternatives the landless families end up leasing plots for cultivation from their neighbours, working as day labourers on big cattle ranches or occupying land in the protected areas in northern Petén, with poverty and conflicts about resources on a steady rise. Value chain analysis shows that the conversion from small scale peasant agriculture to extensive livestock production reduces land productivity and diminishes local added value and employment, thus providing further arguments for changes in agricultural politics to halt or reverse the process.

Introduction

With over 50% of the economically active population working in agriculture¹, in their great majority as smallholders on tiny plots of land with an extremely uneven distribution of land holdings on a national level², land ownership has been a crucial and conflictive issue in Guatemala for decades.

The efforts of the democratically elected governments during the “Guatemalan spring” from 1944 to 1954 to carry out a land reform led to protests of the United Fruit Company to the US-government. A CIA-headed coup d’etat and the installation of a puppet government in 1954 reversed all previous progressive efforts and reinstalled the status quo in favour of the national

¹ PNUD 2008

² Whereas 92% of the Guatemalan farmers have to work on only 21.8% of the available agricultural area, with plot sizes of under 7 ha., 1.9% of the farmers own 56.7% of the arable land. INE 2003

oligarchy and foreign companies. In continuation a chain of military governments ruled Guatemala until 1986. Armed resistance against the military regime started a 36 year long civil war, which cost more than 200,000 – mostly civilian - lives and ended in 1996 with the signing of the Guatemalan Peace Accords. These included several substantial demands, among others, the redistribution of land to small-scale landowners and landless peasants. Most of these, however, have never been implemented. In the case of land redistribution, the Guatemalan government, supported by the World Bank and other international institutions, opted for a distribution via market-mechanisms, meaning that small-scale farmers would receive credits from the government institution FONTIERRAS to buy land from private owners. To a large extent this process has been a failure, since until December 2009 only about 19,471 of an estimated 300,000 to 500,000 families in need of land had benefitted³, and funds available for the acquisition of land for small-scale farmers have been continually diminishing over the years.

What is to be observed at the moment is a new process of land concentration, in the hands of national and transnational companies engaged in large scale monoculture plantation farming and cattle ranchers, destroying entire communities and leaving their families without means of subsistence. This tendency has been especially strong in Petén, Guatemala's northernmost, largest and most recently colonized department that comprises about one third of the country's surface area. It also contains Guatemala's largest nature reserves, concentrated in the department's northern half.

Concerned by the situation, several local organisations⁴ in the south-eastern part of Petén joined forces in a common project accompanied by the German Development Service (DED)⁵ and its Civil Peace Service Program⁶, supporting small farmers and their organisations to stop the loss of their land. This article presents the results of a study conducted by the participating organisations in 2009⁷, on the scale and nature of land concentration. These are complemented by more recent findings from the ongoing fieldwork in the project as well as additional research. It also contains data from a study⁸ of the Institute for Agrarian and Rural Studies IDEAR⁹ on the socio-economic consequences of the phenomenon¹⁰.

³ FONTIERRAS, 2000-2009

⁴ Pastoral Social del Vicariato Apostólico de Petén, FUNDEBASE, COACAP, IGER, ManMuniSurP, Mesa de Tierra Poptún and Secretaría de Asuntos Agrarios.

⁵ Since January 2011 merged into the newly formed GIZ, that incorporates the former independent organizations DED, GTZ, INWENT and CIM

⁶ ZFD (Ziviler Friedensdienst), in its German abbreviation

⁷ Cited as Pastoral Social, 2009a

⁸ Cited as Dürr et al. 2010

In 2009 study focus group interviews were conducted with key stakeholders in 236 communities belonging to the municipalities of Dolores, Poptún and San Luis (70% of the rural communities in the region) to gather data about changes in land ownership during the last ten years. Information from these interviews provided a base for calculating the loss of small farmer's agricultural land to cattle rangers in the absence of reliable figures from government institutions. Participants were asked about basic demographic data, infrastructure, cash crops, actual land tenancy and its changes during the last ten years, reasons for sale, buyers of land and its actual use, fate of those who sold and whether there was pressure involved in the process. This was complemented by in-depth interviews in 10 communities with groups of men and women separately, which also looked at issues such as community organisation, agricultural production and levels of conflict. Since 2009 the project has continually been gathering information about the situation in the communities of intervention, and additional data from different governmental and non-governmental organisations, scientific literature and the press has been included.

The findings of the socio-economic consequences of land concentration are based on the analysis of a representative sample of 34 individual farmers' production systems in three micro-regions¹¹ and of the economic activities of 61 intermediaries (including wholesalers, retailers, and processing sectors like slaughterhouses, corn mills etc.), in the municipalities of Dolores, Poptún y San Luis and at the national level. The results served to compare the Value Added and employment generation in the value chains of corn, beans and cattle.

The article starts with a short description of the historical background of Peten's colonisation, and then take a closer look at the actual situation of land concentration. In the following chapter we will be examining small-scale farmer's and cattle breeder's production systems and the related value chains, to better understand the reasons for land concentration and its consequences. This is succeeded by an analysis of the reasons for sale, from the farmers' point of view and in relation to external factors adding to the problem. The last two chapters are illustrating the consequences of land concentration in south-eastern Petén, and drawing some conclusions on the matter.

⁹ Instituto de Estudios Agrarios y Rurales, Guatemala City

¹⁰ Part of the data of both studies (Pastoral Social, 2009a and Dürr et al. 2010) have been published in: Dürr, Jochen; Zander, Markus; Rosales Mazariegos, Sergio Armando, 2009

¹¹ Administrative units within municipalities with more than 20 communities, created with the Ley de Consejos de Desarrollo Rural.

Historical background

Petén is the youngest department of Guatemala from a colonisation perspective. For a long time it was difficult to access because of its climate and dense rainforest cover, and it was thought to lack mineral resources worth mining (now it is clear that the department holds the country's largest oil reserves). The apparent lack of resources and economic potential spared the region from earlier colonisation and development efforts. The department's small population lived mainly from cattle farming in the central savannah regions, the extraction of *chicle*, (the base of chewing gum for export to the USA) and harvesting of other forest products. In 1960 only about 26,000 people were living in this territory of more than 35.800 square kilometers. This included two Mayan people, the Mopan in the south-east and the Itzá in the central region around Lake Petén Itza, as well as settlers from other regions of the country. Among these settlers in the southern part of Petén were Q'eqchí-Maya from the neighbouring department of Alta Verapaz, who had been evicted from their former communal lands through the installation of coffee-plantations by mainly German immigrants since about 1870 and were escaping the legal obligation to work on those lands under harsh conditions.

From the 1960s on the situation in Petén began to change rapidly. With the overthrow of the democratically elected government of Jacobo Arbenz in 1954 and the reversal of his land reform efforts, pressure on land and social unrest in the densely populated western regions of Guatemala began to rise, and the military governments opted for the distribution of virgin national lands in the Petén to alleviate the situation. FYDEP¹² was founded as a governmental enterprise, to administer an extensive colonisation program. This was aimed towards small-scale farmers and landless families from other Guatemalan departments who were looking for plots on which to cultivate maize and beans, as well as allowing investment in large holdings that were mainly converted to ranches for cattle farming. Cattle farming in Petén had and still has very low profit margins, but the ranches served not so much as a means to produce immediate gains but as a form of savings account as well as being a status symbol. The colonisation program, which was continued by the National Institute of Agrarian Transformation (INTA) from 1990 on, was intended to serve as an escape-valve for social pressure in the country, because the ruling families of Guatemala would never have allowed redistribution of land already in private property.

Conditions for receiving land were very different for small-scale farmers to those that applied to members of well-off families from the capital city and Petén. Military officers also used the opportunity of the civil war to appropriate huge stretches of land, in some cases by simply

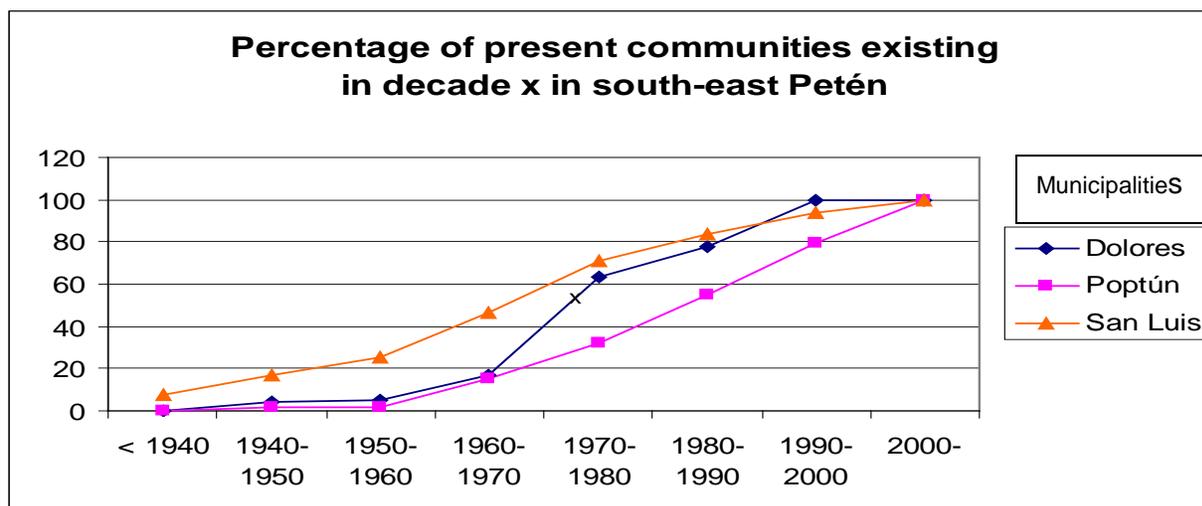
¹² FYDEP: Empresa para el Fomento y Desarrollo Económico de Petén

dropping markers from helicopters, not even stepping on their new estates. Large buyers also paid between 10% and 20% less per hectare than small-scale farmers and were allowed to take possession of up to 675 ha (many in fact appropriated much larger areas). Small-scale farmers could only receive between ½ and 1 *caballería* (22 ha – 45 ha) per family¹³, in many cases on ragged land with poor soil and difficult access, whereas the large area buyers occupied the plain and fertile river valleys. Relative to the size of smallholdings in the western part of the country, where many families had to live from less than 1 ha of land, the parcels allocated to small-scale farmers in Petén presented a significant improvement to them, even taking into account that Petén soils are, to a large extent, not suitable for permanent intensive cultivation. In order to maintain a sustainable level of production, most farmers used to practice swidden agriculture, changing their cultivation area when fertility diminished and allowing fallow times of several years before going back to work the same spot – which was not a problem when land was still plentiful.

Poor families in search of land generally moved from village to village inquiring about land that still hadn't been taken possession, often in groups from their community of origin. When they found a location that seemed to be without owner they installed themselves and initiated the process of recognition and titling – this was called “*agarrar*”, or to grab land. Because of the complicated and little transparent system of land registry and the fact that many large buyers did not actually take their land into possession for years, it was not always easy to find out whether a particular piece of land was really free, and many of the migrants had to move several times before finally finding their own parcel. The colonisation advanced through the department from south to north. Some of the older communities in the southern municipalities of San Luis and Sayaxché were founded up to 100 years ago, whereas in the central region some indigenous settlements are no older than 15 or 20 years. This means that as well the *mestizo* as most of the indigenous population of Petén have arrived as migrants within the last 50 years and that most of the communities in Petén are very young, being composed by people from many different origins, see Figure 1.

¹³ Schwartz, Norman B. 1990

Figure 1: Percentage of present communities existing in decade x in south-eastern Petén



14

Source: Pastoral Social, 2009a

The land, with few exceptions, was given with individual as opposed to collective titles, and kept under the tutelage of the State for twenty years after the final payment, meaning that theoretically it could not be sold – which in practice happened in many cases. The process of gaining title implied many stages including the obligation that the beneficiaries maintained payments on what they owed, took possession, and then worked the land. Since the most obvious evidence for working the land was to fell the trees that were growing on it, this strongly accelerated deforestation in the department. Many of the large landowners cleared areas much greater than what they actually were able to farm. Many never even visited their estates nor paid the fees they owed to the state, which in some cases led to the reclamation of their land by the Guatemalan authorities, and its redistribution to other applicants.

Apart from the obligation to pay for and work the land the process of gaining title involved legal requirements and paperwork that were relatively easy to accomplish for townspeople with a degree of formal education, but difficult for the small-scale farmers who lived in remote locations with difficult access. Many of them could barely read and write and, in the case of the Q'eqchies, do not even speak Spanish. Unrest and military repression during the civil war urged families and whole communities to leave their lands for extended periods, which made it impossible for them to maintain their payments. In many cases ownership documents got lost. Apart from this, agencies responsible for land management changed several times during the decades: from FYDEP until 1990, to INTA until 2000, to FONTIERRAS up to the present. Every change of

¹⁴ San Luis is the southern-most, and Dolores the northern-most municipality.

agency resulted in changes to rules, documentation requirements and so on. For the poor the application and titling process was an often incomprehensible ordeal. There are families who are still trying to get the recognition of their title, more than 25 years after starting the process.

The present land situation

The colonisation of Petén has officially ended, since there is no land left that hasn't been declared as nature reserves or passed over into private property, with some of it still being processed for titulation¹⁵. The population of Petén has risen to more than 600,000 inhabitants¹⁶, about 28% of whom are Mayan people, in their large majority Q'eqchí¹⁷. Still small-scale farmers, being indigenous or *mestizo*, mainly practice their *milpa*-economy¹⁸, clearing land every year to plant maize and beans as the staple crops. Apart they possibly cultivate some other products such as root crops or fruits which are mainly for family consumption except for *pepitoria* (calabash seeds) or sesame which are sold. Although small farmer's families are buying a growing proportion of their alimentary needs and monetary expenses for food are steadily rising, they are generally living from their own production and selling the surplus.

In the early years of colonisation most *campesino* families had their own parcels of between 22 and 45 ha, but this has changed dramatically. In the three south-eastern municipalities of Petén, San Luis, Poptún and Dolores, only about 35% of the *campesino* families in rural communities still hold parcels, with an average size of 33 ha per family, although this does vary substantially between different communities¹⁹. With one family cultivating approximately 4 or 5 ha at a time this may seem quite a lot, even taking into account swidden agriculture and fallow times, but a range of factors impact on the amount of productive land available per head of population that has to be supported. Nearly all families in rural communities are effectively living from agriculture, and the available area has to be shared with sons or daughters of the land owners and others that came too late for land distribution or have lost their land. Many families have to rent land from neighbours, in order to grow their food. Calculating the farming land still owned by *campesinos* and available for small scale agriculture in the region results in an average of only 11.3 ha per family, again with great differences between local areas (see Figure 2). In one of the investigated

¹⁵ Interview with Alan Alaya, departmental coordinator of RIC (Registro de Información Catastral), Guatemalan cadastral institution, 04.02.2011

¹⁶ Projection for June 2010 from the 2002 national census; INE 2002.

¹⁷ Ybarra, Megan, et altri 2011

¹⁸ *Milpa* is the maize field.

¹⁹ Pastoral Social, 2009a

area's micro-regions only 14% of the families possess land of their own, whereas in the micro-region with the lowest area available per family the average size is a mere 4.8 ha, which makes fallow-times to rest the soil impossible. Arable soil is further reduced because areas of south-eastern Petén are characterized by Karst underground and rocky hills. Land has become scarce and will be more so in the near future. There are various reasons for this: the natural growth of population, migration and the displacement of small scale agriculture through medium and large scale cattle farming, and agronomic enterprises that are investing in large scale plantations, mostly oil palm.

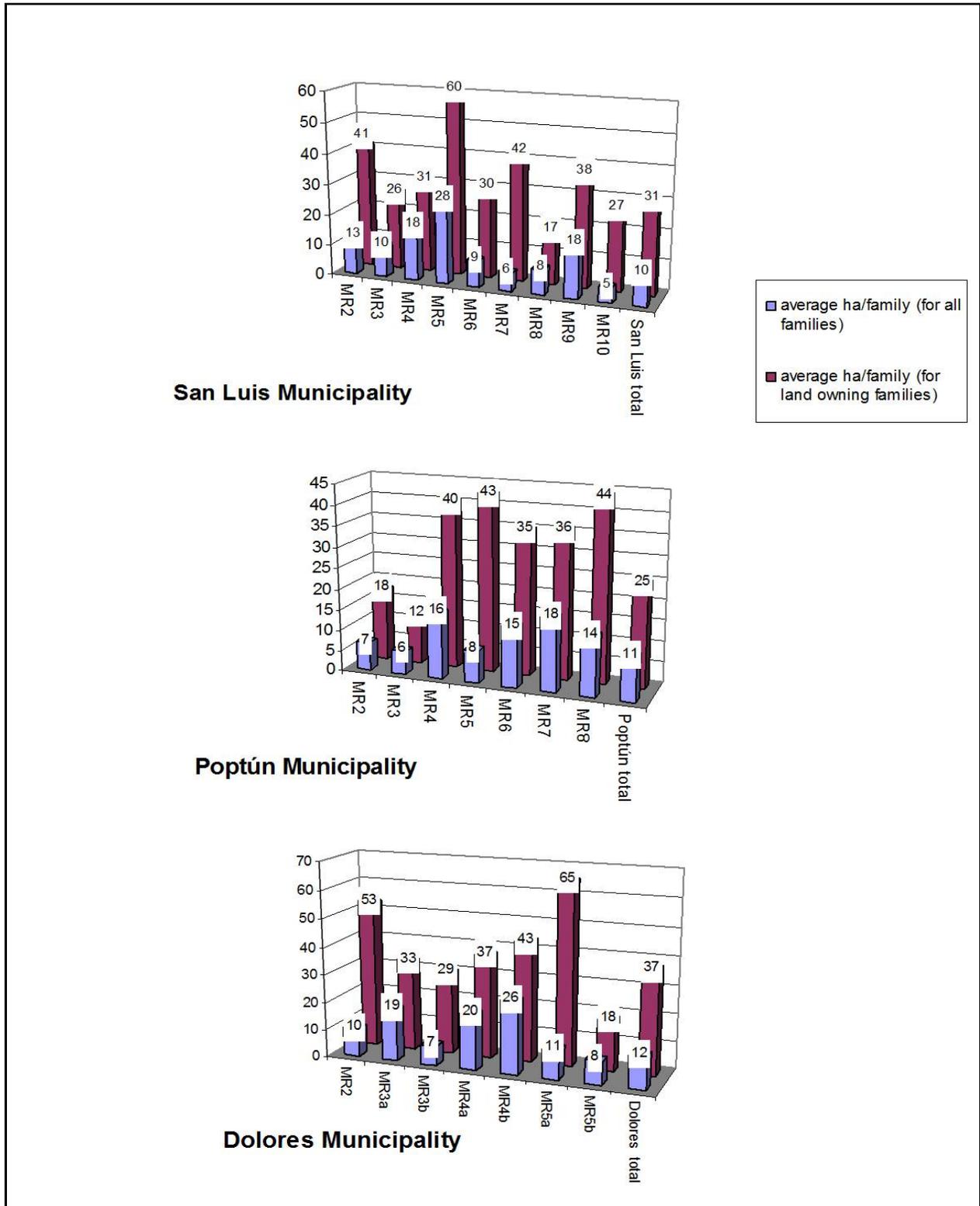
The conversion of agricultural land into pastures and the displacement of the *campesino* families are not new in Petén; in fact it has been happening since the beginning of the department's colonisation process. Migration from other departments to Petén has increasingly been accompanied by intra-departmental migration from southern municipalities towards the north, mainly by small-scale farmers who have lost their land to large landowners, and moved on to find a new plot to claim. *Campesino* families in many cases unintentionally prepared the ground for cattle farming. Liza Grandia describes²⁰ how ranchers let plots for cultivation to new migrants on a temporary basis. When they had cleared the land and harvested for several years, the ranchers reclaimed the land and turned it to pasture.

The dynamics of this process have, however, changed significantly. Firstly, there has been a strong acceleration of the conversion of agricultural land to pasture and an accompanying concentration of land, with an increase in violence and pressure on those who are not willing to sell; secondly, as already mentioned, there is no more available land left - those who lose their parcel are unlikely to find another one.

There are two distinct areas in Petén in regard to the dynamics described: the south-western municipalities Sayaxché and La Libertad, where significant areas are being converted mainly to oil palm or in some cases papaya plantations, and the south-eastern and central parts, where cattle farmers, some of them related to drug trafficking, are the main buyers. The concentration of oil palm in the south-west is due to its more favourable topography and soil conditions, although some parts of Dolores, Poptún and San Luis could also qualify for large scale plantation farming.

²⁰ Grandia, Liza 2006

Figure 2: Available farming area per family, per Microregion (MR) in municipalities of San Luis, Poptún and Dolores



Source: Pastoral Social, 2009a, own elaboration

Oil palm plantations in Petén have been expanding at an enormous pace. The agricultural census of 2003 reported approximately 30.000 ha of oil palm production for the whole country, but none for Petén²¹. A 2007 survey by ActionAid Guatemala showed 29,400 ha of oil palm in Petén, 20,700 ha of them in the productive stage²². In a 2010 still unpublished study IDEAR and CONAP²³ used aerial photographs to measure the extension of plantations and identified 44,300 ha of oil palm in the productive stage in Petén²⁴, which means that the area doubled in only three years, with a lot more still in preparation. Ownership of the plantations is concentrated in a small number of companies, most in the hands of families who form part of the national oligarchy, in alliance with other local and foreign investors²⁵, and “Palmas de Ixcán”, a subsidiary of Green Earth Fuels LLC. from Houston, Texas²⁶.

In the present, the production is destined for the fabrication of food and cosmetics, although with the rising prices of fuels, it is expected that palm oil in the future will increasingly be converted into bio diesel. In 2007, 42% of the national production was consumed within the country, whereas the remaining 58% was exported mainly to Mexico and other Central American Countries²⁷. Because of the growing production and the saturation of the local market, the percentage of exports has probably risen since then.

The majority of plantations have been established on land that formerly belonged to Q'eqchi *campesino* communities, and as a consequence, more than 20 communities have disappeared. In many cases the process of land concentration went through two stages: in the first, speculators and cattle farmers bought land from *campesino* families, and in a second stage they re-sold the land in bigger parcels to the oil palm producing companies, sparing them the hassle of negotiating with many individual owners, but also increasing the price. Several of the communities that have disappeared, and many of the *campesino* families who sold their land had benefitted from the FONTIERRAS' access-to-land program only few years before. Organisations like the Pastoral de la Tierra which had assisted in the titling process, were more than disappointed with this development.

²¹ INE, 2003; in view of the already producing areas in 2007, however, and that oil palm needs at least 3-4 years to reach productive stage, it is very likely that there must have been considerable extensions already planted.

²² Action Aid 2008

²³ Consejo Nacional de Áreas Protegidas

²⁴ Personal communication Alberto Alonso, study coordinator IDEAR

²⁵ Action Aid 2008

²⁶ El Periódico 2008a

²⁷ El Periódico, 2007a

In the case of the expansion of cattle farming, there are no reliable statistics from government institutions; the areas and numbers on farms planted with annual crops as opposed to pasture vary widely from one year to another²⁸. The results of the 2009 Pastoral Social study show that in a period of about ten years, about 30% of *campesino* families in the municipalities of Dolores, Poptún and San Luis²⁹ sold all their land. This percentage varies by only one percentage point between the three municipalities. Differences are considerably higher between different micro-regions within those municipalities, where numbers vary from 8% of families that have sold their land to up to 57% - meaning that in some micro-regions more than half the original *campesino* land owners have been left without parcels of their own (see Map 1). In the 236 communities visited during the investigation we counted the sale of 1,411 caballerías³⁰ or 63,495 ha of land and 2,326 families that were left landless.

Using a conservative figure of six members per family, about 13,965 people, or 10.3% of the area's present overall rural population of 135,689³¹. This does not take into account grown-up children of landowning *campesinos*. In *mestizo* and Q'eqchí-families it is generally the sons who stay on their parent's parcel with their new family and use part of the land, which later might be passed on to them as inheritance. Daughters, on the other hand, are expected to be cared for by their husbands.

Again, calculating with a conservative figure of only one son with a wife and two children living with his parents, the number of people dependant on one parcel would rise to 9 – meaning 28,287 people who had lost their land and livelihood, or 15.2 % of the present rural population of south-eastern Petén.

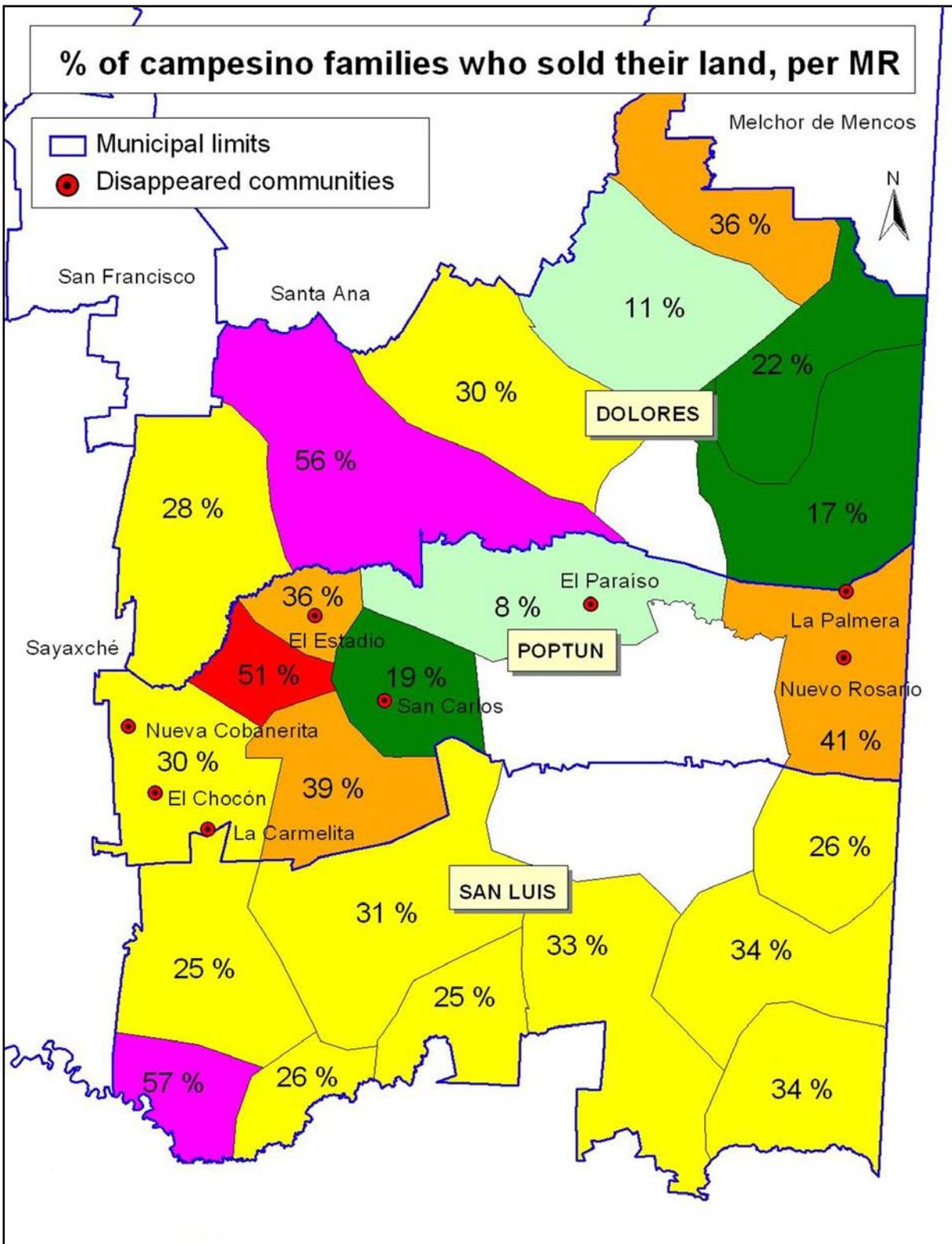
²⁸ INE, 2003; 2005; 2006; 2007. Since the 2003 census was carried out with more time and resources than the following encuestas, we assume it will have a higher grade of precision and use it as a reference.

²⁹ The three municipalities comprise approximately 21% of the department's geographical area, and 30% of its total population

³⁰ 1 caballería is corresponding to 45 ha

³¹ This is calculating on the base of the projections for demographic development in Guatemala from the 2002 national census (INE 2002).

Map 1: Percentage of campesino's parcels sold per microregion and municipality



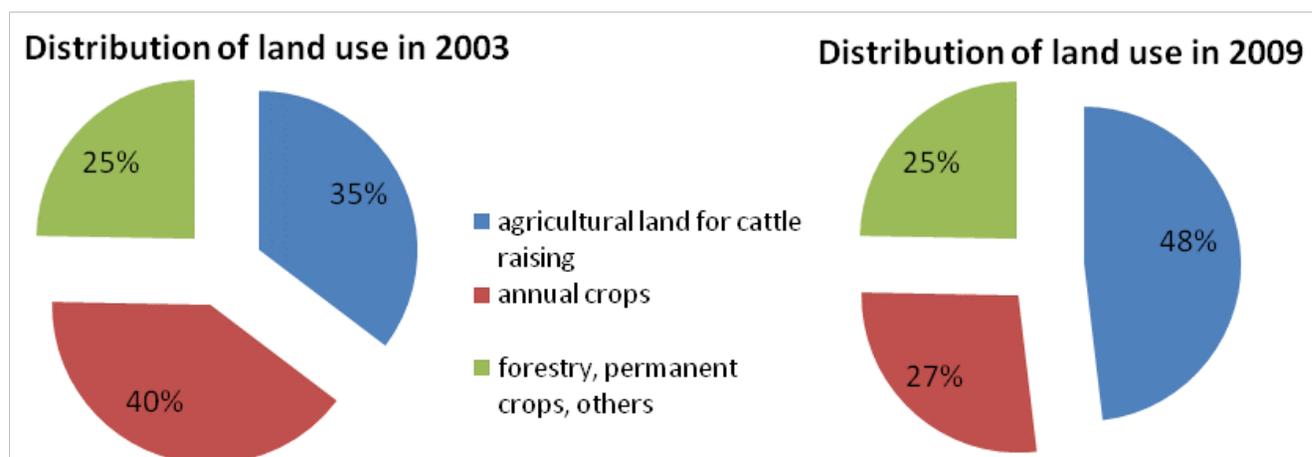
Source: Pastoral 2009a; own elaboration

The production systems and value chains in the region

Large landowners in south-eastern Petén are almost exclusively engaged in cattle raising, with some forestry and early stage oil palm cultivation³². Small-scale farmers on the other hand generally practice subsistence farming, selling surplus production. Some, especially *mestizo* farmers, are also engaged in small-scale cattle farming. There were more than 12,000 farms in the region in 2003 as registered by the Agricultural Census³³, but only little more than 2,000, or 17% of them were raising livestock, meaning the great majority (83%) of the farms did not have any cattle.

In the municipalities of Dolores, Poptún and San Luis a total of 297,255 ha of land is used for agriculture or forestry. In 2003, pastures occupied 104,944.85 ha or 35% of the cultivated land, whereas the great majority of farms dedicated to annual crops had 118,902.18 ha or 40% of the area at their disposition³⁴. The sale and subsequent conversion of 31,747 ha of *campesino* land between the 2003 Census and the investigation in 2009 increased the total area of farmland for staple crops as opposed to grazing land from a ratio of 1:0.9 to 1:1.8³⁵. Cattle farms now occupy at least 48% of the total agricultural surface in the three municipalities³⁶ (see Figure 3).

Figure 3: Change of land use from 2003 to 2009



Source: Censo Agropecuario, Pastoral Social, 2009a, own elaboration

³² The 2003 agricultural census registered 35% of land for agricultural purposes used for cattle farming, 40% for annual crops (nearly exclusively maize and beans), 19% for forestry, 1% for permanent crops and 5% for other purposes

³³ INE 2003

³⁴ This includes land in fallow time

³⁵ Informants were asked how many members of their community sold their land completely in a period of ten years. The total area sold in the 6 year period between 2003 and 2009 is calculated assuming that land concentration was advancing at a steady pace. 63495 ha:10x6= 38097 ha

³⁶ Not taking into account the conversion of forest into agricultural land, or the beginning conversion of pastures into oil palm plantations

Distribution of land within the livestock sector is very unequal as well, see Table 1. Of the 2,171 farms with livestock production in 2003, 71% had less than 50 cattle. These small and medium farms occupied 48% of the land, whereas 52% of the land was held by the 29% of the landowners comprising large scale farms.

Table 1: Number of farms with cattle, number of animals and area of pastures (ha)³⁷, south-eastern Petén

	No. of Farms	No. of Cattle	Pasture ha	Cattle per Farm	Pasture ha per Farm	No. of Cattle/ha
Total	2,171	115,959	94,438	53	43	1.2
1 to 4 cattle	377	951	1,648	3	4	0.6
5 to 9 cattle	275	1,848	2,972	7	11	0.6
10 to 19 cattle	379	5,197	6,028	14	16	0.9
20 to 49 cattle	513	16,142	17,471	31	34	0.9
50 to 99 cattle	345	23,844	17,592	69	51	1.4
100 to 199 cattle	190	25,651	18,222	135	96	1.4
200 to 499 cattle	66	19,090	12,373	289	187	1.5
500 to 999 cattle	18	11,851	7,507	658	417	1.6
1000 and more cattle	8	11,385	10,625	1,423	1,328	1.1

Source: Censo Agropecuario 2003, own elaboration

In the sector of annual and semi-permanent crops, the predominance of white corn and black bean is striking. Table 2 clearly shows this “Black and White” panorama: in 2003, the whole area under cultivation was 56,474 ha, of which 36,718 ha or 65% were cultivated with corn, and 17,720 ha or 31% with beans. All the other annual and permanent crops only accounted for 3.6% of the total area under cultivation.

Table 2: Cultivation area for main crops, south-eastern Petén

	Ha	%
White corn	36,718	65.0%
Black beans	17,720	31.4%
Other annual crops	1,056	1.9%
Permanent crops	981	1.7%
Total	56,474	100.0%

Source: Censo Agropecuario 2003, own elaboration

Among the 236 communities included in the Pastoral Social study, we found a similar picture to that shown by the Census: little product diversification, and a predominance of corn and beans, not only as subsistence, but also as cash crops. In 89% of all communities, farmers sell corn, and in 84%, also sell beans. In 17% of the communities cattle raising is an income generation activity.

³⁷ Ha of pastures only in possession of cattle farmers (not including other pastures)

Other products such as pumpkin seeds are only cultivated in 11% of the villages, with rice and vegetable production in only 6%. 50% of the communities rely on maize and beans as their only cash crops. This would not be a problem if these production systems were highly profitable. But, as Table 3 shows, low yields of approximately 39 quintales (qq)³⁸ per ha in the case of corn, and of 14 qq per ha in the case of beans, the profits are between Quetzales (Q)³⁹ 800 and Q 900 per ha, including costs of labour and land.

These costs are often not calculated by the farmers because land mainly is their own and about two thirds of all work is done by family labour. This means, that a family which grows an average 4.8 ha of corn⁴⁰ and 1.6 ha of beans, does not spend money on leasing land and hires only about 30% of its labour force, can earn around Q 20,500 from the two harvest that are normally possible in one year, or less than Q 1,700 per month. Subtracting family consumption of about 4.0 qq of maize, and 0.15 qq of beans per month for a family of six, income would be around Q 5,100 less per annum.

Table 3: Calculation of the utilities of white corn and black beans in three micro-regions of south-eastern Petén

	White Corn	Black Beans
Area cultivated ha	4.8	1.6
Yields qq/ha	39	14
Price Q/qq	97	244
Total Value/ha	3.741	3.486
Input Costs/ha	389	579
Labour Costs/ha	2,177	1,721
Land Costs/ha	349	299
Profits	827	887
Profits/Total Value	22%	25%
Man days/ha ⁴¹	44	34

Source: Dürr et al. (2010)

As mentioned above, cattle raising occupies the largest part of south-eastern Peten's agricultural area. Most breeders practice an extensive livestock farming system with a low stocking density.

³⁸ 1qq = 45.6 kg

³⁹ Q 8 = 1 US\$

⁴⁰ Calculating the average total surface cultivated in two harvests

⁴¹ Man days/ha in agricultural production calculated for the cultivated surface, not taking into account land in fallow time

According to the 2003 Agricultural Census⁴², stocking rates were only 0.6-1.6 head of cattle per hectare, small farms generally having fewer animals on a given area than large cattle ranches. Once farms are established, fenced and sown with pasture, labour requirements are very low, between 6-11 man days/ha, see Table 4. For small-scale farmers, even with higher density stocking rates of 1.4 cattle/ha found in our study, there is very little profit to be made from this kind of livestock farming. According to our calculations, it is even achieving minor losses. This was also shown in a study carried out by the University of San Carlos (USAC). With increasing farm and herd size, input and labour costs per hectare are diminishing, meaning that large farms can achieve a better profit margin than small holdings.

Table 4: Calculation of the utilities of cattle breeding and fattening by small-scale farmers in south-eastern Petén

	IDEAR (2009)	USAC (2007)
Number of farms	10	8
Area ha	253	245
Number of cattle	359	458
Animals/ha	1.4	1.9
Number of calved	57	78
Value Q/calved	1,170	1,600
Animals sold	111	53
Price Q/animal	3,012	4,491
Total value Q	347,754	278,000
Value Q/ha	1,372	1,135
Input Costs/ha	431	1,049
Labour Costs/ha	336	470
Land Costs/ha	793	-
Depreciation/ha	163	6
Profits Q/ha	-351	-390
Man days/ha	6	11

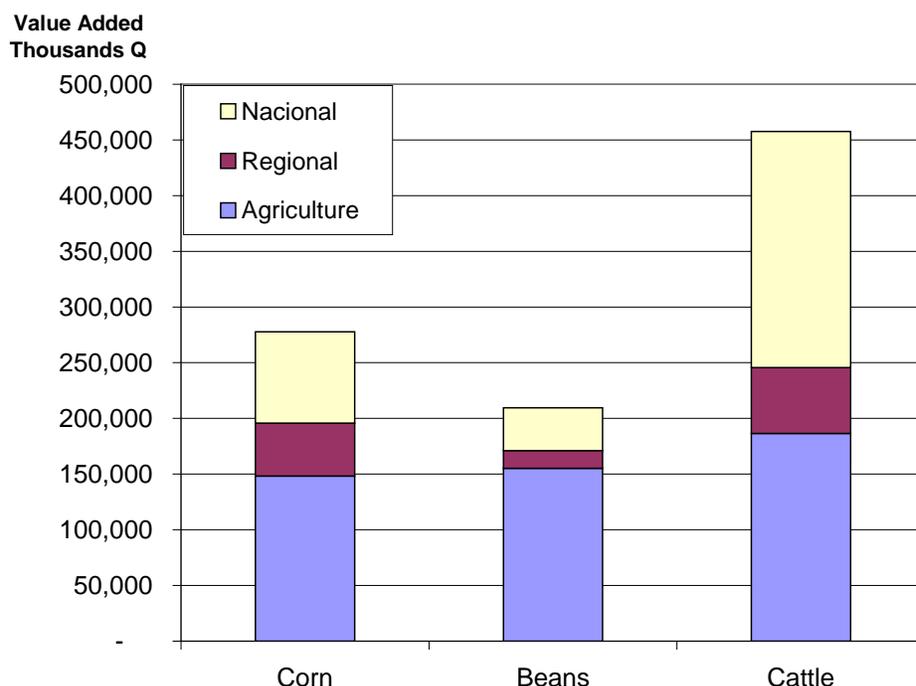
Source: Dürr et al. (2010)

The entire rural economy of south-eastern Petén relies mainly on corn, beans and livestock. These activities not only add value and create employment in the agricultural sector, but also in

⁴² INE 2003

the whole value chain, including the input sector, traders, industry and the retailing sector. Figure 6 compares the three products and the three levels where they generate value added (VA). In the agricultural sector the VA does not differ a lot between corn (Q 148 millions or US\$ 18.7 millions), beans (Q 155 millions or US\$ 19.6 millions) and cattle (Q 186 millions or US\$ 23.5 millions). In the regional intermediary sectors (like corn mills, traders, *tortillerias*, slaughterhouses, butchers etc.) it is higher in the cattle (Q 59 millions or US\$ 7.5 millions) and corn value chains (Q 48 millions or US\$ 6.1 millions) than in the bean value chain (Q 16 millions or US\$ 2.0 millions), where no transformation is involved. The livestock value chain generates nearly half of its VA (Q 212 millions or US\$ 26.8 millions) at the national level, since live animals are transported to other departments and the capital city to be slaughtered and sold. Petén in spite of its low yields per hectare is one of the important corn producing department of Guatemala, thanks to its large areas under cultivation, and contributes a significant percentage of maize and beans to national consumption. Corn and beans sold on national markets contribute to the generation of VA at the national level with Q 82 million (US\$ 10.4 millions) and Q 38 million (US\$ 4,8 millions), respectively.

Figure 6: Value Added in the value chains of corn, beans and cattle

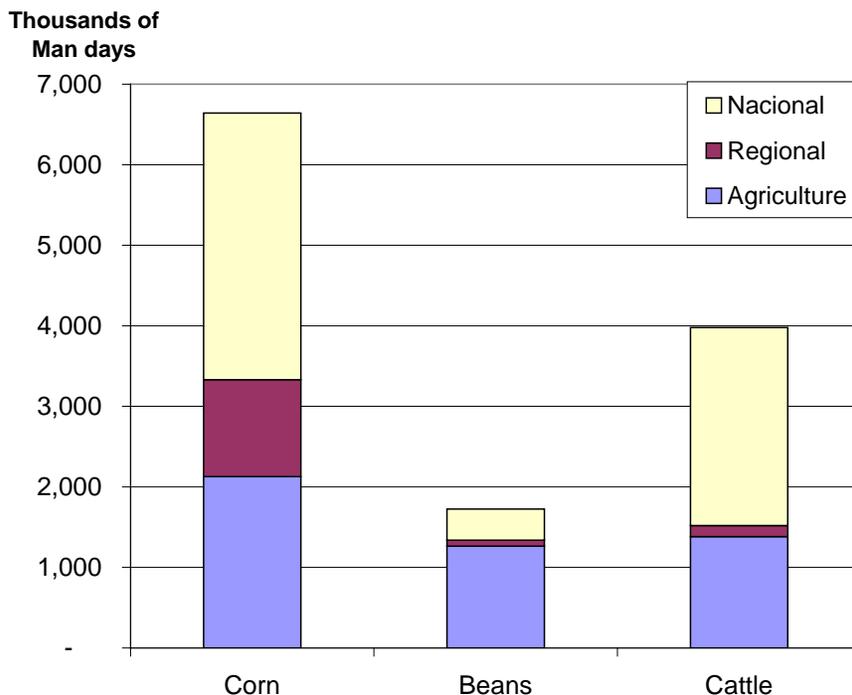


Source: Dürr et al. (2010)

Comparing the significance of the three activities in relation to employment generation, it becomes clear that the corn sector generates most jobs. Figure 7 shows that more than half

(53%) of the 12.5 millions man days of the three value chains were generated through corn production. At the regional level, corn is responsible for more than half of the jobs created in the agricultural and intermediate sectors: For each agricultural job, there are two jobs indirectly created through backward and forward linkages. This also holds true for the livestock sector, but the jobs created here are mainly at the national level (at the slaughterhouses and the numerous small butcher shops in Guatemala City) whereas benefits at the local and regional level are not as high.

Figure 7: Employment generation in the value chains of corn, beans and cattle



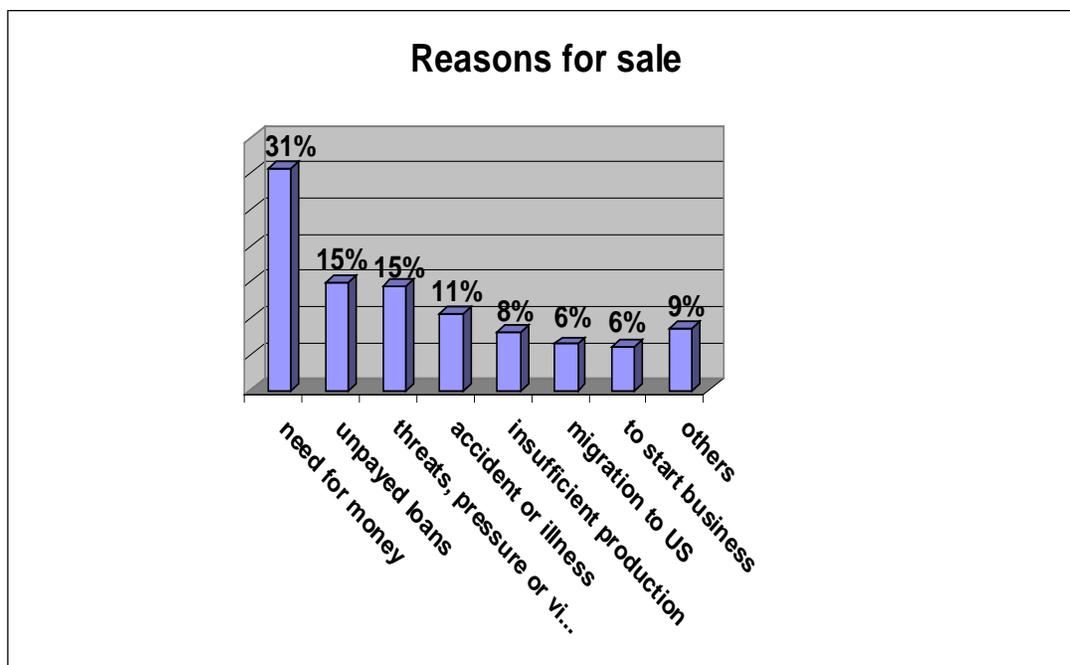
Source: Dürr et al. (2010)

Why do peasant families sell their land?

In the interviews conducted during our research most answers (78%) given by respondents as to why *campesino* families are selling their land had to do with economic reasons (see Figure 8), whereas in 15% of the communities pressure or threats were reported as reasons for sale⁴³. The latter proportion might be higher in reality, given that violence is a very sensitive issue in Guatemala and possibly some didn't want to talk about it to the interviewers who were strangers to many communities.

⁴³ There were no interviews conducted specifically with those who sold; interviewers were talking to the community focus groups asking about the reasons why families would have sold in a this particular community

Figure 8: Reasons for the sale of *campesino* land



Source: Pastoral Social, 2009a, own elaboration

The by far most common answer (31%) given as a reason for sale is the rather unspecific “**need for money**”. Most *campesino* families in Petén live under precarious conditions, with a constant state of unsatisfied needs. As we have seen, peasant agricultural production is focused almost exclusively on maize and beans, with some of the small farmers in south-eastern Petén having small scale cattle production⁴⁴.

Knowledge about diversification of production or improving soil quality is generally scarce⁴⁵, as is availability of technical assistance and credits for investment in agricultural production. Access to markets often is difficult because of long distances and poor road conditions, and there is very little organisation by *campesino* producers for marketing of their products⁴⁶.

⁴⁴ Pastoral Social, 2009a

⁴⁵ In the case of the Q’eqchie communities of Verapaz, the Q’eqchí motherland, and older communities in San Luis production at least for family consumption is much more diversified; explanations for the loss of knowledge and reduction of agricultural productions to only two main crops are mainly to be found in the broken history and tradition of many of the Q’eqchí migrants, first because of expulsion from their original lands in the 19th century through coffee plantations, migration and civil war (see Grandia, Liza, 2006).

⁴⁶ Of the 236 communities visited during the investigation, only 19 (8%) had cooperatives or associations explicitly dedicated to activities in the field of agricultural production or commercialization.

Yields are generally low, and monetary income generated through agricultural production on small-holder plots ranges between Q 4,000 and Q 20,000 (US\$ 500 – 2,500) per year⁴⁷. Many *campesinos* do occasional day labour in addition to cultivating their own parcel, but even so, it is very difficult to satisfy the material needs of a large family. Being able to receive for one's parcel of land in one lump what one can expect to earn in ten years or more is a great temptation, which many haven't been able to resist. Apart from that, the relatively short time that many families have been living in their current location hasn't been long enough to develop a strong sense of belonging, either to the land or the community. Whereas peasants in western Guatemala are defending their substantially smaller plots with all means available, in Petén they are much more likely to give away their land if offered enough.

Insufficient production because of poor soils, excess or deficiency of water is aggravating the financial situation of *campesino* families. Petén has a diverse range of soils, which in many cases are not suited to intensive production, especially for nutrient-demanding crops such as maize. Low-lying areas periodically flood in the rainy season, spoiling the maize harvest, although they might be appropriate for crops like rice⁴⁸. Insufficient knowledge about diversification and soil improvement techniques are adding to the problem and many *campesinos* are resisting against changing their production from maize and beans to other products that might bring better yields.

Maize and beans are culturally engrained staple subsistence crops that constitute the base of family consumption. Maize also has a high spiritual value in the Maya Q'eqchí population, where sowing in many communities is still a collective undertaking accompanied by ritual. Maize production for many is identical with family reproduction, and substituting it with other products that would be mainly for sale would imply a radical change not only of economy but also of mentality, from subsistence to pure market production, thereby risking families' food security. A piece of land that doesn't produce maize is worthless for many, and instead of changing to another product because of unfavourable soil conditions they would prefer to swap their parcel. Apart from the reasons already mentioned it is also the fear of risk associated with investing in a new product with unsecure yields and marketing opportunities that is preventing many farmers from experimenting with new crops.

⁴⁷ Pastoral Social, 2009a

⁴⁸ Semox, a small community in San Luis, had been completely abandoned by its original inhabitants because they couldn't produce maize except for one Q'eqchí family that obtained an excellent rice production and accomplished to buy another parcel of 45 ha for the future use of the children.

Urgent and often unexpected **need for cash** is compelling many to sell. Reasons include accidents, the grave medical condition of a relative, payments due on loans, and other expenses that exceed the family's capacity to pay. Generally the amounts needed are considerably lower than the value of the whole parcel, but a lack of alternatives forces them to deal with those who have the necessary liquidity, generally cattle ranchers interested in extending their holdings. Cattle ranchers don't like to acquire small portions and therefore expect to buy the entire parcel, resulting in a loss of the family's subsistence base.

Credits seem to be a problem for many families. Possibilities of obtaining credits at favourable conditions for small farmers are more than scarce, and an interest rate of 18% annually is already considered low. Most *campesino* families in need of loans obtain them from private credit institutes like GENESIS, which charge up to 36% annually⁴⁹. Because there are few alternatives and in many cases borrowers lack information about alternatives, they accept these conditions⁵⁰. Others obtain loans from neighbouring cattle farmers or land speculators, who demand land titles as security and keep the parcel if families can't keep up with payments.

In San Luis so called "coyotes"⁵¹ were promoting illegal **migration to the United States**, offering loans from a third party to pay for the journey. Those who accepted had to surrender their land title and agree to pay back the loan within one year. Several families have lost their land this way because they couldn't earn enough money in the US, or because they needed too much time to find a job. Others simply sold their parcel (or that of their father) to pay their passage north.

Another important reason why many small farmers sell their parcel are **false assumptions about the availability of land** in Petén. Most Petén peasants who own land have "grabbed" it and later initiated a process of recognition and titling with government institutions. As mentioned before, these times are over since there is no more free land available in the department, but not all *campesino* families seem to be aware of this fact. Part of the problem is the lack of information or erroneous beliefs about the legal status of the protected areas in Petén. Some consider these areas as potentially open to colonisation; this is encouraged by individuals and organisations who promise land to peasant farmers at low prices or talk about supposed plans of the government to declassify protected areas for colonisation, thus raising false hopes. Some government officials have been and still are giving out supposedly legal documents for land that legally cannot be titled

⁴⁹ GENESIS is the largest private money lending institute in southern Petén; some private money lenders are charging up to 80% annually

⁵⁰ Customers for example are told the monthly interest rate (3%), which doesn't sound much, but can't calculate the annual interest.

⁵¹ Intermediaries

as private property⁵². Others are demanding large advances for supposed legal services and selling worthless titles for land they don't own, depleting *campesino* families of their financial resources and leaving them open to the risk of being evicted without compensation. Peasants are also occupying land in protected areas confident that the government is unable to effectively prevent further colonisation.

Other families who sold are hoping to buy legally titled land on the free market, but find that land has become extremely expensive with prices often way above their possibilities. If they manage to find something they can afford they often end up with a parcel significantly smaller than what they sold or one with poorer quality soil.

Finally there are several strategies, including **pressure and threats**, that potential buyers employ to get hold on more land. Extensive cattle farming as practiced in Petén has an expansionist dynamic for several reasons: Profits and the status of owners rise with the size of holdings, soil degradation puts pressure on ranchers to buy fresh land, etc.⁵³. It is a general tendency of cattle farmers to extend their holdings, and the easiest way often is through the acquisition of *campesino* land. Most of the buyers are middle scale and some large scale cattle farmers who generally try to employ friendly and sometimes paternalistic relations with their *campesino* neighbours, if for no other reason than to be able to satisfy their labour needs.

Whereas most middle size cattle ranchers are locals living on their own farms, many of the larger holdings belong to owners from Guatemala's eastern departments Jutiapa, Jalapa, Chiquimula and Zacapa. These owners tend to employ administrators and only visit from time to time. Contact with them is generally more difficult than with local ranchers, they don't care much about relations with the local population, have more aggressive attitudes and conflicts arise more easily. Most cattle breeders involved in drug trafficking (so called *narco-ganaderos*) come from these departments. Because of family and business relations, it sometimes is difficult to draw a clear line between those involved in illegal activities and those who are not.

Buyers' strategies start at the level of information gathering, through contacts with government officials in institutions like FONTIERRAS or the Cadastral Information Registry RIC, or paid

⁵² In 2007 it was discovered that about 50.000 ha in the core area of the RBM had been registered as private property in the national Registro de Propiedad, supposedly belonging to 11 different owners (Mayén Morán, Carlos Tomás, 2008). At the moment of writing this article, the mayor of Dolores, in the run-up to the coming elections, is known to be distributing supposed possession documents to *campesinos* for parcels on municipal lands that form part of the Reserva de Biosfera Montañas Mayas/Chiquibul, towards the border with Belize.

⁵³ See Grandia, Liza, 2006

informants working in those institutions⁵⁴. These can provide valuable data on who is going to receive or recently has received their title, who can't keep up with paying back their loan or mortgage, etc. A next strategic level would be that of offerings and persuasion, such as making bids through local middlemen (*coyotes*) to families in debt or with other problems, or simply having those *coyotes* frequently visit *campesinos* with attractive parcels, repeating or increasing an offer. Depending on who the interested party is those visits can already be interpreted as pressure on land owning families. This can further be increased by the potential buyer himself visiting farmers, possibly in company of armed men, asking if a particular parcel is for sale and offering a price. Although there might be no threat spoken out loud, the experience of civil war, the exploding violence in the country during the past years and the knowledge of a particular buyer and his attitudes in many cases are enough to intimidate small-scale farmers to sell. A next step up is closing access roads to farmer's plots, then letting cattle or fire from burning land for new pastures "escape" and destroy the *campesino's* crops. Direct threats could follow; one common expression is: "If you don't sell, I'll buy from your widow", which is to be taken seriously. Finally there have been many cases of using direct force against small-scale farmers who are unwilling to sell or to leave a property in dispute. Techniques include fencing the property and driving cattle on it, forcibly evicting them from the land parcel with armed men or killing the head of the family⁵⁵.

In some other cases large owners were appropriating land using fraud. In the case of La Cobanerita, an access-to-land project for 20 Q'eqchí families by FONTIERRAS in the Poptún municipality, one group of beneficiaries wanted to sell, whereas another one did not. Those willing to sell collaborated with the potential buyer in faking the others' signatures, and the deal was made. The buyer further intimidated the families who had resisted the sale by threatening them with having them brought to the prison if they took any action – with success.

There is little that families being intimidated or threatened to sell or abandon their land are able to do to resist these strategies without exposing themselves to higher risks in Petén. Guatemala has one of the world's highest homicide rates of 47 per 100,000 habitants, and an even higher rate of impunity; 98% of all crimes committed in the country never lead to any conviction⁵⁶. Organized crime is highly developed and permeating nearly all sensitive government institutions⁵⁷, and there

⁵⁴ It is known that for example the Mendoza family, known as the most influential narco-ganaderos del Petén, had paid informants in several FONTIERRA-offices and were managing their own edition of the cadastral plan which is not for public access.

⁵⁵ The father of one of the Pastoral Social's collaborators was killed in such a situation in 2005

⁵⁶ PNUD 2007

⁵⁷ See for example Lopez, Julie, 2010

is widespread and grounded fear of proceeding against those involved in it⁵⁸. UDEFEGUA⁵⁹, a Guatemalan NGO dedicated to the protection of Human Rights Defenders, counted a total of 305 aggressions against human rights defenders in 2010. Of these, 32.78% were related to organized crime, and 32.11% to conflicts with land owners⁶⁰.

The SAA, the governmental institution in charge of land conflicts, can only mediate in voluntary processes between willing parties, but not give any kind of further support if the conflict should escalate. Police and the public prosecutor's office generally don't act at all if physical violence still hasn't occurred. Most investigations are abandoned after a short time, out of fear, incompetence or because officials have been paid off. Although organisations like the Pastoral Social or ACDIP⁶¹ accompany *campesinos* in land conflict and give them legal orientation, even they generally have to back out if there are serious threats of violence involved, because neither the state nor any other institution are able to protect them and the lives of their staff.

An exemplary case is that of the Finca 13 in the region of Calzada Mopán in Dolores, where a group of 14 *campesino* families settled on a property of about 315 ha around 1990. In the 1970s it had originally been allocated to a military officer from the capital city who never took it into possession, which would have been a condition for its liberation from the state's tutelage. He only left a guardian on a smaller plot to watch over his property. The families entered into negotiations with the owner and around 1995, they initiated a process of recognition for the property to be turned over to them with INTA, the institution then responsible for allocation of land in Petén. This process was later continued by FONTIERRAS. The owner was basically willing to sell the holding he wasn't going to use for a relatively moderate price, but negotiations didn't come to a satisfactory conclusion for him. The *campesino* families refused to pay hoping that the government would revoke his rights in favour of them since he never had worked his lands. In the end of the 1990s the families sought the support of Pastoral Social to sort out their problem.

After the necessary period of 20 years, in 2002, the state's tutelage was lifted from the property and the former officer received full property rights, without considering that the aforementioned conditions had not been fulfilled. He immediately sold it to a new owner who started to urge the 14 families to leave. Since the holding now was in conflict, FONTIERRA stopped the process of

⁵⁸ On 15.02.2011, some days before writing these lines, three men on a motorbike killed judge Edy Cáceres Rodríguez in San Benito, central Petén, on the way to work; three days before that, on 12th February, three students belonging to a *campesino* community on Rio Dulce river just south of Petén, were killed over a land conflict with a cattle rancher when driving home in their dinghy.

⁵⁹ Unidad de Protección a Defensoras y Defensores de los Derechos Humanos - Guatemala ONG

⁶⁰ UDEFEGUA 2011

⁶¹ Asociación de Comunidades para el Desarrollo Integral de Petén, the Petén branch of the *campesino* organisation CENOC at national level.

recognition, and the *campesinos* approached CONTIERRA, to mediate in the conflict, as the government institution responsible for land conflicts preceding SAA. The property was sold two more times until 2006. The last buyer was Yovani España, a cattle rancher involved in drug trafficking from Chiquimula with a reputation for violence, who already had appropriated several large pieces of land in the zone.

España visited his new property with a group of armed men and gave its occupants two hours' notice to leave for good, proceeding immediately after with burning down their houses and fencing the terrain including parts of other parcels he hadn't bought. CONTIERRA made some attempts to get into contact with Yovani España, who finally approached their office in Poptún and declared he had solved the problem his way and as a busy man didn't wish to be molested further. Since he wasn't willing to negotiate, CONTIERRA abandoned the case; the property was legally inscribed in España's name.

The evicted *campesino* families with the support of Pastoral Social tried to press charges against Yovani España with the public prosecutor's office, with no consequences. Finally even Pastoral Social had to tell them that their possibilities of help had come to an end. The families are now living on small urban lots in the village of Calzada Mopan, renting a little land to grow some maize, or they left the area completely. Several of their members are suffering psychological disorders as a consequence of their eviction⁶².

The factors of land concentration

The Guatemalan *campesino* and indigenous population's dispossession off their land goes back long into the past and has taken different forms during different periods of the country's history. In the present, with some exceptions, this dispossession is mainly working through the market – families are selling their land, a seemingly legal and clean procedure. Under conditions of extreme inequalities as in Guatemala however, market forces work directly against the poor. In the case of Petén, several factors have lead to their strong acceleration in the last 10 to 15 years, making land prices multiply by the factor 10 or more. Some of these factors are:

- The cadastral process which at the same time brought judicial security for land holdings and opened up the land market, provoked the immediate sale of hundreds of *campesino*'s parcels directly after receiving the title.

⁶² Yovani España was killed in an ambush by members of a competing drug cartel in August 2010, and his widow sold several of his holdings in Petén including Finca 13 in October 2010, which is giving hope to the *campesino* families to possibly be able to claim it back or get some kind of compensation.

- The strong improvement of road infrastructure in the department which facilitated the transport of products from Petén to the main markets of the country, making investment in land for production much more attractive rather than only using it as a way of holding assets.
- The boom of oil prices and agro fuels converted Petén in an ideal place for the installation of oil palm plantations, as has been described in “The present land situation”
- The financial returns of drug trafficking for local cartels that were re-invested in land for means of money laundering, and to gain control over territory.

Cadastral Process

In Petén, the opening of the land market is an intended result of the cadastral process pushed and financed by international institutions like the World Bank and the BID that was supposedly also going to involve a “market-assisted land reform”⁶³. But this approach is taking into account neither existing traditions of land use and ownership nor present needs of communal management, nor the already existing inequalities between different types of land owners. The cadastral process is reinforcing those inequalities and creates extremely disadvantageous conditions for small-scale farmers’ families, in comparison to those who have money and power, large cattle ranchers, speculators, national or international agricultural entrepreneurs and drug traffickers.

Land reform via the market was intended to be working through loans that FONTIERRAS, the government institution founded for land allocation after the signing of the peace accords, was going to grant to landless farmers in order to buy parcels. This land reform has failed for different reasons: FONTIERRAS was underfunded from the start and in the last years, it has almost completely run out of financial means for land acquisition⁶⁴, so it has only been able to benefit a small fraction of farmers in need of land. At the same time, many of those who were able to receive credits from FONTIERRAS later had great difficulties paying them back, and ended up selling their parcels in order to free themselves of debt, because they weren’t able to create sufficient monetary income with agricultural production on their land. One of the reasons was that terrains bought with FONTIERRAS access-to-land financing often were on low grade soils – the soils large landowners were willing to sell to FONTIERRA projects. Finally many large

⁶³ See Grandia, Liza 2006

⁶⁴ FONTIERRAS’ access-to-land program has continuously been diminishing since 2001, from 5748 families benefited in 2001, through 2429 in 2003, 764 in 2005, 413 in 2007 to a mere 239 in 2009 for the whole country (FONTIERRAS, 2000-2009).

landholders took advantage of the situation and demanded prices for land considerably above its market value – in some cases with overt consent of FONTIERRAS officials⁶⁵. This depleted scarce institutional funds and put an even higher financial burden on *campesino* families wishing to buy land.

Currently, the main task of FONTIERRAS in Petén is the regularisation of land, trying to process all the still pending applications for legal land titles in the department which is an integral part of the cadastral process. This is an urgent necessity in Guatemala because of parallel property registries, evictions and lost documentation during the civil war, the disorderly process of colonisation in Petén and corruption in government institutions, the delay over several decades in the titling process etc. As a consequence, there is no judicial security in regard to many properties. A great number of them are registered as belonging to several owners at the same time. Guatemalans jokingly say that their land should have several floors in order to accommodate all existing claims on the land available.

Land, as already has been mentioned, can now only be titled individually, respectively as family property (*patrimonio familiar*), to give spouses and children the possibility of partaking in decisions about selling or mortgaging the family parcel⁶⁶. This leaves very little margin of choice especially to communities who have a tradition of collective agrarian activities and live in territories where necessary resources for all, like water or forest, are unevenly distributed over different parcels. The exclusive individual titling process creates individual rights on these resources to the exclusion of others, thereby ignoring any existing communal or collective forms of land use and resource management, promoting an individualistic mentality and eventually creating sources of conflict. A combination of different types of rights (family plots to work on, but shared other resources) might be much better suited to the needs of many communities⁶⁷.

Whereas the Registro de Información Catastral (RIC) has the purely technical task of measuring land, FONTIERRAS has to analyze applicants' documentation and award legal titles. However, measuring is not a purely technical task, given the many conflicts about land rights involved. RIC has solved the problem partly for themselves by simply not measuring certain areas in conflict. In other cases, the measuring process clearly advantaged owners with money or power.

⁶⁵ The national FONTIERRAS-coordinator in 2001-02 supposedly urged for the renegotiation of contracts with landowners to increase prices, because he considered them too low (interview Alan Alaya, coordinator of RIC Petén, 04.02.2011)

⁶⁶ The figure of Collective Agrarian Property (*Patrimonio Agrario Colectivo*) which allowed communal holdings, introduced by INTA, was abolished with the institution's dissolution in 2000.

⁶⁷ Grandia, Liza 2006

FONTIERRAS also is not responsible for conflict resolution, but analyzing legal documents and decision-making about land titles leaves some margin of interpretation or the possibility of delaying cases that in many cases also worked in favour of those with influence. The Secretaría de Asuntos Agrarios (SAA), the government institution in charge of agrarian conflicts, can only mediate between willing parties and has no mandate to enforce solutions, even in clear-cut cases from the legal point of view, and rapidly pulls out of conflicts where violence might be involved. So the only way left to applicants are the courts. Since there is no agrarian law and there are no agrarian courts in Guatemala, land conflicts are treated under civil law and all applicants to civil courts have to pay their case, which makes access nearly impossible for poor peasants.

The cadastral process undoubtedly brought judicial security to those who were able to obtain legal titles in Petén. Under extremely unequal conditions and in the conflict-ridden context of access to land in Guatemala, the way this process operates and opening the land market through it clearly work against small farmers and their communities and facilitate further concentration of land. Judicial security has made the acquisition of land in Petén much more attractive for large buyers, being it for investment or for speculation purposes.

Improvement of Road Infrastructure

For a long time, Petén was the vast backyard of Guatemala, a long way from the capital city, difficult to reach and therefore unattractive for commercial production. Before the construction of the bridge that spans the Rio Dulce river in 1980, the 400 km journey from the capital to Poptún was a three-day ordeal. Even then, until the construction of the tarmaced road from Rio Dulce to Flores in 1998, the bus ride to Poptún took about 12 hours. Heavy trucks needed a lot more time, so transporting live cattle to the capital's markets on the long, bumpy journey was a risky undertaking. Travelling to or transporting goods to many small hamlets implied walking for several hours. In those times, land was bought as a long term asset but not for investment in production expecting immediate profits.

This has changed considerably. Travel times have shortened by nearly 50% and the main roads from south to north are excellent. Even most rural communities can now be reached with at least one bus daily. Under these circumstances several industries have grown substantially, from tourism mainly in the central part, with Tikal and other archeological sites nearby, over cattle farming to supply the capital city's growing population and need for beef, to plantation farming of fruit like papaya, of timber and oil palm. Not all have grown at the same rate and with the same success, however. Tourism, after living several years with continuous growth rates, had one of its worst years for a long time in 2010, because of the continuing economic slowdown in the US and

bad press about violence in Guatemala. Dreams of exporting beef (and not livestock) to Mexico, that included the construction of an industrial abattoir in the municipality La Libertad in 2006 have failed, and the plant has only recently begun functioning, although on a limited scale. Because of the accelerated growth of cattle production, prices have experienced a severe decline in the last years, so it is getting difficult for small and middle-size cattle ranchers to survive. Several middle-size farmers made attempts at papaya production for export, but for most of them necessary investment was too high and standards too difficult to meet. But large ranchers are still expanding, oil palm production is booming, and prices for land are still on the rise.

Drug Trafficking

In the whole of south-eastern Petén there are only eight land owners that possess more than 1,000 ha. It is striking that five of them are known to be involved in drug trafficking⁶⁸, two of them being the largest landowners of all (see Table 4)⁶⁹. Poptún is the municipality where the largest percentage of the total surface is concentrated in fewest hands; here the Ministry of Defense and one company own 4.47% of the total land available. Another nearly 6%, however, are held by three of the department's drug cartels.

The Mendoza as well as the Lorenzana and Berganza have additional large properties in other municipios of Petén and in their departments of origin, Izabal for the Mendoza, and Zacapa for the Lorenzana family. Otoniel Turcios and Yovani España in comparison are newcomers in Petén; Turcios' base is in the department of Alta Verapaz, where he owns large extensions of land in the municipio of Fray Bartolomé, and Yovani España had started in Chiquimulas, where he was known as an important cattle rancher. The properties shown here are mainly those which are titled properly under the names of those actors, or in some cases clearly identified by members of neighbouring communities. Many of the holdings in possession of *Narco-Ganaderos* though are not registered as their property, but as belonging to family members or strawmen. The real extension of land in south-eastern Petén in control of organized drug crime is much larger as our numbers indicate. This shows that the influence of organized crime is considerable, not only in relation to the climate of intimidation, violence and corruption they are perpetuating, but also in terms of the dimensions of land concentration, and the funds deriving from illegal activities invested in real estate. Although not being the main reason for land concentration, land

⁶⁸ Mendoza, Lorenzana, Turcios, España Arrue and Berganza

⁶⁹ The figures in the table are very conservative, since we only used data of holdings registered in the Registro General de Propiedad and some information from persons affected. Many of the holdings belonging to actors involved in organized crime are acquired by straw men under different names. The properties of Yovani España, killed in August 2010, are still mentioned because he was one of the most violent and influential actors in the years before.

appropriation with the use of pressure by *Narco-Ganaderos* is one of the most important and, because of the risks involved, most difficult to approach.

Guatemala, with its extremely weak state, is less important for drug cartels as a place for production than as an important bridge for drugs on the way from South America to the United States. Large shipments can be landed by air or by water to then be divided up and transported to their destiny in smaller portions by land. Petén is a particularly attractive department for drug trafficking activities because of its wide extensions, low population density and the little control that the Guatemalan government is able to exercise over its territory⁷⁰. The acquisition of large extensions of land by actors related to drug trafficking, apart from being a way to launder and invest profits from illegal activities, is also a strategy of securing control over territory, in order to set up clandestine landing strips, training camps and other installations, and simply to keep outsiders away.

Economic activities of these actors are not limited to the acquisition of land and cattle ranching, but are deeply interwoven with the department's economy and society. The Mendozas, who like most others started as cattle farmers and are the "oldest" family engaged in drug trafficking in Petén⁷¹, own "Fuente del Norte", the largest bus company of the department, several transport companies, construction businesses, the holiday center "Santa Isabel" in the municipality of Dolores, gas stations and an importing business for agrarian supplies, among others. Their construction businesses have been favoured with numerous contracts by government institutions, which can be traced in the official governmental information site "Guatecompras"⁷², especially by the municipality of San José in central Petén⁷³, where the Mendozas sponsor the local football team "Los Jaguares". Other families have undertaken a similar diversification process converting illegal money into legal business activities, in many cases receiving government funds for contracts. Otoniel Turcios has entered into the oil palm business, installing large plantations in Fray Bartolomé municipality and, still in the initial phase, also in San Luis⁷⁴.

⁷⁰ See for example Lopez, Julie, 2010

⁷¹ They started with the cultivation of Marihuana in Petén and its trafficking to Mexico in the 1970s, according to local information.

⁷² <http://www.guatecompras.gt/>

⁷³ See for example: Municipalidad entrega reconocimiento al empresario Milton Mendoza; http://sanjosepeten.com/index.php?option=com_content&task=view&id=108&Itemid=1

⁷⁴ He was detained by police in Belmopan, Belize, on October 25th 2010, and evicted to the United States (see Lopez, 2010); the installation of oil palm plantations on his properties is continuing, though.

Table 4: Surface area per municipality, municipal property, protected areas, land ownership over 1,000 ha								
Municipality	Poptún		Dolores		San Luis		Total 3 Municipalities	
	ha	% of surface area municipality	ha	% of surface area municipality	ha	% of surface area municipality	ha	% of surface area all municipalities
Total surface area/municipality	165,111.29	100.00%	270,143.70	100.00%	238,586.70	100.00%	673,841.70	100.00%
Municipal property	11,827.81	7.16%	3,896.25	1.44%	7,258.97	3.04%	22,983.03	3.41%
Protected areas								
Refugio de Vida Silvestre Machaquila/Xutilha	53,185.51	32.21%	5,695.76	2.11%	43,070.69	18.05%	101,951.95	15.13%
Reserva de Biosfera Montañas Mayas/Chiquibul	42,841.00	25.95%	81,223.28	30.07%	1,662.87	0.70%	125,727.15	18.66%
Total protected areas	96,026.51	58.16%	86,919.04	32.18%	44,733.56	18.75%	227,679.10	33.79%
Large holdings per owner								
Mendoza	4,234.94	2.56%	6,229.95	2.31%			10,464.89	1.55%
Lorenzana	4,136.12	2.51%	3,032.64	1.12%	2,196.96	0.92%	9,365.72	1.39%
Cultivos e Industrias Cancuen	4,674.40	2.83%					4,674.40	0.69%
Predinsa/ Catalina de Portillo					2,939.64	1.23%	2,939.64	0.44%
Ministry of Defense	2,700.00	1.64%					2,700.00	0.40%
Turcios					2,569.48	1.08%	2,569.48	0.38%
España Arrue			1,997.52	0.74%			1,997.52	0.30%
Berganza	1,392.71	0.84%					1,392.71	0.21%
Total large land holders	17,138.17	10.38%	11,260.11	4.17%	7,706.08	3.23%	36,104.36	5.36%

Source: Registro General de Propiedad, Guatemala; interviews with local informants. Own elaboration

A whole chain of completely legal other undertakings related to drug trafficking serve to launder money, cover up illegal operations, create and maintain contacts and produce profits. This chain reinforces both the element of intimidation on one side and helps to develop patron-client relations and sympathy on the other, creating bases in the local population and offering protection from persecution. Whereas many *campesino* families in Petén have been dispossessed of their lands through the extension of *narco-ganaderos'* holdings, others have profited as employees, cattle hands, guardians or “*mulas*” (transporters of illegal goods), or serve as informants in their communities.

Different families are operating in distinctive ways to get hold of land. While the Mendozas and Yovani España are notorious for their violent approach, others like Turcios seem to have been going about more prudently. He is offering better prices and not applying as much pressure, which in turn earned him a better reputation with *campesino* families in his zone of influence. Legal and illegal business ventures are creating employment in areas where work is scarce. Several of the mentioned actors are known to be running schools and hospitals or funding their construction, thereby offering services in the education and health sector where the state is failing to do so⁷⁵. This holds true also for the security sector: Many *Peteneros* proudly tell about the relatively low rate of common delinquency in the department. One of the reasons is that those involved in drug trafficking are not tolerating petty crime in their sphere of influence. Suspects are being eliminated, often tipped off by local authorities. This way, the powerful families prove their ability to maintain “justice” and order in a situation where the state obviously is not able to do so. Many poor people appreciate this, given the lack of alternatives⁷⁶.

Although the names of the important families involved in drug trafficking are known to everybody and periodically appear as such in the Guatemalan press, hardly any of them have ever been touched by justice. When Otoniel Turcios was detained in October 2010 in Belize, there wasn't even an investigation pending against him in Guatemala, much less an arrest warrant⁷⁷. Neither the Mendozas nor Yovani España before his assassination were ever arrested on drug trafficking

⁷⁵ The most prestigious secondary school in Poptún, where many of the more educated citizens send their children, belongs to a man who is fugitive from justice because of his supposed relations to drug trafficking.

⁷⁶ Only a few days after Guatemalan police and military together with DEA-agents unsuccessfully tried to capture the Lorenzana-brothers in Zacapa on 21 of July 2009, several hundred persons demonstrated against the operation and in favour of the persecuted, arguing they were good people who always had been supportive and helpful towards the local population (El Periodico, 2009a).

⁷⁷ Lopez, Julie, 2010

charges. In the last 20 years, there have been only two detentions of major actors in the drug trade in Guatemala⁷⁸.

This can only be understood with the permeation of Guatemalan institutions especially in the security and justice sector by organized crime⁷⁹ and the fear that these actors have been able to plant in the country's population. At the moment, it is difficult to conceive how this situation is going to change in the near future. It seems that drug-related violence is on the rise in the country because new actors that have been displaced from Mexico to Guatemala now are fighting for territory with the established families.

Consequences of land concentration

The process of land concentration implies consequences in different areas. The most immediate who suffer are the *campesino* families who have lost their land, and their communities. What many *campesino* families underestimate is the cost of living without being able to grow most of their food on their own land. Having to buy everything and the temptation of seemingly having a lot of money at one's disposal make life very expensive, and the money received for the sale of one's parcel melts away like snow in the sun. Families who don't manage to buy new land very soon after having sold, generally lose all their funds in a couple of years with no remedy.

Although the results of this investigation didn't deliver exact numbers in relation to the fate of those who sold, it is observed that only very few are able to buy new land with a comparative value and size on a legal base after having lost their former parcels, be it in their own community or in another place. Although the prices paid are considerable in relation to the annual monetary family income, they often are below the actual market value. In many cases sellers accept cars or mini-buses as part of the payment hoping to be able to start a transport business. Unfortunately these vehicles often turn out to be repainted worthless wrecks that break down after a couple of months, making their new owners lose a good part of the sale price. This, in combination with the fact previously mentioned that land has become scarce, makes it very difficult to find affordable plots to settle in again. Apart from that, the majority of cattle ranchers don't like to dispose of piecemeal farm portions, but prefer to sell them in one single lump which means a lot less bureaucratic hassle to them. For a small-scale farmer with an average annual monetary income of around 15.000 Q⁸⁰, it is already very difficult to buy a traditional parcel size of ½ *caballería*

⁷⁸ Dudley, Steven S. 2010

⁷⁹ Ibid.

⁸⁰ See calculations above

(22.5 ha), which can cost between Q 100,000 and Q 400,000 (US\$ 12,500 – 50,000). To buy a 17 *caballerías* farm is impossible; he would have to find a large group of others with the same objective. Credits available to *campesinos* on the free market in Guatemala are burdened with chokingly high interest rates of 18% annually and above, and FONTIERRAS doesn't have funds to give loans for the acquisition of land at its disposal any more.

Many landless families have chosen the option of seeking land through occupations in the National Parks of Petén, mainly in the Reserva Biósfera Maya (RBM) in the north that covers with 21,000 square kilometers about 58% of the department's surface. At the time of the Biosfera's creation in 1996, several communities already existed within its projected limits, living from small scale farming and the extraction of forest products. They were allowed to stay, but never consulted about the conversion of their lands into protected areas, which implied severe restrictions in regard to the use of the land and forest they were living in. This already created tensions between those communities and governmental institutions, especially CONAP⁸¹ which is responsible for the administration of protected areas.

Since this time, though, thousands of new *campesino* settlers, loggers and cattle ranchers have taken possession of the area. More than 45% of its surface have been deforested⁸², and the annual deforestation rate is estimated around 37,000 ha per year⁸³. According to the Inter American Development Bank BID, about 85,000 persons now live within the limits of the RBM⁸⁴. The situation is complex with a range of different actors and interests involved. Some small-scale farmers, often out of naivety, have bought land from people who, in some cases in collaboration with unscrupulous lawyers, create sales documents on land that belongs to the government and never could have been sold. The children of people who have lived in the RBM since before its creation are seeking more land to cultivate. Cattle farmers associated with illegal activities take *campesino* families up to the protected areas to clear forest for their *milpas*, in order to later convert them into pastoral land. There is illegal logging as well as human and drug trafficking through the large uncontrolled areas towards the border with Mexico, often organized by the same actors who don't hesitate to apply violence if they encounter resistance⁸⁵.

⁸¹ CONAP: Consejo Nacional de Áreas Protegidas

⁸² El Periódico, 03.10.2009: Acelerada talla de bosques acaba con recursos de Petén.

⁸³ Prensa Libre 19/.07/.2010: Ganaderos y narcotraficantes amenazan selva tropical

⁸⁴ This number includes the so called "Áreas de Uso Múltiple" and "Áreas de Amortiguamiento", where agricultural and agroforestral use are permitted under certain conditions. Source: BID 2010

⁸⁵ Parks Watch 2005; Perfil de Área Protegida – Guatemala. Parque Nacional Laguna de Tigre y Biotopo Protegido Laguna del Tigre – Río Escondido

Guatemalan governments have for a long time not undertaken major efforts to effectively protect the RBM and create a balance between environmental and social considerations. Their politics are mainly directed towards repression⁸⁶, on the one hand, and the creation of mega-projects like the famous “4 Bala’am” on the other. Those politics have been doing very little to explore development or implementation of communal concessions for populations already living within the RBM, which could be a very effective way of preserving forests and creating sustainable livelihoods, as projects by organisations like ACOFOP⁸⁷ have shown. “4 Bala’am”, promoted by the US-American entrepreneur archeologist Richard Hansen, seeks to develop the tourism potentials of the RBM with its archeological and environmental attractions. While laudable in theory, this activity favours large national and international entrepreneurs, but not the local population.

The Guatemalan government each year employs large amounts of financial and human resources to evict illegal settlers from the country’s protected areas. The presence of organized crime is often used as a means to generally denounce all settlers, to justify drastic procedures and deny mediation processes. Many *campesino* families who try to get hold of land in the National Parks are evicted again after some months or a few years, often with excessive violence. This in turn causes strong resentment and violent reactions from settlers in the RBM against those in charge of resource protection⁸⁸. Some return and try again, often several times. Others go back to their communities of origin or search for means of survival in other places. Migration to the protected areas is no feasible alternative. It doesn’t offer any kind of security for *campesino* families, creates conflict and leads to the further destruction of the forest. The rapid deforestation is changing Peten’s micro-climate, already affecting farmers in the whole department.

The majority of families who sold their land are staying in their communities, renting land from their neighbours or from nearby cattle ranchers. The growing number of landless families that has to rent land from other community members reduces considerably the farming area available for all, thereby shortening or making impossible fallow times for the recuperation of depleted soils and leading to the accelerated deterioration of farming conditions. *Campesinos* in all interviewed communities reported declining rainfall quantities and harvests over the last years. Whereas

⁸⁶ The Guatemalan army in 2010 provided a whole batallion of elite soldiers for the protection of the RBM from occupations and other illegal activities; Prensa Libre, 2010b

⁸⁷ ACOFOP: Asociación de Comunidades Forestales de Petén, a NGO that is administrating communal forest concessions in the RBM

⁸⁸ On 26 of January 2009 Guatemalan police and soldiers killed 2 persons and detained 40 in a community near the Laguna de Tigre in the RBM, in the intent of freeing two park rangers who had been taken hostage by villagers as a reaction to a forced eviction of another settlement a few days earlier. To compare the radically different viewpoints of government and civil society on the incidence: Prensa Libre, 2009a and Pastoral Social, 2009 b

some have begun to use biological methods to fertilize their land, mainly sowing their fields with leguminous plants⁸⁹ during fallow times and not burning their fields after harvesting to preserve nutrients, most still work the conventional way (slash and burn), applying chemical fertilizer and herbicides when they can afford them or if they are distributed for free by some government agency.

Campesinos are becoming increasingly conscious of the burgeoning land shortage and its negative consequences related with the sale of land to cattle ranchers. In several communities landowners are now asking higher prices to rent out land to those who sold, than to those who never had land of their own as a kind of punishment. In Montería Ulpán, San Luis, for example it is 500 Q/ manzana⁹⁰ (62 US\$) per harvest for those who sold their land in comparison to 300 Q/ manzana (37 US\$) to those who never had any or have additional needs⁹¹. This constitutes a considerable increase of costs, bearing in mind the low profits of *campesino* maize and bean farming. Those who still own land often speak with some contempt about those who sold and their possible motives (“ellos solo querían la plata” – “they only wanted the money”), and there is a certain amount of tension between the groups. There is also growing concern about the future generations, and especially Q’eqchí - communities have created internal rules to ban the sale of land to outsiders, respectively non-*campesinos*⁹². These rules seem to have some effect, although the only means of enforcement possible is social pressure.

Renting land from cattle farmers presents another difficulty, since they generally don’t like to lease land for more than one or two years out of fear that a longer rental period could create ownership rights for the tenants or some other way make it difficult to get rid of them. These short periods impede making any kind of middle or long term improvements on the plot leased, be it by biological fertilizing or by planting semi-permanent or permanent crops, like manioc, bananas or fruit trees. This restricts *campesinos* still more to their nearly exclusive maize-and-beans economy and lets the soil quality deteriorate further.

Even many land owning *campesinos* depend on contracting out their labour for some time of the year in order to generate the necessary monetary income for expenses like education, clothes, tools and food. This holds even more for those renting land, having less land for cultivation available and losing an additional part of their income for paying their lease. Since most

⁸⁹ Frijol abono or frijol terciopelo (*Mucuna pruriens*)

⁹⁰ One manzana equals 0.69 ha

⁹¹ Personal communication Victor Tux, promotor agrícola Pastoral Social.

⁹² For an example see Hurtado, Laura, 2008

campesinos don't have formal education or other skills apart from agricultural work, the only option is to find work with the cattle farmers and on the oil palm plantations. This is no long term solution though, since with the advancing conversion of *milpa* into cattle farm land, labour requirements are constantly shrinking: the value chain of cattle only creates 8 man days/ha on the regional level, which is half the amount of labour required by the corn and bean value chain with 28 man days/ha⁹³. Taking into account that in the south-eastern part of Petén 63,495 ha of former *milpa* land have already been sold and converted to pastures, this means a loss of 1.2 millions man days, or about 4000 jobs⁹⁴.

Cattle farms cannot substitute the labour requirement of *milpa*-farming on the same area and give work to all the *campesinos* who have been driven from their land. Thus cattle farming creates a growing unemployed, unskilled poor labour force in the department, with still unforeseeable consequences.

Migration to the urban centers, to the capital city and to the US finally is another choice for those who have lost their land and can't find income generating alternatives in their communities. Q'eqch'ies generally seem to prefer the urban centers in Petén for migration rather than going to Guatemala City or the United States, with exception of young people who dare to venture further. This might be due to the fact that many of the middle aged and elder Q'eqch'í don't speak Spanish fluently and prefer to stay in a context where they can communicate in their own language. There is no doubt that urban centers like Poptún have experienced a very rapid growth during the last decade, but there are no numbers available for this period of time about the origins of their new inhabitants. It is evident though that new shacks and houses are being built constantly at the peripheries of the town to house families recently arrived from the countryside.

Migration though creates new problems. Labour opportunities are scarce in the small towns of Petén, and for unskilled men there isn't much work to be had apart from day labour in construction, clearing scrub from urban properties or the occasional job with farmers around the urban centers. The minimum wage for agricultural and construction work in Guatemala in 2010 was Q 56 (US\$ 7) per day, and most jobs don't even pay that. For a father it is nearly impossible to maintain his family on that kind of salary⁹⁵, not only having to pay for clothing, education and

⁹³ Corn generates 33 man days per hectare at the regional level (including the agricultural and the intermediary sector), and beans 17 man days/ha, resulting in an average of $((33 \times 67\% + 17 \times 33\%) = 28$ man days/ha. This is taking into account: a. 54% of *campesino* land being in fallow time; b. The proportion between the surface planted with corn (67%) respectively beans (33%).

⁹⁴ Calculating with 6 work days per week

⁹⁵ The cost of the basket of commodities for a family of 5 in Guatemala was Q2,389/ month in 2010 (El Periódico, 08/.04/.2010); the minimum wage was Q56/ day for agricultural workers, plus a Q250 monthly bonus; in Petén, construction or agricultural workers generally are working on

food, which he formerly produced on his own land, but also for a place to rent. Consequently also women have to start looking for paid work, cleaning houses, cooking, washing and ironing clothes or caring for children for other families, waiting or cooking in restaurants and making *tortillas* for sale. Women tend to be developing into the bread-earners of the family as they effectively have more options to find work than men, although generally for even worse pay⁹⁶. In the long run, this might advance gender equity, but in short term, it creates conflict for many in a deeply conservative and male-dominated society⁹⁷. Apart from that, families are further impoverished through migration.

Young men who migrate to the capital have a somewhat wider choice; many young Q'eqchí end up working in the ever expanding security business in Guatemala as watchmen, whereas young Q'eqchí women mainly work in private homes, restaurants, *tortillerías* and "*refresquerías*", which translates as "refreshment sales" but are rather bars with dubious reputation. It is mainly young men who make it all the way to the US, looking for work there and often leaving their recently married wives and young children behind, forever in many cases.

The process of land concentration also implies grave socio-economic consequences. Land productivity of cattle breeding and fattening is very low. The sector only creates a regional Value Added of US\$ 156/ha, much less than corn (US\$ 244/ha) and beans (US\$ 265/ha) (compare Figure 6). This means that converting 63,495 ha into pastures causes a loss of US\$ 5.44 million of Value Added for the regional economy. This is a considerable amount considering the region's dependence on agriculture and the nearly complete lack of economic alternatives.

The livestock sector is dominated by a small number of big landowners who concentrate much more wealth than the grain sector. On the average, farms with more than 50 head of cattle have an income ten times higher than the average small and medium size cattle farmers. Expansion of big farms at the cost of peasant lands is leading to an even more unjust distribution of income and wealth and to more poverty in this already very poor region.

Regional and national food security is negatively affected as well. The south-east of Petén is an important national supplier of basic grains: according to our calculations, the local production

an informal base, and pay seldom exceeds Q50/ day, nobody paying any extra benefits. Working 6 days per week, it is possible to earn Q 1,200/ month, covering only 50% of the cost for the basket, so that at least two family members have to work to cover the costs (not considering that families generally are bigger in size than the stipulated five members).

⁹⁶ Women doing housework in Poptún can earn between Q400 and Q800 per month for a 6 day week

⁹⁷ In indigenous families in the township of Poptún where women are working for salaries outside the house and have certain economic independence, their husbands are generally more violent than in families where women stay at home and completely rely on their husbands earnings, probably out of fear of losing control over their wives (Chó de Paz, Ana del Rosario 2010).

contributes, apart from auto-consumption in the region, 856 thousands qq (38,909 metric tons mt) of corn and 350 thousand qq (15,909 mt) of beans for consumption at national level. A reduction of the grain producing area of 63,495 ha means, based on current yields, the loss of 93 thousand qq (4,227 mt) of beans and 537 thousand qq (24,409 mt) of corn⁹⁸. This would be 1.5 % of the national production of corn, and 2.2 % of the production of black beans in 2009. Although hypothetical, this calculation shows that Guatemala is losing an important source of its basic grain supply, in a country where 50% of the children suffer from chronic malnutrition.

Conclusions and recommendations

To sum up, the sale of *milpa* land to large land owners, mostly cattle ranchers, in south-eastern Petén is leading to further concentration of land in few hands, and to land scarcity for small-scale farmers and the production of staple crops. This has social consequences like the conversion of former independent farmers into dependent farm hands and day labourers, which is not compensated for by creation of new labour opportunities; to the contrary, the demand for labour is shrinking. The *campesino* population is further impoverished, and conflicts are being created within families and communities, but also on a departmental level with growing occupation of protected areas. This conflictive situation is further aggravated by the involvement of organized crime in the process of land concentration. Land concentration has demographical consequences in regard to the accelerated migration to urban centers, is affecting food security through the diminishing production of basic food staples in favour of beef, and causes environmental deterioration through further degradation of soils because of overuse and the destruction of protected areas.

These overwhelmingly negative consequences constitute a dangerous trend that should be recognized and counteracted by Guatemalan government institutions, but also the international donor community in regard to their financial involvement. It must be clear that *campesinos* do not sell their land simply because they are ignorant or don't know what to do with it, as many more affluent Guatemalans say, but because they are under severe pressures. Serious efforts are needed to create better conditions for small-scale farmers' production and marketing. They require sustainable technical assistance about improvement of soils and diversification of production, as well as affordable loans to invest in production. Ranchers should be instructed in more intensive, ecologically sound and less area-consuming methods of cattle raising to have better productivity without the need for expansion. The cadastral and regularisation process has

⁹⁸ Based on the current proportions of production

to be revised and adapted to Guatemala's reality and the needs of its *campesino* and indigenous population. Territorial planning should delimit specific areas for specific agricultural purposes, taking into account food security. And the state must regain territorial control over the department to guarantee the basic rights of all *Peteneros* to physical and mental integrity and the communities' right to own and work their land.

To this date, reaction to the scale of these problems has been scarce. Many low and some middle level government officials admit the problems and show concern. On a discursive level, the Guatemalan government is promoting a "politics of integral rural development" (Política de Desarrollo Rural Integral) that supposedly is going to focus on supporting small-scale farmers' economy and organisation. In reality, the corresponding law proposal that has been elaborated by several *campesino* and civil society organisations, including CONGCOOP/IDEAR, and considers elements of a serious land reform, has been delegated from the congress to an endless round table discussion that since its start in 2009 has not been able to conclude in anything. The Ministry of Agriculture has been so much reduced in size and bled of funds that it is nearly inoperable. Meanwhile, government funds are redirected to the social assistance programs of the president's wife, who is seeking her husband's position in this year's election. Drug trafficking is only mentioned as a risk to security in general terms and sometimes in relation to deforestation in the RBM, but not as a factor that directly affects and destroys small farmers' economies and lives.

Most international organisations don't seem to be interested in Petén, or only in conservationist work in the RBM in the northern part, ignoring that so many of its problems stem from land concentration processes in the agricultural regions further to the south. Presently it is mainly non-governmental organisations like the Pastoral Social that try to stem the tide or at least slow down the process, but without a stronger and decisive involvement by the Guatemalan government and international organisations in the long run, their case will be lost.

Glossary

BID	Banco Interamericano de Desarrollo, Inter-American Bank for Development
campesino	peasant
chicle	Resin of the Chico Zapote (lat: Manilkara Zapota) tree, extracted for the production of chewing gum, mainly for export
CONAP	Consejo Nacional de Áreas Protegidas, government institution responsible for the administration of protected areas in Guatemala
CONGCOOP	Coordinación de ONG Y Cooperativas, umbrella organisation for peasants' organizations and cooperatives.
CONTIERRA	Comisión Presidencial para la Resolución de Conflictos de Tierra, government institution preceding SAA for mediation in land conflicts
coyote	middleman for business transactions, also people smuggler
FONTIERRAS	Fondo de Tierras, government institution created after the signing of the Peace-Accords for the redistribution and regularisation of land in Guatemala
FYDEP	Empresa para el Fomento y Desarrollo Económico de Petén, governmental enterprise founded in 1959 to administrate the colonization process of Petén; dissolved in 1989
IDEAR	Instituto de Estudios Agrarias y Rurales, non-governmental institute for applied investigation in the agrarian and rural sector, associated with CONGCOOP
INTA	Instituto Nacional de Transformación Agraria, created in 1967 for the agrarian colonization and distribution of land, marked by high levels of corruption. Dissolved with the creation of FONTIERRAS
mestizo	People of mixed indigenous and european descent
milpa	Central-american for maize field
MR (micro-region)	Micro-regions are administrative units in Municipalities with more than 20 communities created with the Ley de Consejos de Desarrollo in 2002.
mt	metric ton
narco-ganadero	Literally: drug-rancher; expression for cattle ranchers involved in drug trafficking
RBM	Reserva de Biósfera Maya, Central America's largest Nature Reserve in the northern half of Guatemalan department Petén
RIC	Registro de Información Catastral; government cadastral registry
SAA	Secretaría de Asuntos Agrarios, government institution responsible for mediation in land conflicts
tortillería	Manufactory for tortillas, the Guatemalan staple food on the base of corn

Bibliography

- Action Aid 2008; Las plantaciones para agrocombustibles y la pérdida de tierras para la producción de alimentos en Guatemala; Action Aid Guatemala, Guatemala Ciudad, Guatemala
- Alonso, Alberto. / Alonzo, Fernando. / Dürr, Jochen. 2008: Caña de azúcar y palma africana: combustibles para un nuevo ciclo de acumulación y dominio en Guatemala. IDEAR/CONGCOOP, Guatemala.
- BID 2010: Guatemala hace enormes progresos en la protección de la Reserva de la Biosfera Maya, con apoyo del BID; <http://www.iadb.org/es/noticias/articulos/2010-05-21/deforestacion-de-la-reserva-de-la-biosfera-maya-bid,7148.html>
- Chó de Paz, Ana del Rosario 2010, Factores que inciden con la Violencia Intrafamiliar en Mujeres Indígenas del Barrio Ixobel de Poptún, Petén; unpublished thesis, Universidad Mariano Galvez de Guatemala, Guatemala Ciudad, Guatemala
- Dudley, Steven S. 2010: Drug Trafficking Organizations in Central America: Transportistas, Mexican Cartels and Maras; Woodrow Wilson International Center for Scholars; <http://stevendudley.com/pdf/Wilson%20Center%20Central%20America%20Dudley%2005%2017%2010.pdf>
- Dürr, Jochen; Zander, Markus; Rosales Mazariegos, Sergio Armando, 2009: Cadenas productivas, dinámicas agrarias y cuentas territoriales de base agropecuaria: El sur de Petén. IDEAR – CONGCOOP/ Pastoral Social, Guatemala Ciudad, Guatemala
- El Periódico 2007a; Preven crecimiento del cultivo de palma africana en el país. El Periódico, 23./06./2007; <http://www.elperiodico.com.gt/es/20070623/actualidad/40976/>
- El Periódico, 2008a; Fondos estadounidenses realizan inversión en agro guatemalteco. El Periódico, 01./07./2008; <http://www.elperiodico.com.gt/es/20080701/economia/59513>
- El Periodico, 2009a; Piden cese de persecución penal contra los Lorenzana; El Periódico, 25./07./2009; <http://www.elperiodico.com.gt/es/20090725/pais/108229>
- El Periódico, 2009b; Acelerada tala de bosques acaba con recursos de Petén; El Periódico, 03./10./2009, Guatemala Ciudad, Guatemala
- FONTIERRAS, 2000-2009: Memorias de Labores FONTIERRA; http://www.fontierras.gob.gt/?page_id=12
- Grandia, Liza, 2006; Unsettling. Land Disposicion and enduring inequity for the Q'eqchí Maya in the Guatemalan and Belizean frontier colonization process. PhD Dissertation, University of California, Berkeley; reprinted by the author.
- Hurtado, Laura, 2008; Dinámicas Agrarias y Reproducción Campesina en la Globalización: El Caso de Alta Verapaz, 1970-2007; F&G editores, Guatemala Ciudad, Guatemala
- INE, 2002; Proyecciones de Población con base al XI censo de población y VI de habitación 2002, periodo 2002 – 2020. Instituto Nacional de Estadística, Guatemala.
- INE, 2003; IV Censo Nacional Agropecuario 2003, Instituto Nacional de Estadística, Guatemala
- INE, 2005; Encuesta Nacional Agropecuaria 2005. Instituto Nacional de Estadística, Guatemala
- INE, 2006; Encuesta Nacional Agropecuaria 2006. Instituto Nacional de Estadística, Guatemala
- INE, 2007; Encuesta Nacional Agropecuaria 2007. Instituto Nacional de Estadística, Guatemala
- INE, 2008; Encuesta Nacional Agropecuaria 2008. Instituto Nacional de Estadística, Guatemala
- Lopez, Julie, 2010; Guatemala's crossroads: democratization of violence and second chances: Woodrow Wilson International Center for Scholars; <http://www.wilsoncenter.org/events/docs/Lopez.Guatemala.pdf>
- Mayén Morán, Carlos Tomás, 2008; Causas Jurídicas y Sociales de la Depredación de la Reserva de Isa

Biósfera Maya de Petén; jurídica tesis, Guatemala Ciudad

- Parks Watch 2005; Perfil de Área Protegida – Guatemala. Parque Nacional Laguna de Tigre y Biotopo Protegido Laguna del Tigre – Río Escondido;
http://www.parkswatch.org/parkprofiles/pdf/ltre_spa.pdf
- Pastoral Social, 2009 a: Baseline Study on land concentration in south-eastern Petén.
- Pastoral Social, 2009 b, Comunicado; Pastoral Social del VAP, Sta Elena, Guatemala;
<http://www.lahaine.org/index.php?p=897>
- PNUD 2007; Informe estadístico de la Violencia en Guatemala;
http://www.who.int/violence_injury_prevention/violence/national_activities/informe_estadistico_violencia_guatemala.pdf
- PNUD 2007; Informe estadístico de la Violencia en Guatemala; United Nations Development Program for Guatemala,
- PNUD, 2008: Informe Nacional de Desarrollo Humano 2007/08, Programa de Naciones Unidas para el Desarrollo, Guatemala
- Prensa Libre, 2010a: Ganaderos y narcotraficantes amenazan selva tropical. Prensa Libre 19/07/2010;
http://www.prensalibre.com/noticias/politica/Ganaderos-narcotraficantes-amenazan-selva-tropical_0_301170084.html
- Prensa Libre, 2009; Petén: Dos mueren en liberación de rehenes; Prensa Libre, 27/01/2009
<http://especiales.prensalibre.com/PDFs/Ediciones/2009/enero/27/PDFs/PLMT27012009.PDF>
- Prensa Libre, 2010b: Batallón élite del Ejército va a la selva; Prensa Libre, 21/11/2010;
http://www.prensalibre.com/noticias/Batallon-elite-va-selva_0_376162411.html
- Schwartz, Norman B., 1990; Forest Society; a social history of Petén, Guatemala; University of Pensilvania Press
- UDEFEGUA 2011; Agresiones, el precio que debemos pagar; Informe sobre situación de Defensoras y Defensores de Derechos Humanos , Enero a Diciembre 2010,
http://www.protectionline.org/IMG/pdf/udefegua_informe_2010.pdf
- Ybarra, Megan, et al. 2011; Resumen Ejecutivo Tierra, Migración y Vida en Petén, 1999 – 2009; in: Revista Säk B'ej No.1, Año 2, Universidad San Carlos de Guatemala, Centro Universitario de Petén; Sta Elena, Petén, Guatemala