Navigating the Way through the Market

A First Assessment of Contract Farming in Luang Namtha

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Prepared for GTZ RDMA
April 2008

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Acronyms

ACF	Action Contre la Faim
DAFEO	District Agriculture and Forestry Extension Office
DPI	Department of Planning and Investment
FUF	Friend of Upland Farmer
LYPBPC	Lao-Yunnan Power Biological Products Company
MPSMC	Mengpeng Sugar Manufacturing Company
PAFO	Provincial Agriculture and Forestry Office

Conversions

1 USD	7.6 yuan (2008 average, U.S. Federal Reserve)
1 USD	9,000 kip (local market rate in Luang Namtha, early 2008)

Acknowledgements

This study could never have been possible without the support of many people. The study was designed by Lao-German Development Cooperation, integrating inputs and initiatives from GTZ RDMA and CIM (Centre for International Migration).

Crucial in the accomplishment of this endeavour was the valuable logistic and institutional support of the GTZ team. My special gratitude goes to the team leader Dr. Peter Reckhaus for supporting the study and providing guidance at various stages of the research. Dr. Klaus Goldnick (CIM Regional Planner) enabled contact with various line agencies, companies, and informants in Namtha, as have other GTZ advisors in Nalae and Sing. The logistical support of ACF (Action Contre la Faim) was essential for carrying out research in Long district.

Staff at PAFO and Provincial DPI supplied contracts and useful information on crop planted area and production. Valuable was also the cooperation and technical assistance of DAFEO, DPI and the Trade and Commerce Office in Muang Sing, Muang Long and Nalae.

Special thanks go to my Akha interpreters, Aseu and Aeu for providing help in facilitating my interaction with village communities and their village leaders. I owe appreciation to Soukhsakhone Philavanh (Thet) for translating documents and make my research intelligible to the Lao audience.

Above all, I would like to express my gratitude to the villagers for the extremely warm hospitality offered to my assistants and me. I strongly hope that this report, despite its flaws, will contribute to a smoother negotiation of their needs in the difficult and often controversial dialogue with the government's expectations. I am also thankful to traders, company agents, migrants and the multi-lingual entrepreneurs from the China-Lao frontier for sharing information and opinions with me.

Finally, I would like to show appreciation to the many researchers who have discussed and shared findings on contract farming with me. Among them, special thanks go to Weiyi Shi and Mike Dwyer.

Executive Summary

As Laos asserts its participation within the global economy, integration is sought through the commercialisation of agriculture. Over the last four years, a step towards this direction was taken by encouraging contract farming as alternative to land concessions. In the national and provincial government agendas, contract farming is put forward as key strategy to link local farmers to the regional economy while contributing to alleviate Laos from the yoke of poverty. Luang Namtha has not been an exception to this trend. Since the early 2000s, the provincial government has encouraged the production of an array of cash crops under contract with foreign companies or small investors. The “2+3” formula has been the response to concessions. This model aims at evening up the responsibilities and benefits between stakeholders, whereby the farmers contribute land and labor, while the investors supply inputs, technical advice, and access to market.

Apart from the isolate case of a western company, Chinese firms and investors have been playing a crucial role in the development of contract farming in the province. This is the result of multi-lateral agreements between China, Laos and Myanmar culminating in the poppy cultivation replacement program. This economic directive was prompted in the early 1990s by the Chinese government to substitute poppy with a variety of cash crops in the regions of Laos and Myanmar bordering with China. China’s intensification of financial incentives and bureaucratic support within the poppy replacement scheme in 2004 further encouraged Chinese entrepreneurs to invest in Laos and Myanmar. Contract farming in various cash crops is one of the most outstanding imprints of these policies in Namtha. Crops planted by Chinese companies include rubber, tea, banana, sugarcane, corn, cassava and watermelon.

This study explores the contractual relationships of cash crop farming between foreign investors, villagers and the Lao government. It evaluates the socio-economic implications of the spread of contract farming in three districts of Namtha province, namely Sing, Long and Nalae, in the area of five cash crops: watermelon, corn, cassava, sugarcane, and soybean. As Chinese companies have been subject of much concern among Western development agents and socio-economic analysts working in the region, this study pays particular attention to farming contracts initiated by them.

Contract farming in Luang Namtha has taken a wide variety of forms, ranging from a simple verbal agreement between farmers and investors (watermelon) to a formally written contract between companies and various Lao stakeholders (corn, cassava, sugarcane). Formal contract farming with the Chinese companies is grounded in a complex socio-economic and political reality and has been producing likewise complex outcomes. Far from being a homogenous phenomenon, contracting has had multifaceted implications for different

stakeholders. These vary according to ethnicity, class, political power, social connections and geographical vicinity to China. It would be misleading to oversimplify contract farming as a commercial tool conducive to exploitation of the producers by rapacious companies. This study will reveal that the Chinese businesses' predatory aspirations are often circumscribed by the manipulative strategies of the Lao farmers. The following elucidates the risks and challenges deriving from formal contract farming with the companies, highlighting at the same time its positive sides.

The dark side

- The way Chinese companies design and sign formal contracts follows a top-down trajectory. The process of signing a contract originates at the provincial government, continuing at the district government and ending with the village administration. Farmers do not have any say in the decision making process. When village level contracts reach the farmers, the latter are simply required to accept the terms set by the company and the Lao officials.

- The signing and implementation of contract farming with Chinese companies in Namtha is embedded within long-term cross-border socio-economic and multi-ethnic connections between China's Xishuangbanna and north-western Laos. Chinese companies strategically use these cross-border ethnic links and deeply penetrate the Lao social structure.

- Contract farming with Chinese companies is supported by a patronage system whereby company agents occupy the role of patrons while various Lao social agents act as clients. Government officials and village representatives appointed by the companies to monitor the production of the crop under the payment of salaries or other forms of compensation often act in their and the company's interest rather than in the farmers' interest. This mechanism reinforces pre-existing hierarchies within the Lao social structure.

  - The terms of the contracts are very vague. This feature allows the companies much space for manipulation and to change the contract conditions at their will.

  - The terms of the contracts are often unfair for the farmers. The contract terms maximize the rights of the companies, while limiting the farmers' rights to question the company's way of operating. On the other hand, the farmers are subject to many obligations that serve the firm's purposes.

  - The farm gate prices of the products as set in the contracts are low compared to the labour input involved in the production.

- Written agreements do not have much legal validity. Their validity is questioned by the companies' misleading way of operating, by the farmers' breaching them, and by the decentralized nature of the Lao state.

- The companies adopt a non-transparent way of operating. There is a lack of transparency in the way information is transmitted from the company to the farmers

- The companies show negligence in implementing the contracts. Farmers reported delays in collecting the harvest and delays of payment by the company.

- Farmers often do not entirely understand the significance of signing a contract to produce for the investors. They are not aware of their rights and duties and of the rights and duties of the company.

- Farmers without trading and social connections to China lack information on the farm gate prices of the products they produce to the companies. Such lack of information, forces them to accept the prices set by the firms.

- Farmers lack the cultural language to deal with the Chinese companies. The growers claimed that part of their inability to negotiate with the Chinese companies depends on their lack of Chinese language skills and their inexperience in dealing with the Chinese trading world.

The positive side

- Economic returns generated by contract farming are not high. They only represent subsidiary means of livelihood to subsistence agriculture. However, farmers support contract farming as a valid tool to improve their livelihoods.

- For many growers, contract farming is a fruitful tool to navigate their way through the market. There are a conspicuous number of farmers who long for contract farming. They envision contracts as a secure means to navigate the market. To many of those living in remote areas, global market mechanics are alien concepts. They lack linkages to brokers, traders and consumers. They do not have access to price information. Companies enable the farmers to access the market by purchasing crops at fixed prices. They provide stable and secure, even if not always high, income.

- Farmers are acquiring expertise in planting and marketing their crops through producing for the companies

- Contract farming can be seen as a strategy to secure the farmers' rights over their land and avoid a 'proletarianisation' of the growers. From analyzing contract farming in the cash crops considered in this study, it can be concluded that the "2+3" formula is being effective. Farmers are secured rights over their land even if producing for a foreign investor. With contract farming, growers are not wage laborers of patrons, but land owners who can decide on the agricultural activities to be undertaken on their own land in the future.

- Contract farming under the aegis of the Chinese heralds an alternative mode of development. Over only a 3-4 year period, Chinese investors have been able to provide Lao locals with important tools of livelihood improvement that many years of Western AID oriented interventions have not been able to guarantee.

- Not all is as it seems. Farmers have agency. Villagers have demonstrated resistance to the company-official axis by bypassing the unfair terms of the contracts. Many manipulate the unfair system and the vagueness of the agreements to their own advantage or strategically use naivety to ignore the contracts.

- Some farmers start to find their own niches within the market economy as alternative to contract farming with the companies. Many of them do so by deploying cross-border ethnic *phinong*/kin networks with China, especially in Sing district. An outstanding example of this is the watermelon case.

In sum, despite the many flaws, contract farming promoted by Chinese companies is enabling Lao farmers to navigate their way through the market.

In the light of the above considerations, this study provides the following recommendations:

- Current contracts should not be enforced.

- the terms of the contracts and the contract formulating process should be redefined

- The Lao government should be pressed to adopt a more neutral position between the companies and the farmers

- A mediating body in support of the farmers should be established

- Periodic monitoring of the companies' *modus operandi* is necessary

- The Western AID community should be proactive in creating change

- Raise the farmers' awareness on the significance of contract farming
- Improve farmers' technical skills and production facilities
- Market information centres for the villagers are necessary
- AID agents may consider acting as commercial mediators between farmers and traders
- Diversified forms of marketing should be encouraged
- Preliminary crop processing could be initiated in Laos
- New agrarian and fiscal policies should be issued in favour of the farmers
- Link the promotion of alternative crops to the village bank system
- Learn from China through pre-existing cross-border socio-economic links
- Provide the farmers with education in the Chinese cultural and business language

The Western AID community in the region has so far related to China by adopting suspicious and oppositional tones. China's economic influence on northern Laos is a fact whose significance is deemed to further increase in the years to come. This study concludes by suggesting that rather than rejecting China as a "cultural and business other", Western AID agencies should make efforts to open a dialogue with Laos' neighboring giant and together find solutions to regional problems.

Ch. 1

1.1 Introduction

As Laos asserts its participation within the global economy, integration is sought through the commercialisation of agriculture. Over the last four years, a step towards this direction was taken by encouraging contract farming as alternative to land concessions. In the national and provincial government agendas, contract farming is put forward as key strategy to link local farmers to the regional economy while contributing to alleviate Laos from the yoke of poverty. Luang Namtha has not been an exception to this trend. Since the early 2000s, the provincial government has encouraged the production of an array of cash crops under contract with foreign companies or small investors. Rubber is certainly the crop that has attracted most people's attention for its vast dimensions and the strong political, economic, and environmental significance attached to it. Yet, the development of other crops produced and marketed under contract bears likewise important implications for Luang Namtha farmers while they wait for their rubber dream to be fulfilled. Apart from the isolate case of a western company, Chinese firms and investors have been playing a crucial role in the development of contract farming in the province. Much is being said and written about China's expansionistic policies aiming at absorbing natural resources, raw materials, land and labour from Laos to boost up its national economy. However, too little is known of such expansion on the ground, and too often hasty conclusions are drawn from superficial analyses. The following attempts to shed new light on this issue, unravelling risks and opportunities offered by Laos' neighbouring giant.

1.2 The Research Scope

This study explores the contractual relationships of cash crop farming between foreign investors, villagers and the Lao government. The first part elucidates government policies, agreement typologies and the social setting of contract farming. The second part evaluates the socio-economic implications of the spread of contract farming in three districts of Namtha province, namely Sing, Long and Nalae, in the area of five cash crops: watermelon, corn, cassava, sugarcane, and soybean. Furthermore, the research reconstructs the market chain of each crop and follows the cross-border social networks between China and Laos, and partly Thailand that supports it.

More specifically, this study addresses the following questions:

- What are the economic and political thrusts for contract farming with small investors and foreign companies in Luang Namtha?

- What is the social framework of contract farming?

- What are the mechanics of contract farming? What types of contractual typologies are adopted? How are contracts signed and implemented?

- What is the farmers' understanding of contract farming with foreign companied and small investors?

- What are the benefits, flaws and perils of contract farming?

- What does the landscape of each crop look like? How much is produced per each crop?

- How are crops produced and injected into the market by the company? How does the market chain of each crop unfold?

- What alternatives do farmers have to contract farming? How can farmers be assisted in turning themselves from passive producers into active participants within the market economy?

1.3 The Geographic Focus

Luang Namtha (also abbreviated as Namtha) province is located in the north-western part of Lao PDR. It borders with Oudomxay to the east, with Bokeao to the south, with China to the north and Myanmar to the west. Luang Namtha is administratively divided into five districts, namely Nalae, Viengphukha, Sing, Long, and Namtha. The geographic focus of this study is Sing, Long and Nalae districts.

Sing borders with China's Yunnan Xishuangbanna Dai Autonomous Prefecture to the north-east and Myanmar to the west across the Mekong. The district covers an area of 17980 km2 (Lyttleton et alia 2004). Apart from a large fertile plain where the district capital Muang Sing is situated and a smaller plain in the Mom cluster, much of the landscape is made up of rugged mountains. The district is linked to China through a few border crossings, the main among them being Pangthong-Chahe through which much of crops produced in north-western Laos are exported. Sing's population totalled 29,307 individuals in 2003 (Lyttleton et alia 2004: 16). Like Namtha as a whole, Sing is characterised by a striking ethnic diversity. The local population can be ethnically classified as follows: Tai Lue, Tai Neua, Tai Dam, Tai Deeng, Khmu, Akha, Yao, Hmong, Phunoi, and Hoo. An increasingly high number of Chinese Han has over the last few years also migrated to the district. While the Akha make up 50% of local residents, the Tai

Lue have historically been the economically and politically dominant ethnic group in the district.

Long, bordering Sing to the south-west, neighbours Myanmar across the Mekong. Since 2000, it has been linked to Sing via Route 17. Route 17 goes through Sing and Long townships connecting the Chinese border to the Mekong in Xiengkok. Long is inhabited by people of various ethnicities, namely, Tai Lue, Lanten, Hmong, Kui, Doi, Akha, Muser, Yao, Tai Khao, Taie Deeng, and Tai Dam. The Akha account for 58% of Long's 23,594 residents Lyttleton et alia 2004: 16. Long geography is prevalently mountainous although small valley areas are found, mainly along Route 17.

Nalae, deriving its name from a village where the only paddy field area in the district can be spotted, stands out in the province for its 98% mountainous terrain. The district borders Viengphukha to the west, Oudomxay to the south-east, and Namtah district to the north. Remoteness and inefficient road networks have kept Nalae in a condition of semi-isolation from the rest of the province for a long time. The district centre is linked to Namtha town by a dirt road cleared in 1995-96 (Daviau 2006:25). The road, almost inaccessible throughout the rain season, was being upgraded in early 2008. During the rains, internal communication is also difficult resulting in accessibility to only 30 out of 72 villages in the district (Daviau 2006:25). In 2006, the population of Nalae was estimated to be 22,746 (Daviau 2006:25). Mon-Khmer people make up 83% of the total population while Lao Tai speaking people make up the remaining 17%. The district totals sixteen ethnic groups, the largest being the Khmu (24%), Akha (22%) and Lue (14%). Only 4% of the population is Lao Thai, while the smallest groups are the Yang and the Bit (Daviau 2006:25).

1.4 Approach and Methods

This study is based on fieldwork conducted from mid January through late February 2008. The research deployed a combination of semi-structured and unstructured interviews with various stakeholders to collect both quantitative and qualitative data. Quantitative data in the villages was gathered by means of Rapid Rural Appraisal. More meaningful and spontaneous qualitative information was collected during informal conversations and by means of participant observation, a core methodological technique of anthropological enquiry. Much secondary information on cash crop market trends and policies was gained from government websites and Chinese newspapers.

The field study chose four main typologies of informants to answer its questions: the Lao government representatives; foreign investors, mainly companies' agents; Lao and Chinese farmers; Lao and Chinese traders.

1) The Lao government: interviews were conducted with provincial and district line agencies, including the Provincial Agriculture and Forestry Office (PAFO), the Provincial Department of Planning and Investment (DPI). In Nalae, Long and Sing various consultations were held with the District Agriculture and Extension Office (DAFEO) and the District Commerce and Trade Office (DCTO). Line agencies also supplied statistics on areas and volume of each of the cash crops under study; provincial and district level contracts with the investors.

2) Foreign investors: whenever possible, representatives of the companies involved in contract farming were consulted. Interactions with them ranged from semi-structured interviews to informal conversations, depending on the degree of informant's accessibility and local codes of communication. The companies also provided district level statistics on areas and production of the crops.

3) Lao and Chinese farmers: village survey occupied large part of the field research. In each village, both semi-structured interviews and informal conversations were conducted with the village headman, with the village committee, heads of production groups and farmers. At times, conversations were carried out individually, others with a focus group. The topics touched upon related to livelihood strategies in the past and the present; farmers' motivations for, and expectations for cash crop contract farming with foreign investors; social networks at the basis of production and sale of the crops between Laos, China and Thailand. Villages were selected taking into account ethnic make-up (choosing a varied ethnic representation), proximity to the Chinese and Thai border and road access. DAFO officials provided some directions to target villages that had particular experiences, in good or bad, with crop contracting. Within each village, balanced gender representation was sought, involving in conversations and interviews both male and female farmers. Social and economic differentiation was also taken into consideration. Interaction with Chinese farmers was sporadic and it occurred on a more informal level, mainly through Lao farmers.

4) Lao and Chinese traders: interviews were undertaken with Lao in Sing villages where longstanding bonds with China have developed thriving cross-border economic exchanges. Such interviews were highly valuable to compare the current situation with the past. Relying on personal social networks between the researcher and local residents, some Chinese traders were also involved in the research. Conversations with the latter provided a clearer picture of the effects of investment, import-export policies otherwise kept obscure by government representatives.

Due to the multi-ethnic and multi-lingual scenario characterizing the area under investigation, data collection and interaction with informants occurred in Lao, Tai Lue and Mandarin Chinese, or a local dialectical variation of it. In the case of interaction with informants whose exclusive language was Akha, Akha speaking assistants were used as linguistic mediators.

Value chain has recently gained much attention in western AID discourse. In Laos, it has become a popular tool assumed to resolve the many dilemmas and challenges presented to Lao people by their participation in the global market economy. While acknowledging its analytical validity to gain an overall picture of the steps in the economic chain of products and services, this study suggests that the value chain could result in an empty abstraction if we fail to take into consideration the local social, political and cultural context at the basis of economic transactions and investments in the region. After all, development is not about applying Western designed blueprints to people's livelihoods, but starting from local particulars to find feasible solutions in combination with universals. Therefore, a multi-layered, socio-economic-political approach will be taken to analyse contract farming in Namtha. Recommendations will be drawn along the same lines.

1.5 Study Limitations

In a context where business is more dependent on obscure power plays than on transparent interactions between the various stakeholders, it was a hard task to gain an objective truth. Probing for the truth was also often subject to the stakeholders' "performativity" before the eyes of a western researcher acting within a western AID framework that advocates justice for the weak while condemning the powerful. Each Lao and Chinese informant tried to defend their own position, whether as benefactors in the case of policy makers and company agents, or as victims in the case of the farmers. The challenge of the research was to find a middle ground within these performances. Clarity was sought by combining multiple sources of information, both first hand and secondary. Data such as the area planted, the production of each crop, and the farmer's experience in the production should be taken with caution. This information was beyond my capability to verify given also to the limited period spent in the field.

A further limitation of this study is that the reconstruction of each crop's market chain could not be followed outside Laos. This gap was filled by drawing on secondary sources and information provided by the various stakeholders working and living in the China-Laos frontier.

In the dynamic farming landscape of north-western Laos, this work captures a moment in time of the transformations in early 2008. As such, it should be taken only as a starting point to develop further studies.

Ch. 2 Why contract farming?

2.1 The Policy Framework

Contract farming can be defined as:

> "an institutional agreement that links farmers to consumers in foreign and domestic markets and links farmers to vital inputs. Under a typical contract agreement, the contracting firm…agrees to purchase a specific commodity at an agreed-upon price and time, while the farmer agrees to supply the contracted quantities at the specific quality standards. The contracting firm also agrees to provide the farmer with production inputs and in-kind credit, to be reimbursed by the farmer at the time of sale" (Sununtar et al. 2008:1).

The recent surge of contract farming in Luang Namtha is the outcome of new agriculture sector policies by the Lao national government and trans-national policies between Laos and China in matter of foreign investment, drug control, and import-export.

The enactment of the New Economic Mechanism in 1986 marked for Laos the opening up to international markets. A way to facilitate the transition from subsistence to a market-oriented economy was envisioned in encouraging foreign direct investment by the private sector in rural areas of the country. The new national policy framework on agriculture articulated in the 6th National Economic-Social Development Plan (2006-2010) pushes even further the involvement of foreign businesses in the intensification of commercial agriculture. A specific directive in the Plan states that "private initiatives including those by foreign investors and traders from neighboring countries to promote contract farming, especially in horticulture and tree crops are being encouraged". (Fullbrook 2007:6).

The current emphasis on contract farming is a defensive measure taken to circumscribe the phenomenon of land concessions that has since the early 2000s spread across the country for the purpose of establishing tree plantations. Luang Namtha is known as the flagship province of rubber planting in Laos. In this region, rubber developed not only under individual farmers' initiative but also under the push of various Chinese companies and small entrepreneurs. Chinese investments in rubber by large businesses have taken the form of land concessions or pseudo-contract farming that in implementation is similar to concessions (Shi 2008:34). This situation has caused major problems on land management and unequal shares between investors and farmers. Disputes are

foreseen to augment in a few years resulting from current mismanagement of land allocation. To avoid the spread of similar disputes to other crop areas, the Namtha government has since 2006 encouraged the cultivation of cash crops under contract farming with foreign investors applying a "2+3" model. This formula, as set by the new national economic plan, aims at evening up the responsibilities and benefits between stakeholders, whereby the farmers contribute land and labour (2 things), while the investors supply inputs, technical advice, and access to market (3 things) (Fullbrook 2007:6).

A further thrust for the expansion of contract farming in Namtha can be traced back to the poppy cultivation replacement program, an economic directive prompted in the early 1990s by the Chinese government in cooperation with Laos and Myanmar. This program was designed to substitute poppy with a variety of cash crops in the regions of Laos and Myanmar bordering with China. While the declared aim was to reduce poppy cultivation and circumscribe the flow of narcotics across borders, the scheme was also directed to ensure that China be the main recipient of the crops promoted to replace opium.

Encouraged by bilateral government agreements, in the early 2000s, hordes of Chinese entrepreneurs were driven across the border to produce a big array of cash crops in the province, the main being rubber, tea, corn, sugarcane, banana, chili peppers, and watermelon. Many products fell into the poppy replacement scheme. Farming ventures were principally small scale investments. Apart from a few formally registered contracts with the Laos authorities in rubber, sugarcane and banana, contract farming relied mainly on informal agreements between parties, while enjoying a certain degree of relaxation on import-export regulations. Many of the products were treated as local border trade items, and were subject to favorable tax policies.

After being implemented on a more unstructured regulatory basis, in 2004 the opium replacement program was intensified and subject to new regulations. A series of new favorable policies were formulated by the Chinese authorities to simplify the investment approval process, relax capital requirements, ease labor restrictions, and provide financial incentives to investors. A special fund of 250 million Yuan was established by China's State Council in 2006 to assist businesses through grants and interest reimbursements on loans (Shi 2008:23)[1]. The opium replacement program was inserted within the broader "zou chuqu" (literally "go out") agenda, a strategy aiming to encourage Chinese businesses to invest outside China to become catalysts of natural resources and industrial raw materials for the motherland (Shi 2008:24). The specific guidelines issued by the Chinese government on investment in Laos expanded the opium replacement scheme from cash crop plantations to other kinds of sectors such as forestry resources, electric power generation, cash crop processing and mining. (Shi 2008:24). China's new directives aimed at spurring local economic and social

[1] It is beyond the scope of this study to provide an accurate description of the opium replacement program. For a more exhaustive analysis refer to Shi 2008.

development, expand employment opportunities and infrastructure amelioration (roads, irrigation, and power supply). Businesses qualifying for opium replacement would receive a number of benefits provided by the Chinese government, including various types of subsidies; interest free loans and expanded credit access at domestic commercial Banks; freedom in cross-border movements of labor, equipment, and vehicles; exemption from tariff and import VAT on opium replacement products and outputs. (Shi 2008:26-27). The import of opium replacement products to China has been subject to a quota system, whose specific terms are constantly revised according to ongoing bilateral negotiations between the Lao and Chinese governments. The crops' quota is distributed to various individual businesses, mostly from China, depending on eligibility criteria and political/social connections with the Chinese authorities.

The production and marketing of three of the five crops under consideration in this study, namely corn, cassava, and sugarcane have emerged in Namtha under the above-mentioned policy framework. To better secure control over farmers, outputs, export, tax payment and businesses the Namtha government has chosen to channel the production of these crops within a restricted number of Chinese companies. The latter are only allowed to operate under contract by applying the "2+3" model. Each firm has been granted monopoly on production and/or export of one or more crops to avoid disputes and overlapping of businesses on the same produce. The chessboard of these crops in Namtha is currently distributed to the following companies: The Lao-Yunnan Power Biological Products Company Ltd has the monopoly of cassava planting in the province and export to China, while the Mengpeng Sugar Manufacturing Co. Ltd enjoys the same rights on sugarcane. Both companies operate within the opium replacement scheme. Prior to 2007, an American-owned business, Friend of Upland Farmer, had been granted rights to cultivate and market corn in the province. Following a policy turnover, these rights have been transferred to Jiachuang, a Chinese owned business, operating in rubber. Corn import quotas to China have been granted to a different Chinese company, the Jinggu Border Trade Cooperation Company.

Soybean and watermelon, the two other crops under analysis in this report, have so far been excluded from the resources chessboard controlled by the Chinese companies. After being promoted under contract with Friend of Upland Farmer, soybean is currently out of the expansionistic aims of major businesses in Namtha. Watermelon, on the other hand, is being planted on informal contracts between small Chinese investors and Lao farmers.

Table 2-1 Main Companies Operating in Contract Farming in Luang Namtha

Company	Operating Period	District	Crop
Lao-Yunnan Power Biological Products	2006-2008	-Sing -Long -Vieng Phukha -Namtha	Cassava
Mengpeng Sugar Manufacturing	1994-2008	-Sing -Long	Sugar Cane
Friend of Upland Farmer	2003-2007	-Nalae -Vieng Phukha -Namtha	Corn Soy Bean Sesame
Jiachuang	2007-2008	Nalae	Corn

*The list refers only to the crops object of this study.

Ch. 3 The Mechanics of Contract Farming: Agreements and Social Networks

3.1 Contract Typology

Contract farming in Luang Namtha has taken a wide variety of forms, ranging from a simple verbal agreement between farmers and traders to a formally written contract between companies and various Lao stakeholders. The crops under consideration in this study are being produced and commercialised by adopting two main contractual patterns:

- Informal contract farming with small investors and/or *phi-nong* (relatives and peers)

Informal contract farming is based on a private agreement, normally not officially registered with the authorities, between a (Lao or Chinese) investor and a Lao farmer or a land owner. The two parties are often linked by a *phinong* (relative, and peers) bond. The agreements are more often than not verbal or, in exceptional cases, written on paper sheets. In Namtha, this type of contract is commonly applied to watermelon cultivation.

- Formal contract farming with (foreign) investors

This is a contract form between a company and Lao stakeholders. Although contract farming based on the "2+3" formula refers to two parties, in reality in the signing and implementation of the contracts more parties are involved: individual farmers, village headmen, provincial officials, district officials, traders, and large investors. Four of the crops under study fall under this contract pattern:

sugar cane
cassava
corn
soy bean

3.2 How Are Contracts Signed and Implemented?

How does formal contract farming come into being? How are all the parties brought together? How are agreements signed and implemented? How is farmer consent obtained? The following section will answer the following questions.

The way contacts are made and signed takes a convoluted and hierarchical path. As a general rule, a business intending to carry out farming under contract in Namtha signs agreements at various administrative levels before reaching the farmers. When major companies are involved and large areas are to be allocated the bureaucratic proceeding might start at the central government level. Otherwise it originates at the provincial government, continuing at the district government and ending with the village administration. As it will be shown later in the chapters on individual crops, there are exceptions to this general pattern, these varying according to specific agreements between Lao officials and the companies.

In the three districts covered in this study, formal contract farming has been taking place through companies that for analytical convenience can be divided into two categories:

-Western companies: Friend of Upland Farmer, (corn and soy bean)
-Chinese companies (cassava, sugar cane, corn)

The West/China distinction refers to two main issues:
•the place of origin of the companies.
•a distinctive business way of operating

Since 2008, Friend of Upland Farmer has been excluded from doing business in Namtha, a fact that has made its role irrelevant in the current production and marketing of cash crops. As previously noted, the scene of contract farming in the province is dominated by Chinese companies. The latter deserve more attention as their peculiar way of operating has been subject of much concern among Western development agents and socio-economic analysts working in the region. The following section is dedicated to unravelling some of the key features of the Chinese companies' modes of contracting.

All Chinese companies involved in contract farming in Namtha share a distinctive way of operating. Their mode of contracting takes a top-down trajectory. Some government officials in Namtha have claimed that provincial level contracts with the companies are signed only after consultation with the villages. Yet, the field research has proven the exact opposite: companies tend to first sign contracts with provincial officials and only secondarily involve the villagers. In the contracts Lao authorities agree to allocate large bulks of land, at times accounting to as much as a 30-60,000 ha, to the company by simply taking into consideration the approximate land availability in the province suitable for the crop. These calculations are made without taking into account whether or not the farmers are willing to devote their land to growing that crop.

After concluding the first agreement with provincial officials, businesses sign a second level contract with the district authorities. Subsequently, the negotiations are shifted to the village level. Companies choose target villages appointed by

the District Agriculture and Forestry Extension Office (DAFEO) privileging those with good road access and high poverty rates. The involvement of the villages takes place through persuasion campaigns by both DAFEO officials and the companies' agents. Consent of village headmen (Lao: *naiban*) and village political committees is sought. Infrastructure amelioration and electricity supply become part of the persuasion strategies. The villagers' joining the contract is strongly dependent on the decision of the village headman and the other village representatives. Households enter the venture voluntarily, but often it is under the influence of the chief's charisma that consent is obtained. In many cases villagers are also drawn into contract farming by other farmers from the same village or by friends and relatives from other villages. Often, households would base their decision on others' experiences.

If consent is obtained, DAFEO and the companies undertake meetings with the village community. During the meetings, farmers are explained the advantages of planting the crop proposed by the firm, while giving an overview of the general terms of the contracts, with a focus on inputs supply, prices of crops' purchase, transportation, etc. Once the villagers accept to grow the crop for the company, a written agreement is signed between the latter and the village headman, and in some cases the household's representatives. Before providing the inputs, the companies collect data on the number of households interested and the area to be planted. The households that adhere to the contract receive training by DAFEO and the company's agents on planting and managing techniques. DAFEO officials are supposed to monitor the contractual relations between the farmers and the companies, making sure that no irregularities or abuses of power occur in the production and sale. Table 3.1 summarizes the top-down trajectory of contract making by the Chinese companies.

Table 3-1 Summary of the Top-Down Trajectory Followed by the Companies when Signing and Implementing the Contracts

1	-Agreement between provincial government and company -signing of contract between company and PDPI, PAFO
2	-signing of contract between company and PDPI, PAFO
3	-agreement between DAFEO, DDPI and the company
4	-persuasion campaign by DAFEO officials and company: meetings with the *naibaan*/village committee; meetings with village community
5	-written/verbal agreement with village headman/committee
6	Households join the contract on individual basis
7	Technical training by DAFEO officials and the company to the farmers

3.3 The Contract Hierarchy

The above described agreement-making process generates the following hierarchy of contracts:

- Provincial level contracts
- District level contracts
- Village level contracts.

- **Provincial level contracts**: are written agreements between the Luang Namtha Provincial government (Department of Planning and Investment, Provincial Agriculture and Forestry Office, Governor's Office) and the company.

  They include details on:
  -the duration of the contract
  -type of product promoted
  -land required per district
  -inputs arrangements
  -crop's farm gate price
  -rights and obligations of the company
  -rights and obligations of the Provincial administration

  Some of the rights and obligations of the two parties are as follows:

  Company:
  -must deploy Lao local labour in the production and recruit technical personnel from the local government
  -should improve road links to reach the villages and between the production and processing areas
  -has the right to construct facilities and bring equipment to be utilized in the implementation of its activities.
  -production and export by the company is subject to tax and fees payment according to Lao law
  -the company must avoid causing damage to Laos' natural environment.

  Provincial government:
  -has the right to control and evaluate the company's way of operating
  -if problems arise should find solutions to possible problems and make propositions according to the contract's terms
  -has the right to establish monitoring and coordinating committees at the district levels
  -should take responsibility for promoting, mobilizing and organizing the farmers to produce the crops in the areas allocated to the company
  -should facilitate the entrance and exit of the company's technicians in Laos by issuing adequate Visa and residence permits.

- **District level contracts**: are written agreements between the company and the district government (District Agriculture and Forestry Extension Office, District Department of Planning, District Governor's office).

  The terms of the contract are the same as those enumerated for the provincial level agreements. The difference being in the area allocated for the production per each district and specific obligations of the district officials towards the company.

- **Village level contracts**: are agreements between company and village representatives (*naibaan* or village committee). At times, these contracts are signed by the production groups made-up by a few households. As adopted for the crops under consideration, they take form of three sub-types:

  Detailed written contracts (cassava, corn (FUF), soy bean (FUF)).
  They include details on:
  -rights and duties of the company
  -rights and duties of the farmers
  -terms of inputs supply by the company
  -extension's technical advice
  -crop farm gate price/1 ton
  -time and terms of crop collection (weighing, transportation)

  Simplified commitment contracts (sugar cane)
  Are paper sheets signed/finger-printed by the individual households.
  They include details on:
  -inputs advance by the company; quantity of inputs provided by the company
  Farm gate price and terms of collection are communicated verbally by the company

  Verbal agreements (corn (Jiachuang)): Terms of inputs supply, price, details on crop collection are communicated verbally by the company

3.4 The Social Framework of Contract Farming

The signing and implementation of contract farming with Chinese companies in Namtha is embedded within long-term cross-border socio-economic and multi-ethnic connections between China's Xishuangbanna and north-western Laos. In pre-modern times, this region was part of an interconnected web of Tai principalities in the upper Mekong. Links established through intermarriages, trade, and religion among the various ethnic groups straddling the borders of current China and Laos can be traced back to that period. With the formation of

modern nation states and the subsequent demarcation of national borders, interactions between ethnic fellows in this frontier region continued to occur intermittently, often obstructed by nationalist circumscribing thrusts. War and persecution on both sides of the border during the process of nation-building of the two socialist states spurred various migration waves across the region. The most significant of them was the movement of hundreds of Tai Lue, Akha, Miao (Hmong) and Yao from China to Laos following the political upheaval of the the Great Leap Forward in 1958 and the Cultural Revolution (1968-1978). The migratory flow was reversed when in the late 1970s and the early 1980s, many Akha, Hmong (Miao), and Yao and Khmu moved from Laos to China as refugees under UNHCR patronage. During their stay in State Farms and villages in Xishuangbanna, Lao refugees became acquainted with China's local agriculture framework. They learned about rubber and sugarcane two of the crops currently cultivated by Chinese investors in Namtha. Much transfer of agriculture technical expertise from China to Lao still happens along the Mengla-Namtha socio-economic axis, crosscutting State Farms and villages from both sides of the border.

Han Chinese presence in the region is not a new phenomenon as one might conclude from simply observing the recent increase in Han migrant's presence in Namtha. This ethnic group dominated trade routes between India and China via northern Laos since the 19th century. And their passage along the route was never divorced from interactions with local populations. The construction of the road linking northern Laos to China in the 1960s and early 1970s was undertaken by thousand of the Han Chinese soldiers. To them can be attributed the strengthening of old cross-border trading links between Mengla and Muang Sing in that period.

Since the mid-1980s, the establishment of new regional economic cooperation plans in the Upper Mekong re-authorized trade and travel across borders. This resulted in the revitalization of cross-border ties among the various ethnic populations residing in the area. Re-connection spans the social and economic field. The new inter-governmental policies on trade and investment mentioned in Chapter 2 created more favorable conditions for this re-connection to flourish. Under the same policy banner is inscribed the arrival of Han migrants to Namtha operating in a wide range of sectors, from restaurants, to fisheries and mining, and from cash crop agriculture to trading. Chinese companies accommodate themselves within such new political framework and long-lasting cross-border dynamics.

3.4.1 The strategic use of cross-border ethnic links

The popularity of Chinese companies in Namtha can be traced back to their capacity to penetrate the Lao social structure and their strategic use of cross-border ethnic links between China and Laos. In their business, firms draw on individuals from China sharing the same ethnic background with Lao locals. A

large number of the company employees working in Laos are ethnic Tai Lue or Akha from China. Mastering Chinese and Lao, and their mother tongues, Chinese Lue and Akha act as crucial cultural and linguistic mediators between Lao farmers, government officials and the companies. Also the majority of truck operators or middlemen that transport products from Lao producers to the factories in China are of Tai Lue and Akha ethnicity. Furthermore, the firms rely on a wide pool of brokers, contactors, interpreters or business agents made up by Chinese speaking Lao, such as the Hoo and Phunoi, Han migrants with established links within the Lao society, and Lao locals that enjoy good social and economic connections with people in China.

3.4.2 Patronage system

A further winning strategy of the companies is the construction of a patronage system whereby company agents occupy the role of patrons while various Lao social agents act as clients. The companies obtain permission to operate in the province by establishing personal links with Lao government officials at various administrative levels and by bestowing bribes, salaries and per diem to the latter. DAFEO officials are supposed work for a smooth resolution of problems in favour of the villagers when contracts are implemented. In reality, the patronage mechanism encourages government agents to pursue their personal economic interests by siding for the companies rather than safeguarding the farmers.

The patronage system expands also down to the villages. The village chiefs' support to involve a village community in contract farming is not only obtained by providing them with pecuniary compensation but also through dispensing consumer goods such as mobile phones and motorcycles. Feasts and trips to China are also a very effective form of enticement to buy the leaders' sympathy. The same technique is adopted with the production group leaders (Lao: *huana kum*) and other individuals appointed by the company to supervise the production and sale of the crops. It is often the case that professional links between the company agents and these intermediary actors are not divorced from close social connections. What determines for a male villager to become the *huana kum* are not only basic knowledge in accounting and multiple languages but also good *guanxi* (connections) with the company's employees. Like for the district and provincial level officials, village representatives instrumentally deploy their position as intermediaries to serve personal gains while at the same time supporting the company's lucrative interests.

However, villagers, excluded from the patronage system, do not remain passive recipients of the abuses of power by their village leaders and government officials. They resist the company-officials axis by deploying two types of strategies: they bypass the unfair terms of the contracts or instrumentally use naivety to justify their not abiding with the contracts. This will be better elucidated in the sections on the 'farmers' voices' in the chapters on each crop considered, and in Ch 9.

3.4.3 Ethnicity and class

Ethnicity and class are two important factors determining the farmers' joining a contract with Chinese companies. By and large, it can be argued that individuals of Tai Lue, partly Tai Neua, and Hmong ethnicity as well as low land Lao tend to be less involved in contract farming than other groups. Tai Lue and Tai Neua together with lowland Lao continue to occupy, like in the past, crucial economic and political positions. Such power allows them to have access to independent forms of income other than contract farming. Similarly, their particular role in the Lao history and good connections with the government contributes to the Hmong's good economic positioning, keeping them away from dependency on contract farming with foreign investors. When individuals belonging to these groups enter in business with the companies they are better prepared to negotiate the terms of the contracts and find strategies to cope with the firms' unfair treatment.

On the other hand, Akha, Khmu, Muser, Laten and other groups residing in mountainous areas, are more removed from core economic positions, a factor that leads them to become more dependent on contract farming as income generating source. Their economically and socially marginalized location makes these groups more vulnerable and unable to negotiate with the companies than others.

At the same time, within the same ethnic group, class differentiation might impact on the individuals joining the contracts. Lower class individuals have more limited access to the market and resources than village chiefs and families with high status in the social hierarchy. This explains why the former are more inclined to join the contracts than latter.

Ch. 4 Watermelon

4.1 The Watermelon Landscape in Sing and Long

Although local farmers mentioned a pre-existing small scale production for internal consumption, watermelon was introduced in north-western Laos as cash crop for export to China only since 1997-1998. The initiators of watermelon planting were small investors from China that hired paddy land from villages of Akha, Hmong, Tai Neua and Tai Lue ethnic make-up in Muang Sing district, the majority of which located near the border with China. The first zone interested in watermelon planting was Mom, a cluster proximate to the Chinese border in Sing district. Following an official encouragement by the district authorities, in Muang Sing, watermelon planting underwent a boom in 2001, involving numerous villages not only in Mom but also in Nakham cluster. In 2002-2003, the cultivation of watermelon shifted to Thongmai cluster while expanding also in some paddy plots in villages in Nakham, Namkeao Luang and Nakham clusters. In 2008, Thongmai was still the area with the largest watermelon plantations in Sing (particularly, Ban Tami, Ban Hunaa, Ban Erla), while smaller areas were also covered in Xiengjai, Nakham, Namkeo Luang and Mom clusters. Since 2004-2005, an increasing number of villages in Muang Long district, mainly located on Route 17 have been major targets for watermelon cultivation by Chinese investors. In Nalae, due to the very scarce paddy land, watermelon production is very limited and has irrelevant commercial significance. Figure 4.1 visualises the area planted with watermelon in Long and Sing since the early 2000s.

Table 4-1 Districts Involved in Watermelon Production

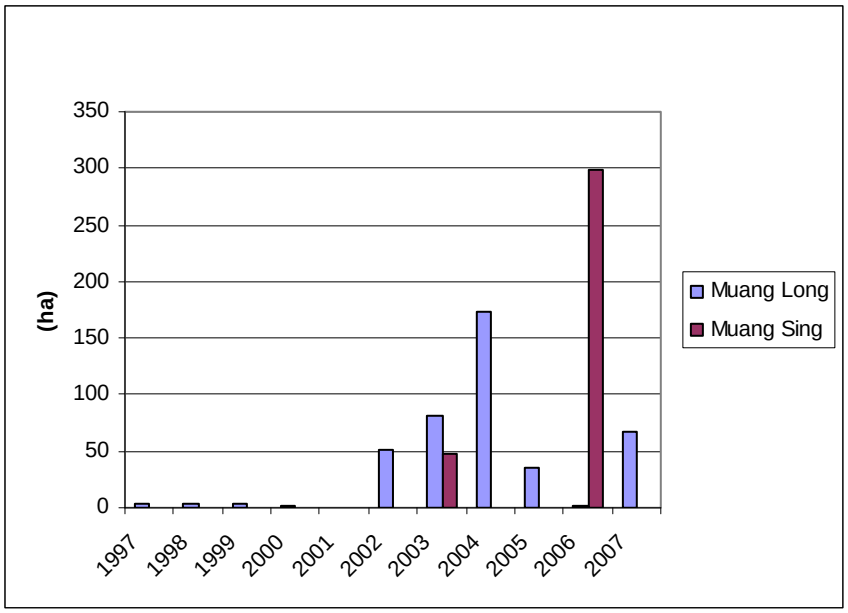
District	Year
Muang Sing	1999-2008
Muang Long	2004-2008

In 2003, six large-scale entrepreneurs (Ch. *laoban*) were involved in watermelon planting between in Muang Long and Muang Sing (Lyttleton 2004:34). The pattern of labour supply adopted by the companies relied on bringing technicians and skilled labourers from China, while also hiring local farmers for carrying out low-skill tasks such as planting, picking and loading. However, the ranks of watermelon investors were made by a conspicuous number of small Chinese entrepreneurs.

In 2008 it was found that only small entrepreneurs, of Han, Tai Lue, and seldom Akha ethnicity from China were the major players in the watermelon business. Investments by Tai Lue and Akha are in most cases arranged through networks of relatives, *phinong* and peer of the same ethnicity, and follow the path of long-term cross-border connections. The Chinese entrepreneurs come prevalently from Sieng Hung (*Ch*. Jinghong, capital of Xishuang banna Dai Autonomous Prefecture), Meng Mang (*Ch* Meng Man), Meng Pung (*Ch*. Meng Peng), and

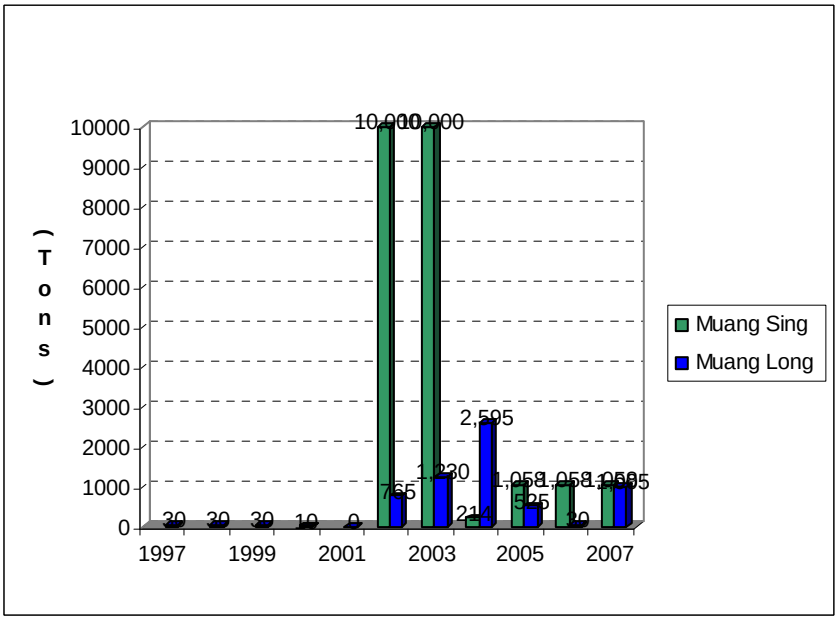
other locales in Meng La county. The volume of watermelon production fluctuated over the years. Figure 4.2 summarizes such changes.

Figure 4-1 Area Planted with Watermelon by District (in ha)



Source: Luang Namtha PAFO, Muang Long: DAFEO, Muang Sing: Office of Trade and Commerce; GTZ Agriculture and Forestry Office, DAFEO.
Data not available for Muang Sing years: 1997-2002

Figure 4-2 Watermelon Production by District (tons)



Source: Luang Namtha PAFO, Muang Long: DAFO, Muang Sing: Office of Trade and Commerce; GTZ Agriculture and Forestry Office, DAFEO.

Data not available for Muang Sing for the years 1997-2001[2].

4.2 Watermelon Contract Farming with (Foreign) Investors

Watermelon cultivation in Sing and Long has mostly taken the form of unofficially registered contracts between partners. Agreements are made privately and often initiated by the Chinese or Lao investors. The formula of the contracts is more often than not verbal. However, at times, an informal written recording of the agreement occurs on paper sheets on which the two parties jot down capital provided by each party for the inputs and the shares on the income. Without the official endorsement of the authority such contracts obviously do not have any legal validity, but are still considered by the parties as a form of reciprocal commitment to the terms agreed upon. In case of friendship or *phinong* relation between the two parties, it is the social bond that guarantees a fair share of the returns or a transparent payment of land rent. Given that watermelon in Laos is preferably grown on a virgin soil every year, contracts are only signed for one season, the five months included between the planting and the harvesting of the crop. On the following year, the same investor might hire land from another owner and make a similar unofficial unwritten agreement with the new business partner.

Typologies of contractual arrangements

There are three typologies of contractual arrangements:

1) Land lease by Lao farmers to investor

2) Joint-venture between farmer and investor (share of returns)

3) Joint-venture between farmer and investor (farmer pays a quota to the investor on the income)

4.2.1 Land lease by Lao farmers to investors

Contract formula: verbal

Contract terms:

-*land*: leased out by Lao farmer to investor
-*capital, inputs, technical expertise*: entirely provided by the investor

[2]There is some incongruence between Figure 4.1 and Figure 4.2: the production does not correspond to the area cultivated. Data should be treated with caution.

-*market access*: by Chinese investor
-*income*: goes entirely to investor

This is the most widespread type of contract for watermelon planting in Sing and Long. The most common arrangement of this typology is that the investor hires a land plot from a Lao farmer or a land owner. Investors are most commonly Chinese (Tai Lue, Akha or Han) or Lao (Tai Lue), while land providers are Lao of Akha, Tai Lue, Hmong, Tai Neua, Yao ethnicity. Normally, a Lao or Chinese broker (most commonly of Tai Lue ethnicity) accompanies the entrepreneur around the area and once a suitable paddy plot has been identified, the former assists the latter in concluding the agreement with the land owner. A deposit (100 *yuan*) is given to the land owner to 'book' the land and avoid that this is leased out to other entrepreneurs. Subsequently, the entire amount on land lease is paid to the owner. Table 4.2 summarizes the price range for land lease.

Table 4-2 Prices on Land Lease from Lao Land Owners to Investors

2004	2005	2006	2007	2008
450-800,000-1,500,000 kip/1 hA	1,000,000 kip/1 hA	1,000,000-1,500,000 kip/1 hA	1,600,000 kip/1 hA	800,000-1,600,000 kip/1 hA

(Prices vary according to the land location and to the road accessibility by truck)

Capital and inputs are all provided by the investor. Seedlings, fertilizers, pesticides and plastic mulch are brought from China. Depending on the size of the plantation, the entrepreneur might manage the plantation on his own with the help of family members or by bringing labour from China (Han or Tai Lue) for high-skill tasks. The latter are involved in setting up the seedling nursery, grafting the saplings, positioning the plastic mulch on the soil beds to cover the saplings, adding adequate doses of fertilizers and pesticides. Lao local farmers (mainly of Akha ethnicity) are hired to carry out low-skill work such as ploughing the soil, preparing seed beds and trans-planting the saplings. At harvest, Lao farmers provide labour for picking and loading the melons on to the truck. Normally, 50 people are hired for loading a truck for which they receive 500,000 kip/1 truck load. The amount is split by the 50 farmers generating an income of 10,000 kip per person. The investor keeps the entire amount of the income from the sale of the crop.

Table 4-3 Division of Labour between Lao and Chinese Labourers on Watermelon Planting

Tasks of hired Lao labourers	**Tasks of Chinese skilled labourers**
ploughing	Setting up nursery
seedling planting	sapling grafting
picking	watering
truck loading	fertilizer adding
	pesticide spraying

Table 4-4 Wages Paid to Lao Farmers by Investors

2004	2005	2006	2007	2008
Planting:15,000 kip/1 day Picking/loading: 500,000-700,000 kip/1 truck load	Not available	Not available	Planting: 30,000 kip/1 day Picking/loading: 500,000 kip/1 truck load	Planting: 30,000 kip/1 day Picking/loading 500,000 kip/1 truck load (Baan Namhu, Thongmai)

4.2.3 Joint-venture between farmer and investor (share on returns)

Contract formula: verbal (more common) or written (rare, and not officially registered)

Contract terms:

-*capital and inputs*: by the investor or partly by the Lao partner
-*land*: by Lao partner (or at times hired from another land owner)
-*labour*: by Lao partner (and Chinese investor or skilled workers from China)
-*technical expertise*: by Chinese partner (and in some cases provided by Lao partner)
-*market access*: by the Chinese investor
-*income*: split between the two parties (once costs for inputs are deducted). Share: 50%-50% or 60-70% to the investor and 40-30% to the farmer

This is the second commonly adopted type of contract. It is normally arranged between Chinese (Tai Lue, Han, Akha, Yao ethnicity) investors and Lao farmers of Tai Lue (in limited cases Yao or Tai Neua) ethnicity. However, as more Lao Tai Lue acquire technical expertise from producing with the Chinese, they adopt this form of contract in cooperation with Akha land owners. When it occurs between parties of the same ethnic background or between people from the same area, the agreement is often based on trust between *phinong* or peers. Mutual trust replaces the legal validity of the contracts, guarantees more business transparency, and facilitates conflict resolution between the parties.

The capital is normally provided by the Chinese/Lao entrepreneur or jointly by the two parties with a share varying according to the financial assets available to any of the two. The agreement is more often than not verbal but occasionally recorded in written form. However it is never officially registered with the authorities. As described in the case of land lease contracts inputs are imported from China. More often the Lao counterpart supplies land, although paddy plots

are also leased from other land owners. Labour is provided by the Lao partner in a joint effort with the Chinese investor, or with the help of hired skilled labourers from China. Also in this case, Lao Akha farmers are hired to fulfil the tasks described in the contract typology (1), under the same payment terms. The Chinese party provides technical expertise on grafting the saplings (when these are not imported directly from China), setting up and managing the plantation (plastic mulch wrapping, adequate pesticide and fertilizer adding, watering). At harvest, the Chinese partner provides access to the market through pre-existing networks from the other side of the border or both parties wait to be contacted by the buyers through the Lao middlemen network. Returns on the sale are split between the two contracting partners. The share varies between 50-60-70% to the Chinese partner and 50-40-30% to the Lao partner, depending on the initial agreement on labour, land and capital inputs.

Case 4-1 A Lao Tai Lue-Lao Akha joint venture in Baan Thami

A Phu (pseudonym) is the head of a five peoples' household in Baan Thami, an Akha ethnic village in Thongmai cluster along the road to Muang Long. In 2007, A Phu, his wife and his elder brother entered in a joint-venture with an investor of Tai Lue ethnicity from the nearby Ban Nam Dai (check village site?) to grow watermelon. In the partnership with A Phu, the Tai Lue entrepreneur provided the technical skills acquired on the previous year by growing the crop with a Han Chinese from Meng Peng, a township in China located only a few kilometres from the international border. A Phu supplied his paddy land and shared with the Tai Lue man not only labour but also part of the capital for the inputs to set up the plantation: each party put 3,700,000 kip for a 2 hA plot. The two men agreed to split the revenues on the sale at a 50%-50% share and informally recorded the terms of the agreement in a written form, each partner keeping a copy of the document. When all seemed to be proceeding in the best way, a heavy heil in 2007 partly ruined the melons that had already grown in their fields. Despite the subsequent rains, the two entrepreneurs were able to sell the remaining large-sized melons to a Han *laoban* (boss, businessmen) through a broker from Meng Peng. Although A Phu did not receive the conspicuous income he had hoped for, he nevertheless was able to earn 5,700,000 kip from the sale of the crop. Small-sized melons were given for free to his village fellows. In 2008, A Phu felt confident enough to start a watermelon plantation on his own and apply the skills (Lao; *wit thi*) he had learned from the Tai Lue man. However, his elder brother persuaded A Phu not to throw himself into such a high risk, highly weather dependent and high labour input business on his own, given that a lot of labour was needed for the family to manage the rubber plantation started partly from the money earned from the 2007 watermelon venture. A Phu decided to listen to his brother, but he still intends to take the challenge to grow watermelon independently next year.

4.2.3 Joint-venture between farmer and (Chinese) entrepreneur (farmer receives a quota on sale by the investor)

Contract formula: verbal (more often) or written (rarely, and not officially registered)

Contract terms:

-*capital and inputs*: by the investor
-*land*: by Lao partner (or at times hired from another land owner)
-*labour*: by Lao partner
-*technical expertise*: by Lao partner
-*market access*: by the Chinese entrepreneur
-*income*: minimum income quota for the investor on the income. Farmer receives 40-30% on the income.

While no cases fitting within this contractual typology were actually found during the field research in 2008, both government officials and farmers mentioned its adoption. It is an agreement most commonly made between a Chinese (Tai Lue or Han) entrepreneur (Ch: *laoban*) and a Lao farmer (of Tai Lue ethnicity) with developed watermelon planting skills. The Chinese party provides capital and inputs, while the Lao party supplies land and labour. The investor sets a minimum quota that he should receive from the sale of the crop by the Lao partner. At harvest, the investor sells the crop to China at the current market price (price is not agreed upon in advance when initial agreement is made) provided that the melons meet the standards set by the Chinese market (see below). The Lao receives a 40-30% share on the income from his business partner, once the minimum quota is met and the initial capital for inputs is deducted. The risk involved in the quota terms makes this type of contract not very popular among the farmers.

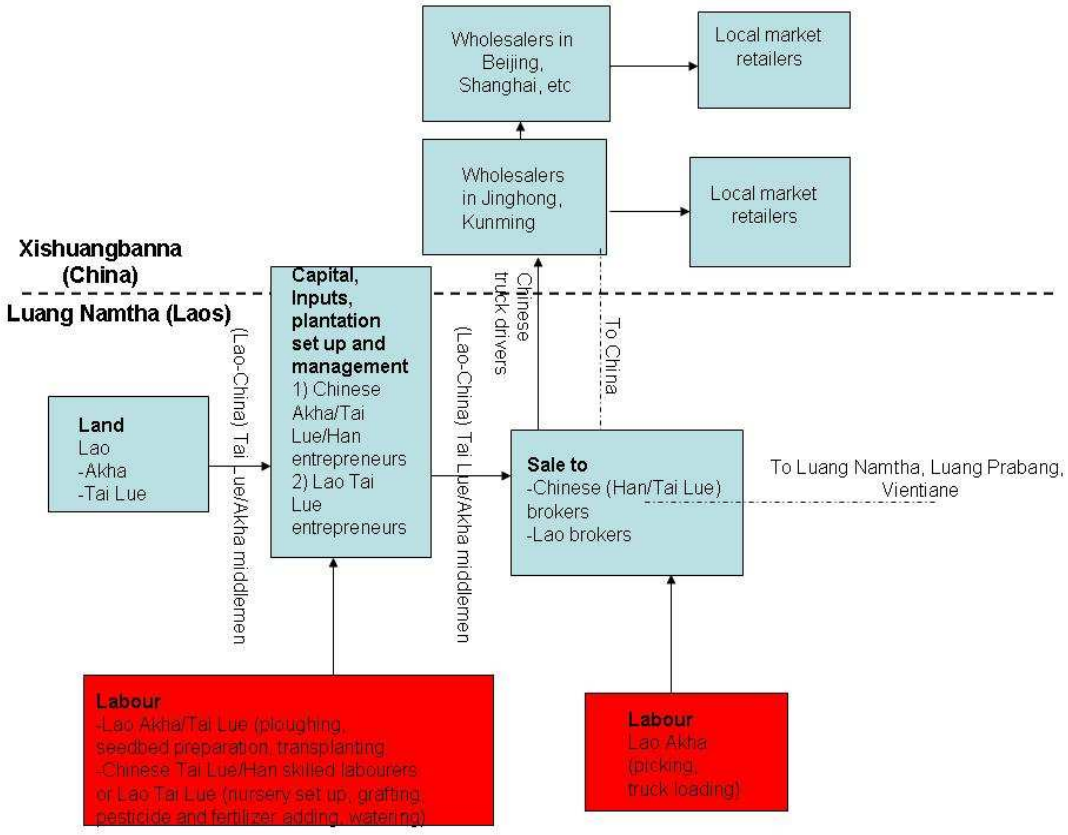
4.3 Individual Farmers' Production

-*capital and inputs*: by the Lao investor
-*land*: by Lao investor or hired from another land owner
-*labour*: by Lao investor and hired Akha labourers
-*technical expertise*: by Lao investor
-*market access*: by the by Chinese middlemen/wholesalers
-*income*: entirely to investor

Since 2006-2007 an increasing number of Lao farmers in Sing and less in Long have started producing watermelon on their own. Farmers take up entirely the burden of buying inputs and managing the plantation on their own as well as seeking buyers from China. Many of them have previously entered in a joint-venture with an investor from China. These new entrepreneurs have mostly Tai Lue ethnic background with strong economic and social bonds with Chinese Tai Lue. Cross-border ties with relatives and peers (Lao: phinong) are crucial factors at the basis of independent watermelon planting, as through them farmers gain

technical knowledge, buy inputs, obtain prices information and reach market outlets. Among others, Ban Dongchai (or Ban Hun) located in Nakham cluster along the main road to China, is an extraordinary example of a village that has utilized trans-national bonds to produce and sell successfully watermelon. In 2008 the majority of the households in the village have grown watermelon using their own financial means and the knowledge acquired through relatives in China. Figure 4.4 represents the social networks at the basis of watermelon production and sale.

Figure 4-3 Watermelon Cross-Border Socio-Economic Chain



4.4 Watermelon Production and Sale

Most of watermelon growers, both Lao and Chinese, in Sing and Long utilize irrigated rice-growing areas (Lao *naa*), although watermelon could in theory be profitably grown on uplands using a trickle irrigation system (Vernon 2006:70). The production is undertaken during the dry season, between December-January and April.

While in China the use of grafted watermelon sapling is quite widespread, in Laos both Chinese and Lao growers tend to use China-imported hybridized seeds that are locally bred in nurseries and then transplanted ungrafted into the seedbeds.

Ungrafted saplings are preferred as they are easier to grow, produce better yields, and require less care than the grafted ones. Ungrafted saplings are rarely planted on the same soil for more than one year in four, to avoid that the plants succumb to soil-borne diseases such as bacterial wilt (Vernon 2006:70).

The costs for establishing a watermelon plantation have been estimated by Lao and Chinese investors/growers as follows:

Table 4-5 Cost for Establishing a Watermelon Plantation

2007	2008
7,400,000 kip/ 2hA (Ta mii)	8-10,000,000 kip/1 ha (Ban Donchai)

The desire to increase the quality of the yields and obtain large size melons forces the producers to an excessive use of pesticides and fertilizers. A foreign agronomist that worked in Muang Sing as adviser for DAFEO denounced already in 2005 that the volume of pesticides sprayed in watermelon plantations in the region surpassed by large the maximum quota allowed by a decree by the Lao Ministry of Health.

Prices of watermelon on the Chinese market have fluctuated since 2000s, depending on the offer on the market. In 2007, the price of large melons sold by Lao producers/Chinese investors to Chinese wholesalers was 3 jiao/kilo. Prices of the crop sold at retail on the Muang Sing market are summarized in Table 4.6.

Table 4-6 Prices of Watermelon on the Muang Sing Market

2004	2007	2008
1,000-2,000 kip/1 melon	3,000 kip/ 1 kilo	5,000 kip/ 1 big melon 2,000 kip/ 1 small melon

In China, in 2007 the farm gate prices of watermelon from Tai Lue producers in Mengman to wholesalers to Kunming was 8 jiao/kilo.

4.5 The Farmers' Voice

The land lease type of contract is by and large regarded by land owners as a convenient cash generating source, especially by ethnic Akha farmers. The income is often utilized by households to set up rubber plantations. However, the terms of this contractual model have not always been transparent nor without unfair outcomes for the farmers, especially when watermelon production was a novelty for Lao locals. Some inexperienced farmers of Akha ethnicity from both

Sing and Long claimed to have been ‘cheated’ (Lao: *tua*) in the past by Chinese entrepreneurs (Ch: *laoban*) on the payment of the land rent. Even people of Hmong ethnicity, renown in the region for their entrepreneurial skills and long-term relations with the Chinese fell into the same trap. In early 2000s, Chinese *laoban* would agree to pay the land lease after harvesting the crop, but in numerous cases they would conclude their business without giving the farmers any compensation.

However, experience in interacting with Chinese businessmen has resulted in increasing the negotiating power for Lao farmers. In 2008, villagers in Sing and Long claimed to have ‘learned the lesson’ and to adopt a new strategy to protect themselves from unfair treatment by the investors: they ask the latter to pay the rent in advance before the use of land occurred. The actual transferring of money to the land owner, rather than the paper sheet, is the assurance for the fulfilment of the agreement. In Ban Namhu (Thongmai cluster), further evidence of farmers’ agency in the business dynamics was presented. Villagers reported that in 2008 a Chinese land contractor in their village kept deferring the payment on land rental to the villagers even after setting up the plantation. After soliciting the payment for seven or eight times without positive response from the investor, the land owners took extreme measures: they pulled out the watermelon saplings from the fields hired by the investor. The latter had no choice but to pay the rent to avoid further problems.

The few Lao farmers that have entered in a joint-venture with an investor (sharing the returns) regard this type of contract as relatively secure because cooperation with the Chinese partner enhances risk-coping capabilities, guarantees share in capital, transmission of technical know-how and facilitates access to the market. This contractual arrangement gives good profits for both parties.

The net income on watermelon sale by Lao local producers varies according to the quality of the yields, on the market price on each year. In 2007, the harvest of most farmers in Sing was ruined by heil storms. A farmer that had planted 2ha with a Chinese partner was able to earn as little as 5,700,000 kip. More lucky farmers reported that in previous years some investors earned as much as 30,000,000 kip from the sale of high quality yield harvested from 1ha of land.

However, watermelon planting is a high risk investment. The success in the business is strongly dependent on weather conditions and expertise in managing the plantation. Furthermore, farmers are often not able to mobilize the large finance needed to set up the plantations. The combination of all these factors discourages most farmers from venturing in the crop planting on their own while fostering their relying on Chinese partners with developed technical skills.

When Lao farmers produce the crop on their own are faced with the problem of accessing the Chinese market through brokers who often keep prices low. Lao producers are unable to by-pass the chain of middlemen to sell their harvest

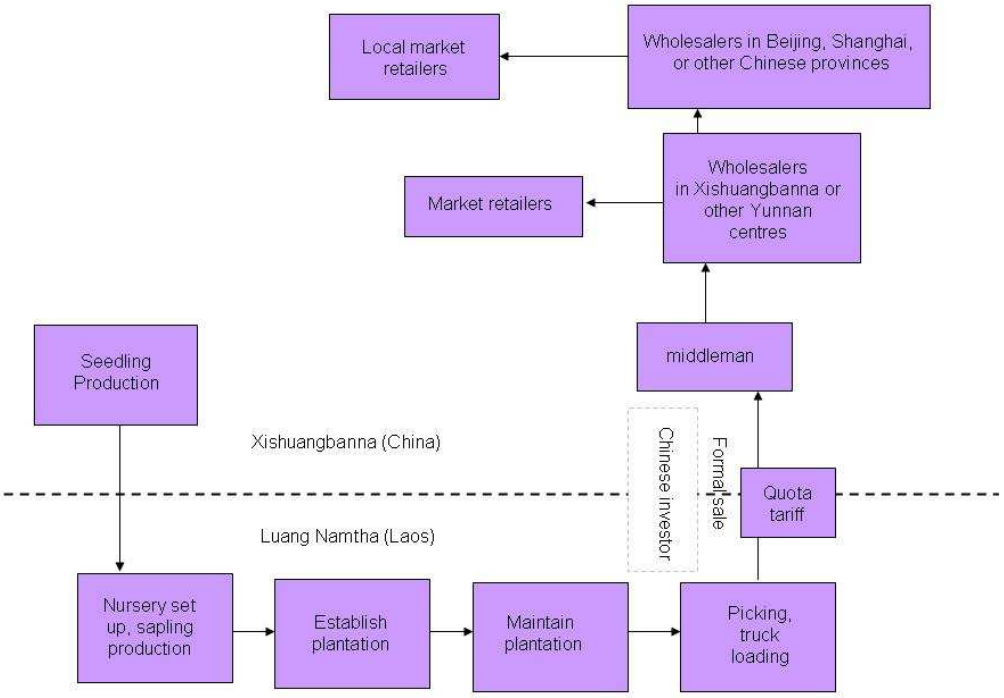
directly to retail markets in China. This difficulty is shared by growers on the Chinese side of the border.

4.6 The Watermelon Market Chain

As seen earlier, watermelon inputs (plastic mulch, saplings, hybrid seeds, fertilizers, pesticides) are produced in and imported from China, apart from some saplings being recently bred in Laos (but using Chinese seeds). The crop is entirely produced in Laos and exported to China via the Pangthong-Chahe border-crossing. At harvest, producers wait for possible buyers to come and view the plantation. Buyers are normally Chinese Han or Tai Lue that act as brokers for wholesalers in China. Chinese brokers reach the producers via Lao middlemen or 'contracting agencies' in the district capital. Local mediators are paid a share on the sale returns. In sporadic cases, the growers seek Chinese brokers on their own relying on pre-established market networks on the Chinese side of the border. Truck drivers hired from China by the buyers transport the crop to wholesale markets or retailers in Jinghong or Kunming. From there, the chain may proceeds through other agents or middlemen to other centres outside Yunnan such as Beijing and Shanghai. According to the producers, watermelon is subject to quota imports set by the Chinese government. The watermelon market chain is visualized in Figure 4.4.

Chinese wholesalers set high quality standards for the crops and purchase only large-sized melons. When the melons 'size meets the requirements of the buyer, the access to the Chinese market is guaranteed along with reasonably high returns (depending on the offer on the market). When the yields are small sized-melons, these can only be sold on the Lao domestic market for lower prices than those offered by Chinese. Small melons produced in Sing reach consumers as far as in Luang Prabang and Vientiane.

Figure 4-4 Watermelon Cross-Border Market Chain



Ch. 5 Cassava

5.1 Cassava Production and Uses: World Trends

For long relegated to the corner of the world's economy as a marginal product, cassava has recently emerged as a key crop on the food and energy scene. In it, many experts lay the hope to partly overcome fuel shortages as global oil supplies increasingly decline. Cassava has been grown in many tropical areas of Africa, Asia and Latin America for centuries. In its major producing countries, Brazil, Nigeria, Indonesia, Zaire and India, the crop is widely used as staple food. Surplus production of cassava is injected into the international market in various forms, such as chips, dried roots, flour, and tapioca starch. Dried cassava finds utilization in animal feed production, while grocery tapioca is used for human consumption. Cassava starch is utilized for industrial purposes in the production of paper, textiles, and other products where the crop is combined with synthetic polymers. Cassava finds also application in the production of ethanol for human consumption and industrial purposes. However, since the late 1990s, cassava has been on high demand for the manufacturing of fuel ethanol along with corn and sugar cane[3]. As maize prices rise on the international market, predictions are made that cassava will replace maize as the main raw material for starch manufacturing. An increase of cassava use in place of maize is also expected for the production of animal feed with the growing global demand of meat and dairy products. Moreover, with an expanded consumption of bread among developing countries, cassava will become a complementary ingredient to wheat. For the above reasons, cassava price and demand have significantly risen worldwide and the projections indicate that they will further rise. As a response to increased demand for cassava, its major producers have over the last ten years increased its production. Also other countries from tropical regions hitherto unresponsive to the crop cultivation have in recent years become involved in the cassava boom (Grace 1977).

In Asia, new cassava varieties for ethanol production have been recently introduced. Thailand and Vietnam[4], respectively the second and third largest cassava producers in the region have not been exception to this trend. Both countries have since the early 2000s expanded their starch manufacturing. Thailand has already started to produce fuel ethanol. Vietnam is taking the first steps in the same direction.

Lately, China has also emerged as a major cassava consumer in the world. The dynamics of cassava cultivation in north-western Laos are mainly connected to China' demands. Before having a look at the development of cassava in Namtha, it is worth first exploring the scenario of cassava production and manufacturing in China.

[3] Some experts have pointed out that among sugar cane, maize and cassava, the latter is the best energy crop for the production of bio-ethanol (Wang 35).
[4] Vietnam produces 12% of the world's traded cassava

5.2 China's Increasing Demand

Although deployed in the past as 'emergency' food to overcome periods of hunger in the southern provinces, in China cassava has only lately gained new attention as key raw material. Since the mid 1990s, cassava has found increased utilisation as input in the country's industrial manufacturing and as animal feed. The augmented deployment of cassava production in various sectors has been supported by the introduction of hybridized new varieties with higher yield and starch content since 1995 (Wang 36). Currently, only 10% of produced cassava in China is used for human consumption, 30% for animal feed, while 60% is utilized for industrial purposes. Cassava derived starch is mainly utilized in the paper and textile industry, in the production of animal feed and, in lower percentage, in the food industry. Nowadays, cassava makes up 11% of China's national total starch production, while maize accounts for 80% of starch manufacturing. Table 5.1 shows the increase in cassava starch production and its volume in relation to the country's total production for the 1995-2000 period.

Table 5-1 Comparison of Cassava Starch Production and Total Starch Production In China from 1995 to 2000 (in million tons)

Starch type	1995	1996	1997	1998	1999	2000
Total starch	2.60	2.64	2.84	3.58	4.70	5.50
Cassava starch	0.228	0.273	-	0.291	0.369	0.588

(Source: Wang: 34)

In China cassava has also found application in ethanol manufacturing for a long time, mainly to produce low purity ethanol (40-95%) for human consumption and industrial purposes. However, since the early 2000s cassava has been identified as major crop for the production of anhydrous ethanol (99%) to be used as fuel. China has been developing a bio-fuel ethanol plan since 2000 to decrease fossil oil imports and presumably reduce environmental pollution. The choice for cassava as main input for fuel production lays in the government's desire to limit the use of food crops such as maize, wheat, and sugar for the same purpose. Currently, corn accounts for 90% of the inputs in Chinese ethanol manufacture, but as its supplies have decreased and prices have risen since the early 2000s, the officials have given directions to circumscribe the application of corn to animal feed production. This is also related to the rise in price of pork, China's principal meat, which is mainly produced on corn-based feed (AP Food Technologies, June 2007). The cost of using cassava to generate a ton of ethanol is 300-500 RMB (US$38-63) less than corn (World Watch Institute, July 2006).

The production of fuel ethanol has been estimated to become China's "sun-rise industry" (Wang 35). Chinese experts expect that ethanol production could amount to 5 million tonnes per year if fuel ethanol was added to gasoline at a level of 10% (Wang 35). For this reason, the Chinese government has designated nine provinces to manufacture and promote the use of ethanol fuel since 2000, but all the designated provinces have used corn as raw material (GOV.cn, June 2006). Currently, there are four main sites across the country that produce about one million ton of ethanol annually from corn (AP Food Technologies, June 2007). A new one-million ton capacity exclusively cassava-based plant is under construction in Guanxi capital Nanning, expected to have a one million ton capacity. Guanxi, China's top cassava growing region has been appointed by the central government to become the nation's largest non-grain ethanol base over the next few years (World Watch Institute, July 2006). All Guanxi's petrol stations will replace gasoline and diesel oil with bio-ethanol fuel starting from April 2008. China's south-western province Yunnan, bordering with north-western Laos, is expected to follow Guanxi's example from 2009 by introducing ethanol-gasoline-mixed fuel. Officials have unveiled that "[M]ore than 300,000 tons of ethanol fuel will need to be blended into the 3.2 million tons of gasoline Yunnan consumes in a year, while the production capacity of enterprises in the province can now reach 500,000 tons" (CRINORDIC, March 2008).

As shown by the table below, between 1993 and 2001 China's cassava production has steadily increased.

Table 5-2 Estimated Total Area, Yield and Production of Cassava in China from 1993 to 2001

Year	Area	Yield	Production
	(000ha)	(t/ha)	(million tons)
1993	280	11.43	3.20
1994	300	12.15	3.64
1995	323	13.68	4.42
1996	339	13.41	4.55
2001	412	14.21	5.85

(Source: Wang: 34)

The country's current cassava production is estimated at 7.5 million tons per year (AP Food Technologies, June 2007). Since such amount is not sufficient to match the country's increasing demand, China has been moving towards two directions: boost the national planting, and develop better technology for fuel ethanol manufacturing. Furthermore, China has considerably augmented cassava imports from other countries. Nigeria has committed to sell 5,000 tons of its annual 120,000 tons cassava production to (China People's Daily, January 2005). Recently, Laos has also been drawn into the cassava vortex by China. The involvement of Namtha province into cassava planting is likely inscribed within the above-described China's national strategies and Yunnan province ethanol production plans.

5.3 North-western Laos in the Cassava Loop: Contract Farming with the Lao-Yunnan Power Biological Products Company

Laos has a long history of cassava planting, especially among upland dwellers. These populations have for many years cultivated the crop in small quantities using local varieties and with very low inputs. The roots have been used for human consumption and as animal feed, while young shoots have also been part of the farmers' diet. In the past, cassava was consumed by the producers themselves or bartered at local markets with lowland consumers for other products. However, following global trends, cassava cultivation has recently experienced a new turn also in Laos. Since the early 2000s, cassava has been the third most grown crop in the country, after rice and corn (CIAT 2). Responding to the rising demand of the crop in its neighbouring countries and particularly in China, the Lao government has pushed for a large-scale production of cassava nationwide. The sale of cassava to starch factories across the borders or to factories planned to be built within the country is expected to provide an opportunity to diversify and boost the nation's income.

In 2005, a move towards this direction was made in Namtha province, where a large-scale production of cassava for export to the Chinese market was started through an official agreement between the provincial government and the Chinese Yunnan Power Biological Products Co. Ltd (Ch Yunnan Liliang Shengwu Zhipin Youxian Gongsi). The Yunnan Power Biological Products Co. Ltd is a formerly state-run firm with a fifty year agriculture planting and processing history in China. Today being a private business, the company incorporates different groups that operate in Yunnan province (in Dehong Simao, Honghe prefectures), in Burma and Laos. Currently, its main production activities range between sugar refining, ethanol production for human consumption and industrial purposes. The firm's twelve brown and white sugar processing plants in China spread across Honghe, Dehong, Simao, and Kunming. Adhering to the Yunnan government's 'zouchuqu' scheme/call [5]and the poppy replacement program, the company has established two branch companies respectively one in Laos and one in Burma for the production of sugar cane, cassava and rubber (YPBPG Brochure). In Burma's Shan States bordering with China, the firm has took over with both sugarcane and cassava cultivation and processing—a sugar cane refinery and ethanol manufacturing plant was established in 2007. In Laos, the initial plan to grow sugarcane, cassava and rubber faded to the cultivation of only the latter two crops due to competition with the Meng Peng Sugar Company, who has enjoyed the monopoly of sugarcane cultivation in Namtha province since the early 2000s (see Ch 6). In north-western Laos, the Yunnan Power Biological Products operates through the Lao-Yunnan Power Biological Products Group Co. Ltd (LYPBPG) that ramifies at the district level through sub-agencies managing local

[5] On this topic see Shi 2008

production. The company has monopoly on cassava planting in Namtha province. The cultivation spans Sing, Nalae, Vieng Phukha and Namtha districts[6]. The company has so far promoted the crop adopting a pilot test approach, hoping to expand the production if the farmers respond positively to the business. The actual extension of cassava by the Chinese firm in Namtha started in 2006.

Table 5-3 Districts Involved in Cassava Production under Contract with Lao-Yunnan Power Biological Products Group in Luang Namtha Province(2006-2008)

Sing
Long
Nalae
Vieng Phukha
Namtha

5.4 The Cassava Landscape

The way cassava planting developed in the three districts under study differs significantly. As demonstrated in the Table 5.4, Long is, among the three districts under consideration, the one where in 2006 the highest number of households planted cassava with LYPBPG, followed respectively by Nalae and Sing. This finds explanation in the following factors:

-In Long, farmers were initially more inclined to join the contract as they found in the LYPBPG the only commercial partner that offered them an alternative income generating source at a fixed price and potentially for an extended period of time. Exception to this was the rubber companies, but the partnership with the latter is expected to bring income only when the trees are mature for tapping in 2013-15. Similarly, banana and watermelon Chinese investors provide income only to a limited number of villages along route 17 from land rental but this is only on a short period basis. Other crops planted in the area are sold on informal contractual basis that do not guarantee returns at a fixed price. Villages located in remote areas, distant from Route 17, or along this main thoroughfare and yet affected by a higher rate of poverty were more apt to cassava planting with the company than those having better road access and being better-off.

-In Nalae, the initial number of households was lower than in Long due to the alternative revenue channels provided firstly by FUF and later by Jiachuang with corn and soy bean production (see corn and soy bean chapter). The villages that joined cassava planting with the company were those located along the road to the provincial capital Namtha. Only a few of those with poor road access were involved in the business.

[6]The company's rubber production expands in Saignaburi, Vientiane, Luang Prabang and Phongsali.

-In Sing, the low number of households involved in cassava cultivation with LYPBPG can be explained as follows: the Meng Peng Sugar Company had already absorbed a large portion of area and labour in the district; the closer vicinity to China and the long-term cross-border socio-economic relations offered Sing locals alternative and more profitable sources of income; Sing's average living standard can be considered higher than that of Long and Nalae, a fact that allowed its population to escape the trap of low paid cassava cultivation under contract. Villages more distant from the Chinese border and with more feeble social and trading contacts with China were more inclined to venture in the cassava planting with the company that those better socially and commercially connected to China.

In the three districts, more well-off households chose not to join the contract with LYPBPG due to the low price/labour input ratio. The way the production progressed over two years also took different forms in the three districts: as shown in the Table 5.4, the conspicuous number of villages and households that joined the contract with the company decreased from the 2006-2007 to the 2007-2008 planting cycle in Sing and Nalae, but increased in Long. The area covered in the three districts followed the same trend (Figure 5.1).

Table 5-4 Number of Villages and Households Involved in Cassava Planting under Contract with LYPBPG (2006/2007-2007/2008)

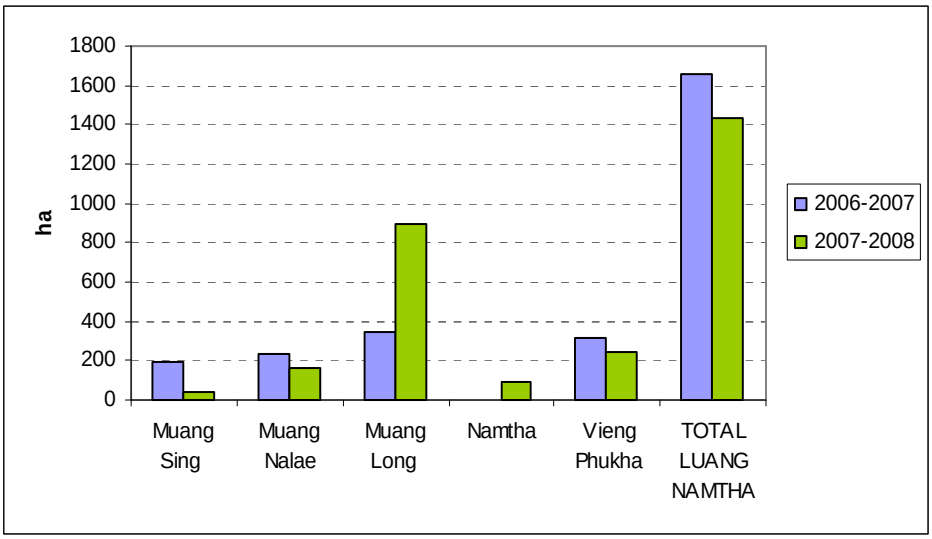
	Sing	**Long**	**Nalae**	**Namtha**	**Vieng Phukha**
2006-2007	39 villages 443 HH	34 villages 847 HH	26 villages 585 HH	Not available	35 villages
2007-2008	15 villages 115 HH	35 villages 1265 HH	13 villages 69 HH	9 villages	29 villages

Source: Muang Sing, Muang Long, Muang Nalae DAFO, GTZ Agriculture and Forestry Office and Lao-Power Biological Products records.

The volume produced increased slightly in Nalae and significantly in Long from the 2006-2007 to the 2007-2008 cycle (Figure 5.2). This discrepancy might be due to the fact that many Nalae families that had planted cassava in 2006 decided to dig it out only in 2008[7]. It is unclear as to how much cassava has been harvested from the area covered in all districts. In reality, many farmers In The general trend was that in the 2007-2008 planting cycle cassava has in all districts increasingly lost terrain due to competition with other crops.

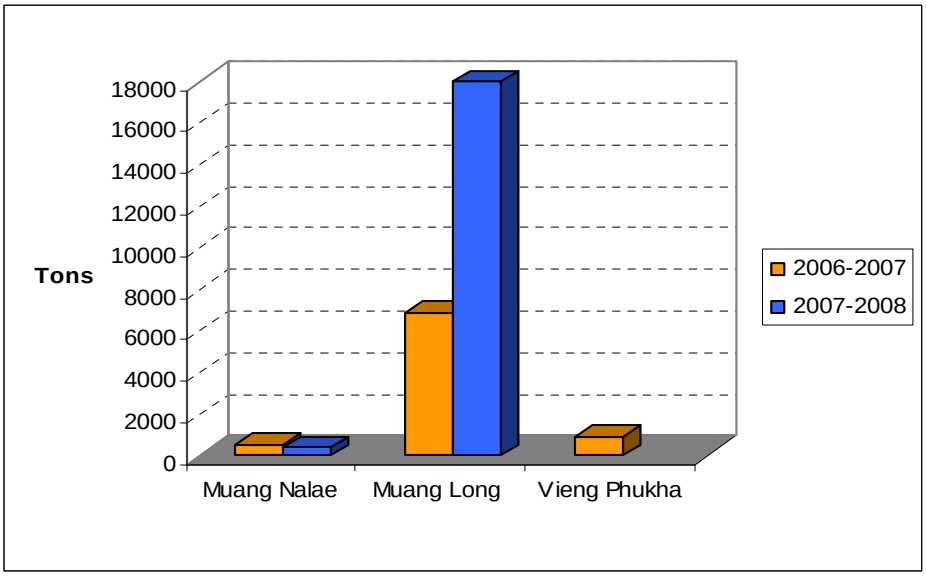
[7] Although sufficiently reliable to offer an understanding of the trends in overall production and planted area, the figures presented above should be treated with caution: there is some incongruence between the data provided by the company, the Lao government officials, and the situation on the ground.

Figure 5-1 Area Covered with Cassava under Contract with LYPBP



Source: Luang Namtha PAFO, Sing, Long, Nalae DAFEO

Figure 5-2 Cassava Production under Contract with LYPB by district



Source: Luang Namtha PAFO, Long, Nalae DAFEO
(Data not available for Sing, and for Vieng Phukha on 2007-2008)

Although figures on volume are not available for Sing, the empirical research has unveiled that in this district cassava planting under contract has never really taken off, as LYPBPG lost out in the competition with the Meng Peng Sugar Company. Long is likely to follow the same trend from 2008 on, where a few villages have already committed to grow sugar cane for the Meng Peng Sugar

Factory (see Ch 6). In Nalae the majority of farmers that had previously joined the contract with LYPBPG claimed that they will resort to corn production with Jiachuang starting from 2008 (see Ch 7) while also seeking other revenue options. Despite the LYPBPG's desire to increase the production in 2008, the number of households, area, and volume, involved in cassava planting is deemed to plunge in the three districts. The reasons for this will be explained in more detail in the sections below.

5.5 Contractual Arrangements

The LYPBPG signed three types of contracts, respectively one at the provincial, at the district and at the village level. When compared to the other Chinese companies operating in the three districts on producing other cash crops (excluded rubber), the LYPBPG is the firm that has drawn the most extensive and detailed written contracts which convey, at least in appearance, a more transparent way of operating. During the field research, only the first and the third typology of contracts were viewed. The following section shows the main terms of each of these two contract typologies, while highlighting differences between different village-level contracts signed in 2006 and 2007.

5.5.1 Provincial Level Contract

LYPBPG signed a written agreement with the Luang Namtha Provincial government (DPI and PAFO) in October 2005. The contract was written in Chinese and Lao languages. The document pertains to the plantation, purchasing and processing of sugar cane and cassava in Sing, Long, Vieng Phukha and Nalae districts. The duration of the contract is 15 years. The cost of the investment is estimated as large as US$3,000,000. In the document, the Lao provincial government agrees to allocate 20,000 ha in Sing district for sugar cane cultivation and a total area of 60,000 ha in Viengphukha and Nalae for the production, purchase and processing of cassava. It is also assured that the Lao authorities will allocate land to the company to establish a sugar cane refining plant, a cassava processing plant, warehouses, guesthouses, and agricultural laboratories (Art. 6). Whenever necessary, the Lao party is responsible for removing the users of a land plot to set up such infrastructure, while the company commits to compensate the land owners.

5.5.2 Village Level Contracts

Contrary to their provincial counterpart which combines in one document the cultivation of cassava and sugar cane, village level contracts refer exclusively to cassava growing. Contracts are in a written form and formulated in Lao language, containing details about terms, rights and obligations by all stakeholders. Contracts are written and signed every year. Since the company started to operate in the region, village level contracts have been signed twice (once in

2006 and once in 2007). Exception to this has been some villages in Nalae where farmers joined in the production without signing a formal contract, but simply making a verbal agreement with the company. In early 2008, only a very small number of villages committed to cassava planting for the following year and only one of those visited signed a new contract. While in the 2006 contracts the company agrees to buy both raw and fresh cassava, in the 2007 agreements, it confines its purchase to dry cassava. Moreover, in the 2007 contracts, the company sets higher quality standards for the crop, specifying that only high quality, white, mould and dirt free cassava will be purchased. As already pointed out earlier, consent from the villagers is obtained through persuasion campaigns undertaken by DAFO officials and the company's agent. No coercion cases were found in any of the villages surveyed. Households joined the contract at their will and on individual basis.

What are the arrangements of the contracts?

- *land* and *labor*: contributed by the villagers (no land rental is involved, but farmers grow the crop on individual land).

- *capital* and *inputs*: seedlings are provided by the company free of credit; although not used at the time of the survey, the district level contracts point out that fertilizers and pesticides will be provided on credit by the company when used. The same policy applied to tractor rental for ploughing. Money for such inputs is deducted from the payment of the crop at the time of purchase.

- *technical extension*: provided by the company (with DAFO assistance)

- *market access*: provided by the company. The company guarantees to purchase the crop from the farmers on a fixed price according to the volume sold. Neither party in the contract should change the price of the crop at the time of purchase, despite fluctuations on the market. In the 2006 village contracts, the company states that it will buy both fresh and raw cassava respectively for the following prices:

  -raw cassava $12/ ton (120,000 kip/ton)
  -dry cassava $ 40/ton (430,000 kip/ton)

  The prices set in the 2006 contracts were initially the same for all districts. Subsequently, in the 2007-2008 contracts the company changed its plans by circumscribing the purchase only to dry cassava. LYPBPG designed different prices according to the district and/or village road accessibility, and transportation.

Table 5-5 Dry Cassava Farm Gate Prices in 2006/2007-2007/2008 Cycles (by district) (kip/ton)

	Sing, Namtha	Nalae	Long, Vieng Phukha
2006-2007	400,000-430,000 kip	400,000-430,000 kip	400,000-430,000 kip
2007-2008	500,000-530,000 kip	450,000-480,000 kip	450,000-500,000 kip

Source: district-level contracts, village-level contracts from Muang Long district.

The company's agents claimed that the gradual increase in farm gate prices every year is a strategy adopted by Lao-Power to encourage farmers to continue producing the crop. However, as shown below, the farmers did not respond positively to this incentive.

- *Transportation costs* (for delivering the harvest from the village to the company's warehouse): are covered either by the company or arranged by the farmers. The farmers should bring the cassava sacs to a site reachable by the company's vehicle. They also have the responsibility to load their cassava sacs on trucks.

- *Weighing*: the company is responsible for weighing the crop in the farmers' presence and pay accordingly at the time of collection.

Other terms included in the contract are:

-In case of damage caused by natural disaster or crop destruction by wild animals, the company does not ask villagers to pay for the inputs. On the other hand, they do not pay villagers for their lost labor.

5.6 From Agreement to Implementation

In implementation, the terms set by the written provincial level contract were not entirely applied. Cassava was not only extended in Viengphukha and Nalae, but also in Sing, Long and Namtha. The company was not able or allowed to establish a cassava processing plant. LYPBPG agents claimed that this has not happened as the production is still too low. At least 2,000 ha planted across the province will be necessary to establish the plant.

The implementation of district level contracts was more compliant with the terms set by the written document, although, as elucidated later, many clauses agreed upon were not respected by all the stakeholders.

How are production and sale to the companies managed in reality?

5.6.1 Producing for the Company

-Households join in the contract on an individual basis. Cassava is usually grown in fallows on individual lands as certified by the *naiban* (village headmen). Mid-level slopes and well-drained soil are the areas where farmers planted the crop.

-Growing, digging, slicing, packaging, truck loading is done by individual households, although some cooperation among villagers occurs on a rotation system for truck loading operations.

-Company nominates a group manager that receives compensation based on a percentage on the volume sold. The group manager is responsible for monitoring the planting of the crop (quality), arranging the time of collection for the company, supervising the weighing, and guaranteeing transparency of payment. This role is in most cases filled by the *naiban*.

5.6.2 Selling to the Company

-The company buys cassava from December to April.

-Crop weighing occurs in the village (when company arranges transportation) or at company's district warehouse (when villagers arrange transportation)

-Crop is collected by truck drivers (from China and Laos) or delivered by villagers to the company's district warehouses

-Farmers are compensated after the company weighs and collects the crop, although, as shown later, there have been some exceptions to this. No receipts of payment are given to the farmers.

5.6.3 The Farmers' Voice

As anticipated, in Luang Namtha, cassava production and sale has not gained much success among the farmers. Except very few isolated cases, the farmers unanimously expressed strong dissatisfaction with cassava contracting. This section gives space to their voices.

The main reasons for such widespread discontent can be summarized as follows:

-The company did not entirely respect the terms of the contracts signed in 2006 whereby it committed to buy both fresh and dry cassava. At the time of collection in 2007, the company only purchased dry cassava. Drying cassava requires a high labor input that the farmers were not keen to provide. By and large, farmers

preferred to produce fresh cassava which, despite the lower price offered, involved lower labor input.

-Farmers encountered problems with drying and reducing the moisture content and preserving the crop in good condition until the company collected it. Most of the crop produced was not dried properly and got spoiled in the humid Namtha weather between December and March. Early rains further contributed to ruin the harvest by making it moldy. Many found difficult to prevent animals from eating the crop laid on the ground, as they did not have the means to fence off the fields adequately.

-Farmers did not have sufficient space to store the crop between harvest and collection by the company. Some overcame this problem by drying their crop in the lower parts of their houses. Overall, the quality of cassava produced was very low, mostly moldy and black-looking. When the company set higher standards in the 2008 contracts claiming that it would only buy white, crunchy, and dry cassava chips, farmers were even less motivated to plant and dry the crop.

-Farmers regarded the prices offered by the company absolutely inadequate for the labor input involved in the production. Many growers refused to harvest the crop because of the low income prospects. Not even the company's policy of gradually increasing prices over years has persuaded them to pursue the production. The income earned from cassava sale varied from district to district. A lady interviewed in Ban Sop I Mai in Sing said to have planted cassava twice for the company. In 2007, she sold 12 sacs (1 sac=25 kilo, 12 sacs=300 kilo) for 450 kip/1 kilo earning in total as little as 130,000 kip. In Ban Lan Pha Mai in Long a lady planted 2 acres of land that yielded 20 sacs of dry cassava (1 sac=20 kilo; 20 sacs=400 kilos) purchased for 500 kip/1 kilo. Her income was 200,000 kip. In Ban Lao in Nalae a male farmer told to have planted 1 ha of cassava in 2006. He was able to sell 600 kilos in 2007 and make 220,000 kip. In 2008, the same person sold 15 sacs earning only 108,000 kip. A farmer in Ban Phu Luang sold 150 sacs (about 3 tons) in 2008 amounting to 440,000 kip revenue.

-Some farmers also lamented that the varieties they planted produced low yields. According to a company's agent in Long, 1ha of land in that region of Laos can yield up to 10-12 tons of dry cassava which in theory could produce a 5,500,000 kip income. However, none of the farmers interviewed had ever harvested or earned as much. Investors in southern Laos claimed that 1ha could yield up to 70/100 ton of cassava, depending on soil fertility (LaoFAB conversations March 24, 2008). Unfair price/labor input ratio led farmers in Sing and Long to prefer sugarcane to cassava, despite lower productivity (1ha/40 ton) and lower gate price offered (130-160 yuan/ton) for the former. Their calculation was based on the fact that producing 1 ton of sugarcane requires less labour than producing the same quantity of dry cassava.

-Some farmers in Sing reported that in some sporadic cases the payment was inferior to what agreed upon on the contracts. Ban Thongmai residents (Sing) claimed that in 2007 dry cassava was being bought by the company for 300,000 kip/1 ton instead of 400,000 kip/ton as marked on the agreement.

-Growers denounced delays in collection (due to road inaccessibility or to the company's negligence in organizing transportation). While in 2007 the company was quite punctual in collecting and paying the harvest, in 2008 such punctuality was seldom respected. This resulted in the loss of much crop and a subsequent reduction of income for the farmers (See Case 5.2). After the 2007-2008 harvest, many farmers in Long had to deliver the crop on their own. Others, as their harvest had gone rotten with time and uncollected by the company were refused payment by the company. The paragraph 7 of the village level contracts states that "if the company does not buy [the crop], it will be responsible for reimbursing labour costs to the villagers or other labour costs that the villagers have already paid for". At the time of the survey this term was not being applied.

-Delays in payment in 2007 were infrequent, becoming in early 2008 a widespread phenomenon in Muang Long. At the time of the survey, many farmers in Long had not received payment for the cassava sold and were begging payment from the company's agents.

-Claims were made that DAFO employees supposed to act in the farmers' interest were more inclined to act on their own and in the company's interest. In some cases farmers did not receive due technical assistance by either DAFO or the company. Some even denounced cases of mistreatment by the company's employees.

Business mismanagement by the company resulted in the farmers not complying by the contracts and a failure of cassava planting. Villagers claimed that only if receiving the amount of 800,000-900,000 kip/ton they could be persuaded to resume the production.

Case 5-1 Ban Sopi Mai: the Uncertainty about Cassava Planting

Ban Sop I Mai is an ethnic Akha village in Sing district located along the road to Namtha. 49 households populate the village, 45 of them in 2006 joined cassava contract farming with LYPBP. The charismatic *naiban* acted as mediator between the company and his village community by divulgating technical information to the farmers. He was also in charge of managing and organizing the collection by the company as well as supervising the weighing procedures. All proceeded well until the time of collection arrived and the farmers were informed that the company would only buy dry cassava and not both dry and fresh cassava as agreed upon in the contract. The company's change of policy led the farmers to dismiss the contracts. Some left the crop in the soil; others harvested it but utilized it as feed for their livestock; some others dug it out only in 2008 even if earning a ridiculously low amount. Overall, there was much discontent among the farmers. At the time of the survey in 2008, only 10 households were still committed to cassava planting, even without formally signing a new contract. Among these households was that of a middle-aged woman that constituted an exception to the mainstream disappointment. In 2007, the lady and her husband sold 2 sacs of cassava (1 sac=25 kilos) earning 22,500 kip (450 kip/kilo). Although the low income from the previous year, in 2008 the household decided to increase the area planted with cassava as they found sugarcane not as convenient due to the lower farm gate price paid for it. The household hoped to harvest about 1,300 kilos from the seedlings planted in 2 acres of land. The lady and her husband claimed not to have encountered major problems with cassava planting other than producing chips with the moisture content required by the company. However, the day the village was visited in February, an unusually heavy rain was falling in Muang Sing. The couple had to run to the fields to collect their cassava and lay it in the lower part of their house on stilts. The cassava chips looked irregular in size and thickness, as the couple had decided not to use the slicing machine provided by the company. The colour of the chips was not white nor mould free as the company wanted. The farmers were uncertain as to whether they would be able to sell their harvest this season.

Case 5-2 Ban Senkhankham Mai: Land Dispute between LYPBPG and a Rubber Company

Ban Senkhankham Mai is located on the rugged mountains off the Mekong River in Xiengkook, in Long district. Connected to Xiengkok town by a winding and often impassable 12 km road, the village livelihood relied on a semi-subsistence economy until it became involved in contract farming for cassava production with LYPBPG in 2006. However, the passage to the market economy has not been as smooth as the farmers had hoped. The whole village (47 hh) joined the contract with LYPBPG in 2006, which resulted in planting cassava over an area as large as 50 ha. After a first harvest sold to LYPBPG with no major problems, the villagers were persuaded by DAFO officials to join a rubber contract with a Chinese company operating in Long district. Becoming absorbed into the rubber vortex signified for the villagers to be involved into a dispute over land between the two Chinese companies. The Lao authorities allocated to the rubber company some land that was partly being used to grow cassava for LYPBPG. The latter claimed its rights over that land on the principle that it had come first. Nevertheless, with the support of the Lao police the rubber company threatened to arrest the farmers if

they did not cooperate. Without asking for consent, the company's workers dug out the cassava of nine households to pursue plant rubber saplings. Despite the farmers and LYPBPG's appeal to DAFO to intervene in their favour, the rubber company prevailed over LYPBPG and never accepted to compensate the households affected for the crop's loss. Eventually, the two companies resolved the dispute by making their rubber and cassava interests coexist in the same land for two years: the villagers were encouraged to intercrop cassava and rubber. At the time of the visit in February 2008, hesitation and disillusion hovered above the village. The farmers were uncertain as to whether at the end of the two years they would pursue the cassava business, given the more enticing future offered by rubber[8].

5.6.4 The Company's Voice

Many complains came from the company's side as well. LYPBP's dissatisfaction can be summarized as follows:

-The quality of the crop produced by the farmers is generally too low and does not meet the standards for industrial processing. The chips had high moisture content, often mouldy or rotten and too thick. Only a few farmers were able to produce high quality dry cassava.

-Despite cassava is a crop that requires minimum management input the company claimed its failure in the farmers' lack of technical skills and negligence. A further reason for business breakdown was poor road access.

-The company claimed that the farmers seldom respected the terms set by the contracts.

-The company attributed part of its failure to the Lao government's obstructionism. The latter has so far not created the conditions for building a processing plant which prevented the firm from buying fresh cassava from the farmers. Fresh cassava needs to be processed three days after slicing to avoid that it gets spoiled. This is what forced the company to purchase exclusively dry cassava for export to China.

5.7 The cassava market chain

An adequate analysis of the cassava market chain between northern Laos and Yunnan is undermined by the lack of solid information on the market dynamics on the Chinese side of the border. However, the following section will provide a general overview of the patterns in the flow of the raw material from Laos to China and the processing chain in China. As already anticipated in previous

[8] Shi (2008) also refers to the land dispute between LYPBP and the Chinese rubber company in Ban Senkhankham Mai in her rubber study.

sections of the chapter, the LYPBPG has introduced industrial cassava varieties that produce high yield and high starch to Laos. Initially, seedlings were imported from China and distributed to the farmers for free. However, from discussions with the company's agents, it has emerged that the company has recently started to breed such new varieties in Laos by encouraging the farmers to utilize the above-ground stalks dug from the previous year. The company's employees did not want to share the prices of the seedlings provided to the farmers, but revealed that the prices are relatively low.

Given that cassava has so far been grown on relatively virgin soil, no chemicals or fertilizers were being used. However, if the company succeeds in keeping up the farmers' interest in cassava planting and by so doing intensifying the crop's cultivation, it has been anticipated that pesticides and fertilizers might be introduced in less fertile soils. The chemicals and fertilizers will be imported from China.

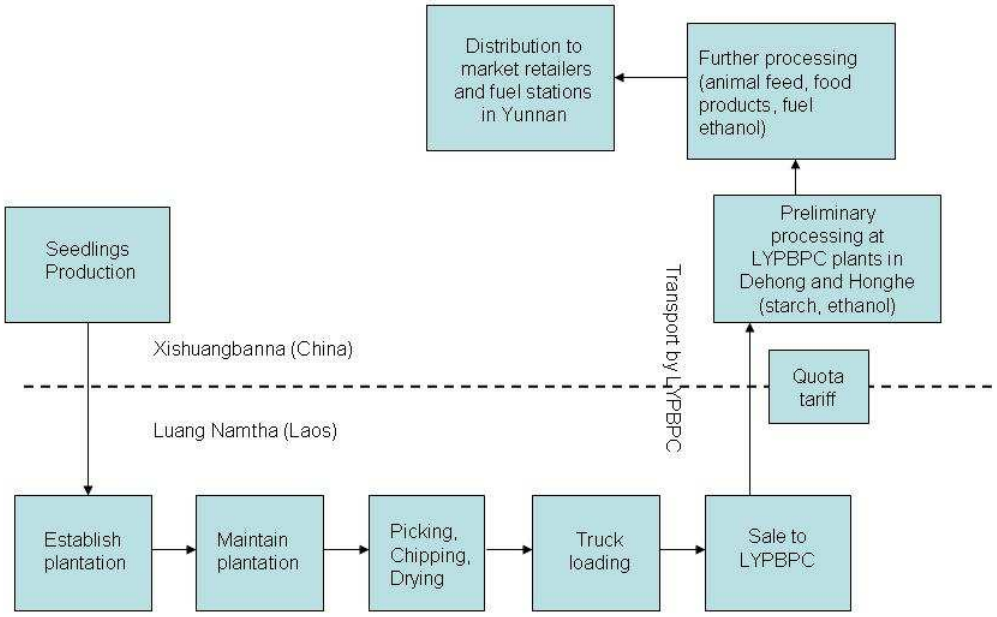
So far, the only steps in the cassava market chain that occurs in Laos are planting, slicing and drying, while every step involved in processing is done in China. Dried cassava is packaged by the farmers into plastic sacs provided by the company free of charge. There have been cases of the farmers who turned the harvested cassava into feed for their own livestock, or, rarely, sold it on the Lao domestic market as animal feed instead of selling it to the company. However, when cassava chips were delivered (either by the company or by the farmers themselves) to the company's district warehouses, they were subsequently exported to China via the Phangthong check-point on trucks hired by the company.

The company agents remained vague about the policy on tax duties to be paid at the border check-points on both sides of the border. According to the provincial level contract, the firm should be exempt from import-export tariff and fees. Despite the company's operating within the poppy replacement program the agents claimed that while on the Chinese side of the border the company receives a preferential tax treatment on cassava import, on the Lao side of the border a tax applies.

Once crossed the border, cassava is distributed into the various company's plants in Dehong and Honghe prefectures of Yunnan for preliminary processing. A minimal part is processed into flour for the food industry and into animal feed. A larger portion of cassava is directed to ethanol production. At the time of the survey, the company produced low purity ethanol (95% or less) for human consumption and industrial purposes. Given the above-mentioned Yunnan government's push for bio-fuel-run automobiles it is possible that LYPBPG will start producing anhydrous ethanol (99%) for fuel soon. The company's agents were vague as to whether ethanol processing is done in the same factories as starch manufacturing or if it occurs in other plants of Yunnan. Final manufactured products are distributed to Kunming and other places in Yunnan. The provincial-

level contract signed between the LYPBPG and the Lao authorities refers to a plan to set up a cassava processing plant in Laos. The company's agents blamed the non-implementation of the plan on the Lao government's obstructionism and on inefficient electricity availability to run the factory in Laos. However, the company intends to pursue this plan in the future. If this is achieved it claims it will pay a higher farm gate price to the farmers. Also, having a plant in Laos will allow them to buy raw cassava. The cassava market chain between northern Laos and Yunnan is visualized in the Figure 5.3

Figure 5-3 Cassava Cross-Border Market Chain



Ch. 6 Sugarcane

6.1 Sugarcane Production in North-Western Laos

In Luang Namtha province sugarcane has been cultivated for a long time on a small scale mainly for local consumption and sale in the Lao domestic market. In Muang Sing, sugarcane grown both in the lowlands and on lower slopes has been utilized by local residents, especially of Tai Lue ethnicity, to produce brown sugar. Up until today, some Tai Lue villages in the Sing valley have maintained the tradition of brown sugar production through a rustic manufacturing and pasteurising process. Sugar blocs are sold at the Muang Sing market or exported to other areas of Namtha (See Case 6.2).

It is not until the mid 1990s that in Muang Sing sugarcane shifted from being a crop linked to the Lao internal market into representing an important raw material injected into the broader Chinese market and included as refined sugar into the larger world economy. Such a shift was marked by an agreement between Sing DAFO and the Chinese Jenjay Company. Borrowing capital from a sugar factory in Xishuangbanna and the Agricultural Bank the company promoted sugarcane cultivation under contract guaranteeing the purchase at a fixed price. However, the venture did not generate particularly fruitful results as farmers were not provided sufficient technical support and poor road network made transportation to the villages difficult. After Jenjay, some farmers continued to grow sugarcane for other Chinese companies splitting the returns at a 50%-50% (Lyttleton and alia 2004: 32), among which was the Yunnan Xishuangbanna Yingmo Sugar Manufacturing Co. Ltd.

In 2002 an official agreement between the Meng La (China) and the Muang Sing governments resolved to formally introduce sugarcane farming under contract with the latter as a first step towards opium replacement. The company, represented in Laos by the Mengpeng Sugar Manufacturing Co. Ltd. (MPSMC) planned to take advantage of the vicinity of one of its main sugar refineries in Mengpeng (located in Mengla County, in south-western Xishuangbanna) to Muang Sing where a large pool of land and labour could fulfil the factory's demand. Contributing to the company's expansion beyond the border was the Chinese farmers' gradual abandoning sugarcane cultivation, replaced by the flourishing of other higher income generating crops such as rubber.

The Yunnan Xishuang banna Yingmo Sugar Manufacturing Co is a formerly state-run company recently turned into a privately-own firm with its managerial headquarters in Kunming. Apart from the plant in Mengpeng, the company owns two sugarcane refineries in Menghai County in western Xishuangbanna and a few in Dehong Prefecture (Yunnan). All factories manufacture white sugar and low purity ethanol (80%). The Meng Peng sugarcane plant was established in 1987 by the Chinese government as part of a national economic development plan designed to integrate Xishuangbanna's local agriculture into China's national

industrial production. In the late 1990s some villages located near the Chinese border produced for the company. Since early 2000s an increasing number of villages in Muang Sing joined sugarcane cultivation with MPSMC. From Mom and Xiengjai clusters the production has been lately expanding to other clusters in the district. While Nalae has not been reached by the sugarcane business, in Long the company started to grow the crop in 2007. The factory has delocalized its entire sugar cane planting from Xishuangbanna to Namtha[9].

In Muang Sing the Mengpeng Sugar Manufacturing has been granted the monopoly of sugarcane production, a privilege that the company did not want to share with the Lao–Yunnan Power Biological Products Company nor with any other firm. In 2006, the Mengpeng company made an agreement with the Muang Sing government to operate in the district until 2009, and has ambitions to renew the contract until 2016[10]. However, as some of the company's employees have remarked, it remains uncertain as to whether the company will be able to maintain its business over the next few years, when many villages in Sing and Long will have started tapping rubber.

6.2 The Sugarcane Landscape

A conspicuous number of households and villages in Sing joined in the production with MPSMC and, as suggested by Table 6.1, this has increased significantly from 2004 to 2007. In 2008 the firm planned to extend the sugarcane growing area in Sing by 70 ha and boost the production to as much as 70,000 tons. In Long, the villages involved in growing the crop were 5 in 2007. The number is planned to rise to as many as 20 villages in 2009. Enticed by the high fertility characterizing the soil of this district, the company has the ambition to expand the sugarcane area in this district by as much as 80 ha starting from 2008. Some rumours suggest that the intended area will be 536 ha over the next two years. The failure of cassava planting by the Lao-Power Biological Products will contribute to implement such plan. In both Sing and Long a high number of households dissatisfied with cassava planting are expected to join in the contract with MPSM from 2008 on.

[9] According to some records circulated by the Meng Peng company in Muang Sing, up to 2004 on the Chinese side of the border in Meng Man township 11 villages were involved in sugar cane production, while in Meng Run Township and Guanlei township there were respectively 12 and 1 village involved in the same business. It is uncertain as to which year these villages stopped growing the crop for the company. Reliable sources reported that none of these villages produce for the company in 2008.

[10] Another company runs a few sugar refineries spread across Xishuangbanna, these being in Menghai, Mengla and Jinghong. Some government officials have mentioned that this company has signed an agreement with the Lao authorities to plant sugarcane in Phongsaly province.

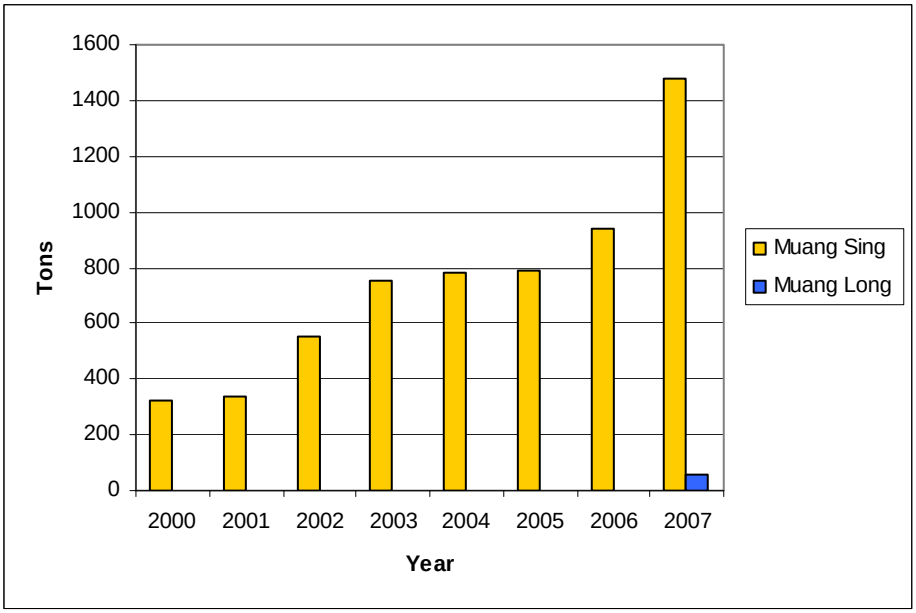
Table 6-1 Number of Villages and Households Involved in Sugarcane Planting under Contract with MPSM (2006/2007-2007/2008)

District	2004	2005	2006	2007	2008	2009
Muang Sing	42 V 1196 HH	60 V 1167 HH	60 V 1500 HH	65 V 2170	Not available	Not available
Muang Long				4	4	20 planned

Source: DAFO and MPSMC records.

In Muang Sing the sugar cane area and volume have been expanding (Figure 6.1 and Figure 6.2) and are foreseen to rise, at least until rubber production will have taken over in the region. In 2008, the expected production was 70,000 tons.

Figure 6-1 Area Planted with Sugar Cane under Contract Farming with Meng Peng Sugar Manufacturing in Muang Sing and Muang Long

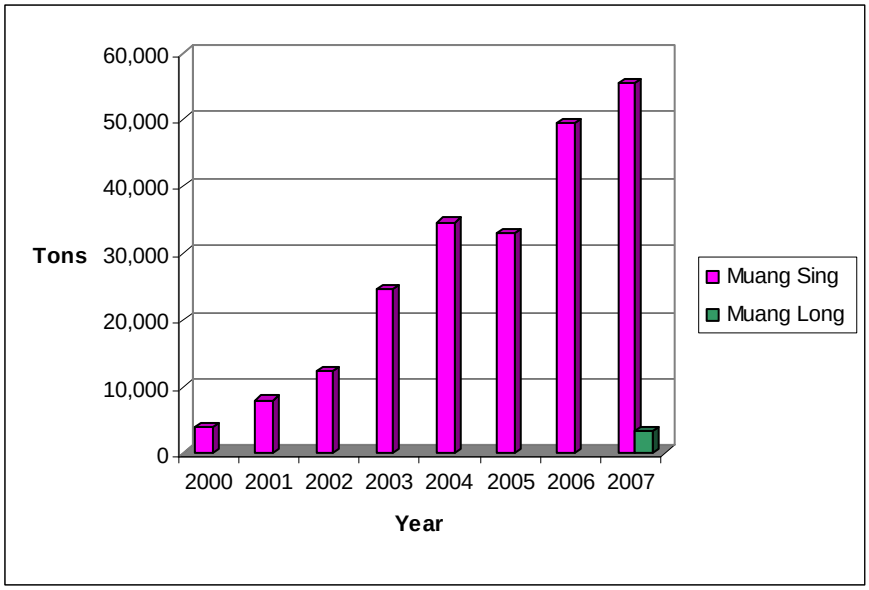


Source: Long DAFO, Sing Office of Trade and Commerce

Although a few villages of Tai Lue, Tai Neua, and Hmong ethnic makeup have chosen to take part in the sugar cane contract farming, in Sing most of the growers are ethnically Akha farmers, whose number increases as one travels further away from the Chinese border, especially in those villages where road inaccessibility has thwarted strong commercial and social bonds with China. Exception to this pattern are the Akha villages in Xieng Kheeng cluster, still excluded from sugar cane cultivation due to the very poor condition of the road

linking Muang Sing town to this area bordering with the Mekong. In Long, all villages involved in sugar cane farming with MPSMC are located along Route 17. The majority of them are ethnically Akha and the minority are Tai Lue.

Figure 6-2 Volume of Sugar Cane Produced under Contract Farming with Meng Peng Sugar Manufacturing in Long and Sing



Source: Long DAFO, Sing Office of Trade and Commerce

6.3 Contractual arrangements

6.3.1 District Level Contract

While there is not trace of a written accord between the company and the provincial authorities, as mentioned above there is evidence that the MPSMC entering the Lao sugar cane production scene was marked by an official agreement with the Muang Sing district government. The field research has brought to light a written contract referring to an "economic and technical cooperation to promote sugar cane" signed on 29/08/2002 between Sing DAFO and the Meng Peng Sugar Manufacturing Company. The last contract signed in 2006 was not disclosed by the government agencies. The document sets the terms of sale and purchase and includes rights and duties of all stakeholders, namely the company, DAFO officials and the farmers. The reference of all three parties in one document seems to indicate that this agreement has validity both as a district level and village level contract. However, the farmers' signature does not appear on the document, a fact that suggests that the contract was drawn without direct consultation with or the involvement of the farmers. For the year 2003, the company agrees to buy the total amount of 33,000 tons of sugar cane

from the Lao farmers, of which 30,000 tons will be sent to China for sugar refining and the remaining will be used as seedlings for further production in Laos.

What are the arrangements of the contract?

- *Land* and *labor*: contributed by the villagers (no land rental involved. Farmers grow the crop on their own land)

- *Technical extension*: supported by the company and DAFO technicians.

- *Market access*: provided by the company. The company guarantees to purchase the crop from the farmers at a fixed price according to the volume sold (see below for price range).

- *Transportation costs* (for delivering the harvest from the village to the factory in China) paid by the company (30 yuan/ton in 2003, 35 yuan/ton in 2008). The farmers have the responsibility to make the road accessible to the company's trucks. The company is exempted from being accountable for delays in collection because of road inaccessibility. However, if the company fails to collect the harvest on the set date it is accountable for paying a 10% fee on top of the due amount of sugarcane.

- *Weighing*: the weighing of sugarcane must be supervised by an official of the District Commerce Office.

- *Payment*: there are two clauses that define the payment to the farmers:
  1) If the company has sufficient financial means, it should pay the farmers at the time of collecting the crop.
  2) If the company does not have sufficient funds, it is allowed to pay the farmers within 30 to 60 days since the crop collection. If the company does not pay the due amount within the due time, it is subjected to pay the sum charged of an interest rate set by the Lao Commercial Bank.

Further conditions included in the contract are:

- Sugarcane sold must meet the quality standards set by the company (stems clear of roots, barks, etc). If these quality standards are not met, the company has the right to deduct the weight accordingly from the harvest.

- The growers must harvest their crop and prepare it for loading it on the trucks only on the date set by the company. If the farmers anticipate the harvesting of the crop or harvest more than the amount required, the company is entitled to deduct 10% of the total weight.

From the above terms, it can be deduced that there is a certain ambiguity as to the way the company is allowed to manage the transportation and payment of the harvest. The company exempts itself from being accountable for road inaccessibility, but in a region with very inefficient road infrastructure it is not always easy to reach villages located in more remote areas. Often the farmers have no means to improve the road access to their village, nor can they have control upon the inaccessibility in case of rain. The contract does not protect the farmers in this respect, but rather, it seems to utterly serve the company's interests. Likewise, according to the contract, the company can delay the payment by 30-60 days in case it lacks financial means. The contract denies the farmers the right to receive the payment at the time of collection or to claim it at their will (provided that they have sold the harvest). Furthermore, the contract does not set any measures to protect the farmers in case the company buys only part of the harvest.

6.3.2 Village Level Agreements

From the field research it has emerged that at the village level, MPSMC has not produced written contracts bearing details concerning the terms of production including: extension technical advice, rights and duties of the company and of the farmers, conditions of inputs supply, price of purchase/1 ton, terms of collection of harvest (weighing, transportation). Rather all these terms are communicated to the farmers verbally by the company's employees with the assistance of DAFO at the promotion meetings with each village community. Not having a written contract specifying in detail the terms of production and sale prevents the farmers from understanding the exact conditions under which they and the company should operate. It also denies them to appeal to a legally valid document in case problems arise. None of the villages surveyed had seen the district level contract mentioned above. Rather, their joining the sugarcane production with MPSM was marked by the signing of what can be conventionally termed as "simplified written commitment contracts" (see picture). These are paper sheets bearing the name of the village, the name of the household representative, and the details about all inputs (seedlings, fertilizers, pesticides, tractor), with the corresponding amount, provided by the company to each producing unit. Such documents are signed and finger-printed by each individual household and considered by both the company and the farmers as a binding document. In some other cases, the farmers used the term "contract' (Lao: segnna) to refer to informally written scrap paper sheets where the company recorded details of the inputs' advance. No coercion cases were found in any of the villages, as farmers joined in the production at their will. "Simplified written commitment contracts" are normally kept by the village headman or by the production group leaders.

<u>Summary of typology of village level agreements:</u>

- simplified written commitment contracts
- Receipts of inputs' advance by the company

The time limit of these agreements remains uncertain as it is not specified in any of the papers viewed. The farmers claimed that the contract duration depends on the productivity of each variety planted (some seedlings can provide yields up to 2-4 years)

The terms of production, sale and purchase, as verbally transmitted by the company, include:

- *capital and inputs*: seedlings, fertilizers, pesticides, tractor rental for ploughing, are provided by the company on credit. Subsequently, the expenses for inputs are deducted from the payment of the harvest sold to the company.

- After harvesting, villagers obtain profit according to the volume sold once inputs capital is deducted by the company (normally the credit is paid back entirely on the first year, sometimes on the second year, depending on the farmers' preference). The prices set by the company are communicated verbally to the growers, a fact that, as it will be emphasized later, has impact on the farmers' misinterpreting the company's payment policies. The prices at which the company purchased sugarcane from the farmers varied according to the three varieties planted, some being paid more than others. As shown in Table 6.2, since 2000 the price of each variety planted increased slightly over the years. In 2008, the rates were 150, 160, and 170 *yuan*/ton respectively for the low range (black), the mid-range (green) and high range (white) variety[11]. These are the net prices paid to the farmers having subtracted transportation costs (35 *yuan*/ton), export tariff, and various other taxes to the Lao government agencies.

Table 6-2 Farm Gate Prices of Sugarcane Paid to the Meng Peng Sugar Manufacturing Co (2002-2008) (yuan/ton)

2002	2003	2004	2005	2006	2007	2008
130-140-150	130-140-150	130-140-150	130-140-150	150-160-170	150-160-170	150-160-170

Source: Sing DAFO and Office of Commerce, company's records, farmers.

Other conditions reported by the farmers are the same as those referred to in the district level contract.

[11] According to what the farmers reported, the white variety yields long, small-diameter and juicy canes and can be harvested for 5 years; the black (or red) variety yields long and mid-width canes and can be harvested for no longer than 4-5 years; the green variety, the most widespread in Muang Sing, is a high yield type characterized by very long and wide diameter canes. It can be harvested only for 3 years. For its superior qualities produce of white variety is paid for a high price by the company.

6.4 From Agreement to Implementation

How are the district and village level contracts implemented? Is there any discrepancy between the agreements and their implementation? The following section will answer these questions by looking at the entire process from production to sale as well as reporting the farmers' voices on their sugar cane experience.

6.4.1 Producing for the Company

How is the production for the company managed?

-The households join in the farming contract on an individual basis and by using individually owned land. In Sing and Long farmers grow the crop on low-slope land, normally located in between rice paddy fields and rubber plantations.

-The villagers receive extension technical advice by the company agents and DAFO technicians. The company organizes the households into production groups (Lao: *kum*) (10-15 hh per group) and nominates a group leader (Lao: *huana kum*) that receives compensation by the company or a percentage on the volume sold. In Ban Oila, an ethnic Akha village in Sing, the *huana kum* earned 10 *yuan*/ton on the farmers' harvest plus a 5,000 *yuan* yearly salary paid by the company. In Ban Mom, the only Tai Lue village in Mom cluster, the group leader did not receive any extra salary.

-The group leader acts as mediator between the company and the villagers. He is responsible for monitoring the production of the crop (planting and cutting time), checking quality standard, informing the farmers of the time of collection by the company, supervising the weighing, guaranteeing transparency of payment, and delivering the money to the farmers.

-The *kum* or production groups work on a rotation system based on a mutual help principle, whereby each household takes turns to harvest their crop assisted by all group members in cutting, transporting the crop from the fields to the point of collection by the road, and loading it onto the truck. Each household harvests a small part of their crop at the time. In one village surveyed seven households contributed 100 bundles (one bundle containing 10-12 canes) each to meet the 700 bundles needed to fill the truck. In other cases, the truck was filled with the harvest of one or two households. The rotating mechanism is repeated several times until the harvest of all families is entirely completed. The collection schedule is set by the *huana kum* in accordance with the indications provided by the company regarding the volume to be purchased. Despite their will to maximise the quantity of produce to sell, the farmers tend to respect the quota prescribed by the company. The harvest is collected by the company over a four-

month period (January-April), during which up to 50 trucks a day e cross the border into China with sugarcane.

6.4.2 Selling to the Company

-At the time of collection, the farmers load the harvest on the trucks provided by the company. Each truck is first weighed empty at the company's weighing station located at the outskirts of Muang Sing town. The vehicle's weight is recorded by the company's employees but is normally not communicated to the farmers. The latter make approximate calculations on the amount they sell considering that a truck has a 10-12 tons capacity for sugar cane. However, there is no doubt that this method cannot provide the accurate estimate of the weight, a fact that often accounts for unfair remuneration by the company. Once loaded, the produce is weighed at the company's station. The scale is connected to an electronic display on which is visible the amount. The *huana kum* are supposed to monitor the produce weighing and the transparency of payment. However, this rule is not always implemented. Often the group leaders simply rely on the company's calculation. Farmers that dare to follow their harvest at the weighing station are not explained how to read the weight on the display, or are often denied access to the display all together. The inability to check the weight is even more significant for the villages in Mom cluster, where due to poor road connection the produce is transported via the Mom-Mengrun border crossing and weighed directly at the factory in Mengpeng. In this case neither the *huana* nor the farmers have access to the weighing process.

-Once the weighing is completed, the farmers are provided with a receipt that specifies details of the volume sold and the corresponding payment. At the time of payment, the receipts are returned to the company, while the farmers' revenues and the volume sold a recorded on a green booklet, a document distributed to individual households by the company. The records on the "green booklets" are supposed to have legal validity which the growers could in theory appeal to in case problems arise. However, the farmers do not seem to be aware of the legal utilization of this tool. The company deducts the sum advanced for the inputs from the payment. Normally, the debt on the input advance is paid back within one or two years since planting the seedlings by the farmers.

6.4.3 The Farmers' Voice

What is the growers' perception of sugarcane planting under contract with MPSMC? As a whole, the farmers were quite satisfied with the returns made on the sale of the crop, these varying according to the varieties planted and the stage in the contract, beginners earning less than growers on the second or third year of production. Aeu (pseudonym), a Akha farmer from Ban Namhu in Sing's Thongmai cluster claimed to have earned a reasonable amount from selling his harvest. He planted sugarcane on 800 acres. In 2006, he was able to produce 48 tons from which he received about 7,680 *yuan* (=9,398,016 *kip*). In 2007, from

the same land and the same seedlings he harvested 72 tons, earning him 11,520 *yuan* (=14,097,024 *kip*). Despite the high labour input involved, farmers regard sugarcane cultivating a relatively good source of income. For this reason, when comparing cassava with sugarcane the farmers' preferences in most villages in Sing fell on the latter.

Nevertheless, growers were not spared frustration from the business. From the following discussion it will emerge that there is some divergence between verbal/written agreements and their implementation. This section summarizes the main problems encountered by the producers.

-Farmers feel excluded from the decision making process and unable to negotiate with the company the transparency of weighing and adequate payment.

-Farmers are not explained how the weighing system works at the weighing station. Many of those that follow their harvest to the station are unable to or denied to read the scale. Some denounced to have been mistreated by the company's employees. Others lamented that their incapability to monitor the weighing of their harvest results in the company underpaying the growers.

-Farmers do not always have a clear understanding of the arrangements of the contract, particularly the terms about credit on inputs and its deduction from the payment. Some villagers were surprised that the payment received did not correspond to what they had been informed of by the company as they had mixed up the gross and net income. It can be deduced that there is a lack of transparency in the way information is transmitted from the company to the farmers.

-Prices of payment are communicated verbally to the farmers so that the latter cannot appeal to any legally written document if problems arise. This reflects the broader characterization of contract farming in north-western Laos whereby farmers' rights and revenues are mediated by DAFO officials and therefore by the Lao state.

-Farmers find the payment inadequate for the labour input involved in cultivating, cutting and loading the crop. However it is hard to test the adequacy of payment, as on the Chinese side of the border farmers have stopped producing for the company

-There have been repeated delays in the harvest collection (due to road inaccessibility or company's negligence in organizing transportation): this result in a loss of weight of the crop and subsequent reduction of income for the farmers.

-The *kum* system managed by the *huana* replicates the pre-existing unequal socio-economic relations within the village communities: *Hua naa kum* often act in his own or/and the company's interest rather than in the farmers' interest.

-Similarly, DAFO employees supposed to act in the farmers' interest often act in their own and the company's interest:

Case 6-1 Ban Lomeu: Sugarcane and Community Disconnection

Ban Lomeu is an ethnic Akha village located in Sing's Mom cluster bordering with China inhabited by 85 households. Villagers' livelihood is based on a mixed system of wet and swidden rice farming, the cultivation and sale of vegetables and cash crops such as corn and watermelon. Non-timber forest products sold at the Chinese market in Meng Run are also an important source of income for the farmers. Lomeu was one of the first villages in Sing to grow rubber in the 1990s and has been expanded its rubber planting since 2004 relying on Chinese driven investments as well as farmers' own funds. Since the late 1990s a minority of households became involved in sugarcane production with MPSMC. By 2004, as many as 46 households had joined the contract and ever since the number has remained constantly high. Such conspicuous adhering to the business was not only affected by the geographical vicinity to China, but also to the persuasive power of their charismatic village headman. It was under the leader's suggestion that the community refused to join the cassava farming contract with the Lao-Yunnan Power Biological and remained loyal to MPSMC. And yet, the case of Lomeu tells us more about how contract farming with Chinese companies could be conducive to reinforcing unequal distribution of wealth and power within a village community than of an idyllic equal enrichment of all its members. Strongly socially connected to the Chinese company, the leader has been nominated as *huana* of the sugarcane production in his own village, as well as supervisor of the business for the whole Mom cluster. Such privileged position has earned the chief economic improvement and social mobility, an achievement that was not extended to the majority of his village community. Lomeu residents claimed that the headman's role was more directed to cultivate his personal advancement than to representing and defending their interest. In dealing with the company the farmers felt they were on their own. Even some other politically eminent figures in the community denounced that the village headman had not been transparent in explaining the terms of the contract to the farmers. Farmers expected that their payment on the harvest sold to the company be higher than what they received when comparing it to what they had been initially explained. One of them, in 2007 threw away the "green booklet" in a moment of anger after realizing that the company had deducted from his income a sum for the inputs higher than what anticipated. On the day the village was surveyed in January 2008 for this study, some villagers had harvested their sugarcane but the company had not arranged for the trucks to collect it. Only one day delay in selling the produce meant for the farmers a lower income due to the crop' loss of weight. In none of these circumstances the villagers' interests were advocated by the village headman. The case of Lomeu reveals the socially disconnecting effect of contract farming in some Akha village communities.

Case 6-2 Ban So: An alternative Sugarcane Business

Ban So is an ethnic Tai Lue village in Xiengjai at the outskirts of Muang Sing town. Located on the fertile Sing plain, Ban So is quite a well-off community made up of 36 households. Its residents became involved in sugarcane planting with the Mengpeng Sugar Manufacturing in mid 1995. As the farmers found alternative sources of income such as watermelon planting and trade with China in various produces, they dropped the production for the company. At the same time many women in the village perpetuated the tradition of producing raw sugar blocs to be sold in the area. Sugar blocs were produced in a rustic sugarcane manufacturing workshop where sugarcane juice was cooked in clay stoves, after being squeezed with a press operated with buffalos. Drawing on such tradition, in 2004 two male entrepreneurs, one from the nearby Ban Nonkham and one from Ban So decided to start a business by mechanizing the squeezing process with more advanced technology and expanding the cooking workshop to a dozen of stoves. They bought three disused sugarcane pressing machines, each for 5,000 yuan, from some Tai Lue *phinong* in Mengla that had engaged in raw sugar production before embracing rubber planting. Ever since, in coincidence with the sugarcane harvest between January and April, fifteen households in the village have been producing raw sugar blocs. Sugarcane is bought from Akha, Hmong and Tai Lue growers in Sing, some being unsold crop to the Mengpeng factory. The price for sugarcane from the farmers ranges between 120,000 and 150,000 kip/1 ton depending on whether transportation is included or not. The women pay a fee for utilizing the squeezing machine and the cooking workshop to the entrepreneurs. Every year, each household squeezes about 40 tons of sugarcane, producing about 90-95 kg of sugar blocs. Raw sugar blocs are sold for 3,000-5,000 kip/kilo at the market in Sing by the Ban So female producers. However, many blocs are sold to China through informal trade and as far as Luang Namtha and Luang Prabang. Yi Kham, one of the women interviewed in the village, said that her net income is about 100,000 kip/ton on the sugarcane purchase, a quite low amount if considered the large labour input involved in the production of sugar blocks. Nevertheless, as raw sugar demand has increased in China, this rudimentary production could be expanded to other villages in the area and linked to the market on the other side of the border.

6.4.4 The Company's Voice

Complaints also came from the company that claimed the following shortcomings in the business:

-The quality of the crop produced by the farmers is not adequate to the standards set by the sugar refining plant.

-farmers lack technical skills on planting and often mismanage the plantation, resulting in low productivity

-farmers do not always comply with the contract terms

6.5 The Sugarcane Market Chain

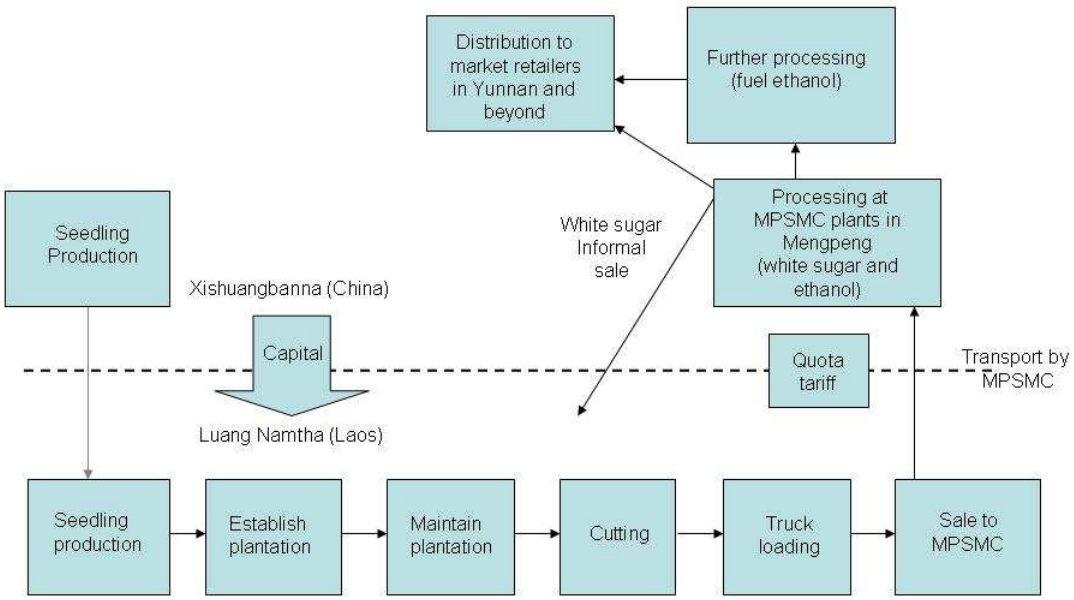
As for cassava, the research conducted for this study could not follow the sugarcane market chain on the Chinese side of the border. The following section attempts to reconstruct the chain drawing on information collected in Laos through line agencies and the farmers' accounts. As mentioned earlier, MPSM introduced three hybrid varieties of sugarcane (white, black and green) to Laos. The white and red varieties were used earlier than the green. The latter was only brought in recently. After importing them from China at the beginning of the production, since the early 2000s the company started to breed seedlings in Laos in villages with particularly fertile soil. The company buys the seedlings from the Lao producers and then supplies them on credit to the farmers for standard sugarcane cultivation. Conspicuous quantities of pesticides and fertilizers, imported from China are utilized to grow all varieties.

As for cassava, the only step in the sugarcane market chain occurring in Laos is planting and relies on labour provided entirely by Lao farmers; any other step involving processing is done in China (Figure 6.3). Once harvested by the farmers, sugarcane is normally exported on the same day to China where it is immediately pressed at the Mengpeng plant. The exact export tariff paid at both the Lao and the Chinese check-points was not revealed either by the company's agents or by the Lao officials. However, it can be assumed that sugarcane is treated as low-tax crop because of its inclusion into the Opium Replacement Program. The firm's agents mentioned that the company is subjected to paying 5 *yuan* for the vehicle toll and 3 *yuan* for road tolls at the Lao check-point. The 2002 contract establishes that the farmers are responsible for paying export tariff on the Lao side of the border, while the company is subject to tax payment on the Chinese. The company deducts the farmers' tariff share from the payment of the produce.

Manufacturing in the Mengpeng plant results in the production of white sugar and low purity ethanol (80%). It remains uncertain as to whether the Mengpeng plant has started producing fuel-ethanol. White sugar manufactured in the factory is subsequently distributed to retailers in Mengla as well as exported to other centres in Yunnan and other provinces of China. The company's agents hinted that some portions of white sugar derived from Lao-grown sugarcane reaches even the European markets. It is an irony that only a very small quantity of white sugar produced in Mengpeng makes it to the markets in Muang Sing and Namtha and sold for 8,000 kip/kilo. Sugar found on sale at retail shops in Laos is mainly smuggled from across the border. It is likely that such smuggling is linked to the Lao and Chinese state protectionist trading policies. In fact, sugar is classified as "highly sensitive" in the import-export list of products traded among the ASEAN countries and China. Such list includes products subject to high import tax rates. An Economic Cooperation and Free Trade Agreement between ASEAN countries and China signed in 2005 resolved that the tax rate on "highly sensitive products" be gradually reduced to 50% by 2015. If both China and Laos will respect the

terms of the agreement, it is possible that some white sugar will be exported from Laos to China through formal channels over the next few years. The largest portion of white sugar sold at the Sing market is imported from Thailand via Xiengkok. The price at retail is 6-7,000 kip/kilo.

Figure 6-3 Sugarcane Cross-Border Market Chain



Ch. 7 Corn

7.1 The Corn Landscape in North-Western Laos

In north-western Laos farmers have engaged in corn farming for a long time, mainly growing sweet varieties for human consumption and hard varieties for animal feed. Nowadays, sweet corn is cultivated primarily for family consumption, although some surplus is also sold at local markets. On the contrary, the production of feed corn has since the early 2000s been expanded to the Greater Mekong Sub-region market and particularly to China[12].

Northern Laos' largest producer and exporter of corn is Oudomxay, followed by Bokeo, Phongsaly, Sanyabury, and Namtha. In Oudomxay, the total area devoted to corn production was as large as 15,000 ha in 2005. Corn volume in this province increased enormously since 2003, amounting to more than 73,000 tons in 2005, compared to the 45,781 tons in 2004 (Case study on Production and Market Conditions for Corn in Namo district 2006: 7).

In Sing the production of corn underwent a boom in 2003-2005 following a commercial promotion by local authorities supported by GTZ through the free supply of Chinese imported seedlings. The boom was also driven by a temporary relaxation in import-export guidelines between China and Laos. Over that period, farmers grew the crop without signing contracts with business partners.

Up until 2005, in Sing, corn was injected into the Chinese market mainly through informal channels. Informal trade occurred between local middlemen of Tai Lue and Tai Neua ethnicity from Ban Dongchai, Ban Xienjai, Ban Nakham, Ban Namkheao Luang, and Ban Tinthat and Chinese Han and Tai Lue traders from Mengman via the Pantong border crossing. Cross-border ethnic networks played a fundamental role in the functioning of such business interactions between China and Laos. Lao-grown corn was considered as a local border trade commodity subject to preferential tax treatment (Yayoi 2006:10-11). However, as the volume of trade increased enormously between 2003 and 2005, the Chinese government imposed an import quota on corn coming from Laos. The new regulation restricted Laos' corn export to China to 20,000 tons, which was raised to 40,000 tons in 2006 (Yayoi 2006:10-11). This directive, influenced by China's access to the World Trade Organization, had a threefold purpose: to protect China's local producers, whose returns were affected by more competitive and cheaper Lao corn; to limit the imports to low moisture and good quality corn (to avoid the spread of epidemics between countries); to guarantee the Chinese government a tighter control on the flow of resources from its neighboring country and better monitoring tariff payment.

[12] Given the marginal role of sweet corn on the regional market, this chapter will focus on the production and marketing of feed corn. A further reason for privileging the latter over the former is that feed corn is the variety that found most commercialization through contract farming with foreign companies or local traders.

China's central government granted the import quota license to the Jingu Border Trade Cooperation Company Ltd (hereafter JBTCCL), located at the Pangthong-Chahe regional border. The latter was in 2006 among the 10 companies that received the Chinese government's support for business activities within the framework of poppy replacement (Yayoi 2006:14). From October 2005 on, the company had the monopoly on most corn imports from Laos, although a minor part of corn was being imported through informal trade outside the quota system. The JBTCCL established a drying plant near the quarantine station at the border in Mengman where all corn (and rice) arriving from Laos was and is still dried and subject to pesticide adding before being distributed across Yunnan. Pangthong-Chahe was the only among the regional border crossings to remain open to corn and rice imports and where the only quarantine post was activated. The new quota system was also accompanied by changes in tax policy[13].

In 2006, the Lao company Tungly, run by a former Hmong Namtha governor, had special rights from the Lao government to collect corn and other crops in Laos and export them to China. It seems that Tungly operated in cooperation with Jingu. In 2008, Tungly did not have such prerogative anymore, although it still plays an important role in import-export activities between China and Laos.

Low prices along with low moisture standards set by the firms have discouraged Sing farmers from pursuing corn planting beyond household's consumption needs. Most farmers interviewed in Sing had abandoned corn to sugar cane or other crops since 2006 despite the increase in price of the former on the Chinese national market. Likewise, local traders were feeling disempowered before the new regulations. They claimed that the quota system had excluded petty entrepreneurs from profitable cross-border trade while reinforcing the financial status of large corporations and of Lao government officials supporting them.

In Long district corn production followed a similar pattern as in Sing, increasing in 2004-2005 and shrinking since the quota system was introduced (Figure 7.1). Only a few Akha, Hmong and Tai Lue farmers pursued corn planting selling their harvest to middlemen from Xiengkok, Oudomxay and Sing up until 2008. The traders provided growers with seedlings and committed to buy the harvest at a certain price. However, the lack of written contracts allowed the traders to reduce the price at the time of collection, at the expenses of the producers. As a general rule, traders operating in Long took advantage of the remoteness of the region, as well as of the farmers' inexperience and need of cash to keep prices lower than in Sing or Oudomxay. In 2005, low moisture corn was purchased in Sing between 1,000,000 and 1,400,000 kip per ton, while in Long the prices offered were as low as 500,000 kip/ton. In 2007 the French NGO Action Contre la Faim (ACF) devised a system to avoid unfair pricing by the middlemen. In Ban Senkhankham Mai, located on the rugged mountains along the Mekong in Xiengkok, ACF acted as commercial mediator between producers and buyers. It provided the farmers with seedlings for free and sought buyers, while assuring

[13] For details on the new tax policies related to the quota system, see Yayoi 2006

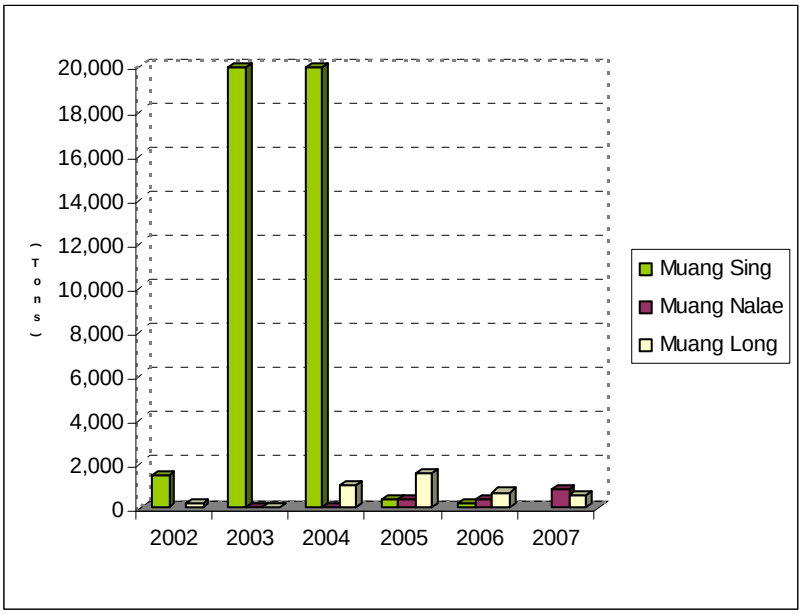
that the sale occurred at the fair price of 1,000,000 kip/ton for the producers. The experiment seemed to have had positive outcomes not only in this village, but also in other communities in the same area. Some local residents reported that a small quantity of corn was also being grown in Long under contract with a company from Bokeo and a small trader from Xiengkok.

Table 7-1 Corn Farm Gate Prices from to Lao-Chinese Traders in Long and Sing (kip-yuan/ton)

	2001	2004	2007	2005	2006	2007	2008
Low moisture content	1,000 yuan	800 yuan (1,000,000 kip)	700,000 kip	500,000 1,000,000-1,300,000-1,400,000 kip	800,000-900,000 kip	1,000,000-1,200,0000-1,300,000 kip	1,300,000 kip
High moisture content				200,000 kip			

Source: Farmers and traders from Sing and Long

Figure 7-1 Volume of Corn in Muang Sing, Muang Nalae, Muang Long



Source: Long, Sing, Nalae DAFEO

In Nalae the corn situation was somewhat different. In 2000, the US-owned company Friend of Upland Farmer (hereafter FUF) obtained permission by the Namtha government to promote corn production in the province's Vieng Phuhkha, Nalae and Namtha districts under contract. The company started to operate in the region with the idea of profitably linking the farmers to the Chinese and Thai markets. A plan was drawn to identify an array of crops that could cover the one-year agricultural cycle. Apart from corn, FUF initiated the extension of other crops such as soybean (see chapter), cardamom, sesame, indigo and other natural dyeing plants. In Nalae, from 5 in 2003, the villages involved in corn

farming with the company raised to as many as 23 in 2005, while the number of households increased from 44 in 2003 to 370 in 2006 (see Table 7.2).

The increase in volume produced and the area used for corn cultivation under contract with FUF was directly proportional to the rise in the number of families (Figure 7.3 and Figure 7.2). The small amount of 9 tons collected in 2003 increased to 414 tons and 370 tons respectively in 2005 and 2006. However, the increasingly profitable business for both the company and the farmers was jeopardized by the decision of the Namtha provincial government to withdraw from FUF the permission to operate in Laos starting from early 2008. The reasons for such resolution, like many other issues revolving around the relationship between companies and the Lao government, remain unclear. However, there is a strong basis to assume that the dismissing of FUF is linked to the arrival of Jiachuang Rubber Promotion Company Ltd. to Nalae. Jiachuang is a privately Chinese-owned company from Mengman with strong bonds with the Chinese Xishuangbanna government. Operating within the government's poppy replacement scheme, the Jiachuang is the only company to which the Lao authorities granted the permission to carry out rubber planting under contract in Nalae district starting from 2005. The ambitions of Jiachuang went as far as to include corn cultivation in their business in 2007. It is likely that pressured by Jiachuang's enticing profit-making proposals, Lao officials conceded to the latter the monopoly on corn production and trade, while discharging the competitor FUF from the corn scene from 2008 on.

FUF and Jiachuang operated alongside each other in 2007. In that year, Jiachuang surpassed FUF not only in absorbing a larger number of households but also in producing a higher quantity of corn (see Table 7.2 and Figure 7.3). The farmers that joined the contracts with the two companies were residents of ethnically Khmu, and Lue villages located along the road to Luang Namtha.

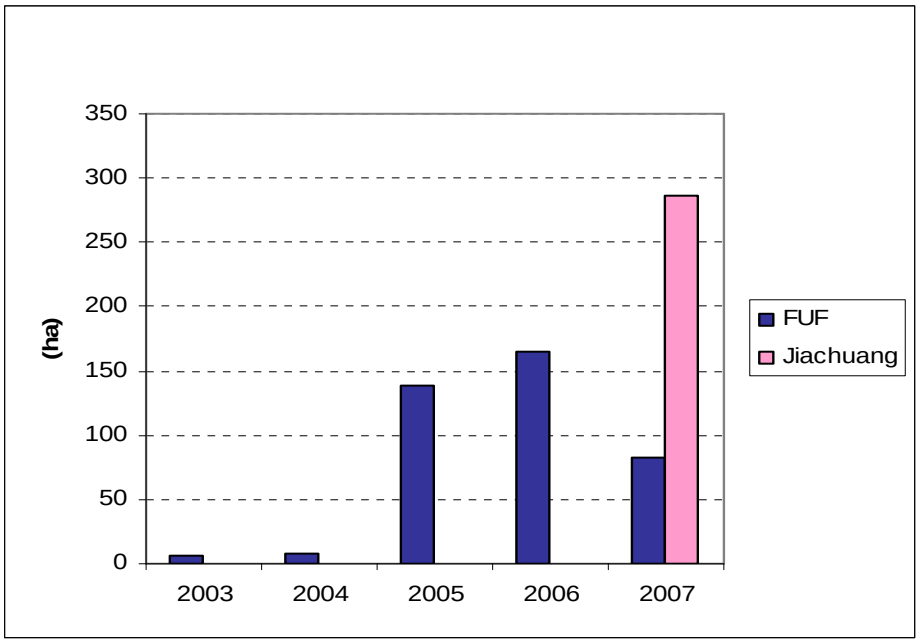
Table 7-2 Number of Households and Villages Involved in Corn Contract Farming with FUF and Jiachuang

	2003	2004	2005	2006	2007
FUF	5 villages 44 HH	6 villages 25 HH	23 villages 262 HH	19 villages 370 HH	8 villages 149 HH
JIACHUANG					24 villages 620 HH

Source: Nalae DAFO

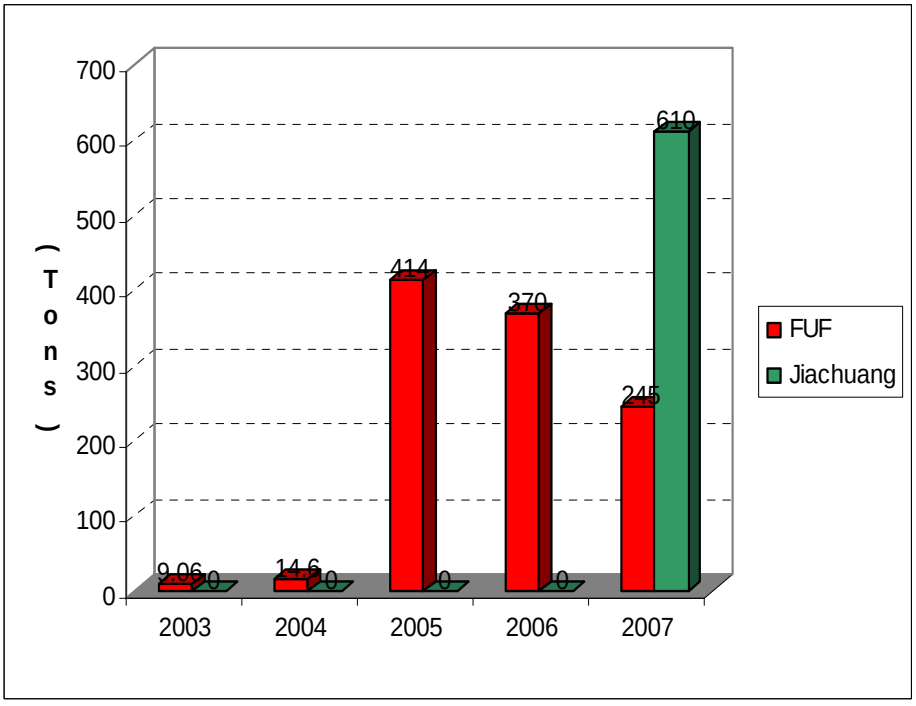
The research unveiled that Nalae DAFO officials carried out a very strong persuasion campaign to convert the farmers from FUF to Jiachuang. Among the arguments used to convince the farmers to make such a shift was that by combining corn production in a package with rubber and some infrastructure development services Jiachuang would offer the farmers higher returns and better prospects for the future.

Figure 7-2 Comparison of Area Planted with Corn Under Contract with Friend of Upland Farmer and Jiachuang



Source: DAFEO Nalae

Figure 7-3 Comparison of Corn Volume Under Contract Farming with Friend of Upland Farmer and Jiachuang



Source: DAFEO Nalae

7.2 Contractual Arrangements

7.2.1 A Comparison between Friend of Upland Farmers and Jiachuang

While it was not possible to view contracts signed between the provincial, district authorities and the companies, the research brought to light village level contracts. It was found that FUF signed detailed written agreements with each village or each group involved in the production. Contracts were signed twice a year, once for the wet season and one for the dry season. Only one written agreement signed by Jiachuang was detected in Ban Phavii. In any other village, farmers had entered in corn business with Jiachuang through a verbal agreement. In this case, DAFO officials, some of whom received stipends from Jiachuang, had to guarantee that the terms of the agreements were respected by both parties. At least on the paper, FUF and Jiachuang contractual arrangements are in most respects similar, the main differences laying in prices, moisture content, and farmers' compensation for truck loading. Another aspect differentiates the two companies' modus operandi: FUF's policy was to encourage the farmers to improve the quality of their produce by reducing the moisture level. Such strategy aimed at meeting international market standards. On the contrary, Jiachuang, although expecting the farmers to dry the crop thoroughly, like many Lao and Chinese corn traders, set more emphasis on quantity rather than quality deriving from low moisture level. FUF contracts set more precisely defined conditions, aimed at more transparent business relations between parties. Jiachuang's contracts on the paper set more flexible and less well definite conditions than those proposed by FUF. It is such flexibility that leads to manipulation by all parties when the contracts are implemented.

The following section outlines the differences and similarities in the two companies' contracts:

- *land* and *labor*: contributed by the villagers in both FUF and Jiachuang agreements

- *Inputs*: FUF provided seeds on credit for 17,000 kip/kilo. The seedling costs are deducted from the payment on the harvest. FUF commits to pay back only 50% on the seedling cost in case of drought or flood.

  Jiachuang provides seeds on or off credit for 17,000-18,000 kip/kilo. In the first case the costs are deducted from the payment at the time the company purchases the crop. If the farmers pay for the seedlings, their harvest is paid a higher price than in the previous case (see Table 7. 3). The company provides pesticides free of charge if there is a disease outbreak. Jiachuang commits not to claim the seedling cost in case of natural disasters (drought, flood), provided that the disaster occurrence is verified by all parties.

- *Technical extension*: both provided by FUF and Jiachuang with the assistance of DAFO officials.

- *Market access*: provided by the company for both FUF and Jiachuang. The company guarantees to purchase the crop from the farmers at a fixed price according to the volume sold (see Table 7.3 and Table 7.4). Prices at which the produce was purchased in 2007 by each of the two companies differed. FUF based the price difference on the crop's moisture content, paying more for lower moisture corn and less for higher level moisture in the rainy season. For the dry season the company adopted only one price. FUF shows some flexibility in considering to pay an advance of 30% on the harvest if the production groups require so. The condition for this is that the crop should be harvested first and kept in the granaries. Jiachuang's prices do not take into account moisture level, but the difference in price depends on the seedlings' advance. If the farmers pay for seedling cost the price is lower; if the company pays for the seedlings costs, the price is higher. The same price policy applied to both rainy and dry season.

Table 7-3 Comparison of Corn Farm Gate Prices at sale to FUF and Jiachuang in 2007 (wet season)

	Moisture (%)	Weight/moisture ratio in 1,000 kilo	Price (kip/kilo)
FUF	14.5	0.00	1,000
	14.6-16.0	22.00	978
	16.1-18.0	76.50	923
	18.1-20.0	133.75	866
	20.1-22.0	185.75	814
	22.1-24.0	232.00	767
	24.1-29.0	279.00	721
JIACHUANG	Not applied		950
	Not applied		800

Table 7-4 Corn Framgate Prices at Sale to FUF in 2006-2007 (dry season)

FUF	2006	2007
	1,000	1,000
JIACHUANG*		Not applicable
		Not applicable

*Jiachuang operated in 2007 only in the wet season

- *Transportation costs*: are paid by the company (already deducted in the price of purchase) for both FUF and Jiachuang. Farmers must take their harvest to a site along the road reachable by the company's vehicle. While FUF has a fairer policy on truck loading by compensating the farmers 10,000 kip/ton; Jiachuang expects that the farmers load their harvest on the trucks without compensation.

- *Weighing* is done by both companies in the villages at the time of collection. FUF preceded weighing by a moisture check-up and calculated the price of purchase accordingly.

Other terms included in the contracts are:

-Both FUF and Jiachuang commit to distribute seedlings and buy the harvest on a set date as specified in the contract.

-In both FUF and Jiachuang contracts, farmers commit to sell their product to the company at the price agreed upon and not to sell it to other buyers. In case the harvest is not sold to the company, both companies reserve themselves the right to fine the farmers as much as the double value of the seedlings received.

-Both FUF and Jiachuang exempt themselves from bearing any responsibility if the crop is eaten by animals. Farmers are accountable for looking after the plantation and the harvest in the granaries. If losses occur, the farmers must pay the seedlings cost to the company.

-FUF concedes that the company reduces the cost of seedlings in case of crop loss due to pest or animals.

7.3 From agreement to implementation

7.3.1 Producing for the Company

How are production and sale to the companies managed in reality? How do these practices differ between FUF and Jiachuang?

-The farmers plant corn for both companies in the dry and wet season, harvesting respectively in February and September[14].

-Households join in the farming contract on an individual basis and by using individually owned land. In some cases contracts are signed by the production groups. The majority of villagers surveyed in Nalae claimed to have sufficient

[14] The corn planting cycle for the rainy season goes from April- May until August-September, while for the dry season goes from November to January-February.

land for planting corn. Since 2007, Jiachuang has encouraged growers to intercrop corn with rubber saplings for 2-3 years to utilize slope land. However, some corn was also still being grown in plots not occupied with rubber.

-The villagers receive extension technical advice by the companies' agents and DAFO technicians. The company organizes the households into production groups (Lao: *kum*) (10-15 hh per group) and nominates a group leader (Lao: *huana kum*) that receives compensation by the company on the volume sold. FUF compensated the *huana kum* 10,000 *kip*/ton on the farmers' harvest. The responsibilities of the group leader and the *kum*' s functioning are similar to those described for sugarcane in Ch 6.

-The harvest is organized by the group leader. After picking, the farmers shell the corncobs by using equipment provided by the companies. Both FUF and Jiachuang encouraged the growers to build bamboo granaries with good ventilation system to allow more efficient drying. Yet, such practice was in many cases avoided by the farmers who preferred to sun-dry the crop and sell it before it was attacked by pests.

7.3.2 Selling to the Company

-At the time of collection, both FUF and Jiachuang weigh the crop in the village so that also the farmers have access to the weighing process. While avoided by Jiachuang, FUF measures moisture content and calculated the price accordingly. The farmers load the harvest on the trucks provided by the companies, receiving payment by FUF and without compensation by Jiachuang. Farmers did not report any irregularity in the weighing procedures. FUF provided the growers with receipts on the volume sold, a practice that Jiachuang has so far avoided. The crop is delivered to the companies' warehouses where it is subject to further drying, or directly sold to the traders. FUF often paid the harvest in advance encouraging the farmers to deposit the money in the village banks.

7.3.3 The Farmers' Voice

In Nalae, farmers involved in contract farming with the two companies experienced a few problems. Overall, poor road network, remoteness of many villages together with high poverty rate locks Nalae residents in a dependency on contracting with foreign firms more prominently than the residents of Sing and Long. Producing and selling for the companies is seen as the only secure way to reach the market, although this, at times, occurs under unfair conditions for the farmers.

Some positive outcomes have certainly emerged out of contracting. Many farmers admitted that since they had entered in business with FUF and Jiachuang their income had increased compared to the past. The average harvest in the wet season for the farmers was 300 kilo of corn from 1 kilo of

seedlings, this shifting to 200 kilo with low soil fertility and augmenting to 400 kilo with high soil fertility. In 2007, in Ban Veen, a village located 10 km from Nalae town 12 ha of land were dedicated to corn farming with FUF and Jiachuang in the wet season. A bit more than 8 tons were sold to FUF generating an income of 9,327,000 kip and about 5 tons were sold to Jiachuang generating 4,750,000 kip. Individual farmers' income ranged from 664,000 kip for 574 kilos produced for FUF to 2,090,000 kip from 2,200 kilos sold for Jiachuang in 2007 in the rainy season. Although not reasonably high, these returns were considered by the farmers as contributing to improve their livelihoods.

Nalae farmers had mixed perceptions of the two companies. Some preferred FUF's more transparent mode of operating that put more emphasis on contract signing, meeting international quality standard of the crop and being more inclined to respect the agreement's terms. Others, mainly interested in maximizing the sale, were more pleased with Jiachuang's ambiguous *modus operandi*. This might have been related to the growers' inexperience in dealing with Chinese investors as well as with the strong campaign conducted by DAFO officials to demonise FUF and praise Jiachuang. It should also be noted that the production of rubber and corn under the same business umbrella might have had some ascendency over the farmers' preferring Jiachuang. Rubber is in the farmers' imaginary the real hope for economic improvement. And Jiachuang embodies such hope. Yet, after only producing for Jiachuang for one season, some growers already expressed some scepticism about the company's business policies on corn. Many would have liked to return to produce for FUF.

The main problems mentioned by the farmers can be summarized as follows:

-The farmers were dissatisfied with FUF's price differentiating according to moisture content. In general, they were dismissive of the standard's requirements of the international market. An excessive loss of moisture to the harvest meant to them a reduction in their income. In this respect the growers appreciated Jiachuang standardized prices for corn with both low and high moisture content.

-At the same time, some farmers did not approve of Jiachuang paying lower prices than FUF (in the 2007 wet season the former purchased corn for 950 kip/kilo while the latter paid 1,000/kilo for lowest moisture content corn). As FUF was forced to withdraw from the business, producers felt they were not given other choices to enter the corn market. The Nalae government did not allow any other company to compete with Jiachuang on the corn business. Many farmers preferred to be given the choice to sell corn to other companies or through informal channels to individual traders. They were aware that in 2008 in Oudomxay the price of corn was as high as 1,500 kip/kilo. But when they entered in trade with other business partners, the latter offered low prices, even inferior to those paid by the Chinese firm. This depended on the lack of contracts with informal traders and the non support of DAFO. Nalae farmers felt they had no option but to accept the terms set by Jiachuang.

-The farmers did not approve of Jiachuang not compensating them for loading the harvest on the trucks. They found that FUF was in this respect fairer as it paid 10,000 kip/ton.

-Farmers denounced both FUF and Jiachuang's delays in collecting the harvest. It often occurred that both business partners sent trucks for picking the crop one month or longer later than the date agreed upon in the contract. Growers lamented that the delay had high costs for them as at the moment of collection the produce had been ruined by pests. Obviously, delays may not always be due to the companies' negligence but more often to poor road accessibility during the heavy rains. In 2006, FUF collected the crop from Ban Lao, a Tai Lue ethnic village located along the road to Namtha, four months after the due date.

-Farmers were not satisfied with FUF's policy of not buying crop harvested from seedlings other than those sold by the company. This was devised by FUF to maintain the quality of the crop. On the contrary, farmers were pleased with Jiachuang accepting any kind and quantity of corn produced.

-In most cases, the farmers lamented that they had no means to dry corn in the way required by FUF, especially during the rainy season. Another problem was the lack of storage facilities to maintain the crop dry and preserve it from pests attack.

Case 7-1 Ban Hard Loi: Refusing Contract Farming with Jiachuang

Ban Hard Loi is an ethnic Khmu Yuan village populated by 47 households, located on the main thoroughfare linking Nalae district to the provincial capital. The village has been located in the current site since 1983. It takes four hours to cover the distance to Nalae town on foot, a fact that has for a long time heavily impacted on the village's weak trading links with the district commercial centre. Mainly growing rice on swidden, all households in Hard Loi entered in corn contract farming with FUF in 2004 renewing the contract until 2007. The villagers described their business experience with the American firm as very positive. During the dry season FUF paid as much as 1,150 kip/kilo for the farmers crop a price even higher than that agreed upon in the written document. When Jiachuang's business was promoted by DAFO officials in 2007 farmers were reassured that the Chinese company would adopt the same rules as those set by FUF. 16 households decided to try producing for Jiachuang and 27 stayed loyal to FUF. Yet, contrary to the expectations, the agreement with the Jiachuang was not marked by the signing of a written contract. At the moment of implementation, farmers were disappointed with the conditions set by Jiachuang which did not meet the higher standards set by FUF in terms of prices on harvest, payment of the group leaders, and compensation for truck loading. Disregarding the agreement, many farmers decided to sell the harvest deriving from the seedlings sold by the Chinese company to traders from Muang Sing who paid as much as 1,200 kip/kilo. In 2008, apart from 3 households, the remaining villagers were not keen to enter in business with the Chinese at unfair conditions. This decision was driven by the charismatic village headman. At the time the village was surveyed, residents were trying

alternative ways to enter the market with broom grass. A trader from Nalae town offered only 2,000 kip/kilo for the crop, a much lower price than that offered in other parts of the province. The villagers strongly wished to make higher returns from such an intense labour input product. The improvement of the road gave them some hope that better bidders from other localities would reach the village and offer higher compensation. The village headman was trying to contact potential buyers in Namtha town through his personal social networks to allow the community to liberate itself from the trap with the Chinese company. The singular case of Ban Hard Loi is illustrative of the farmers' struggle to find their way through the market relying on their own means. It also shows how the choice of not conceding to the Chinese companies in remote areas is not always supported by secure income generating alternatives.

7.3.4 The Companies' Voice

Both FUF and Jiachuang went through similar experiences in conducting their business in Laos.

Despite an overall enthusiasm reflecting the increase in the farmers' income from corn production and the company's rising revenues, FUF representatives denounced a few problems:

-The Lao government's bureaucratic stagnation often made obstacles to FUF by delaying business licenses' approvals. The last major sign of state obstructionism was the dismissal of the company from Laos.

-Farmers often do not comply with the contract, as written agreements remain for many an abstract concept.

-Farmers at times sold to the company a quantity of crop inferior to what expected according to the seedlings supplied. In some cases part of the harvest was sold to other buyers who offered higher prices.

-Due to the weak legal framework of Laos, FUF had no means to enforce the contracts. Farmers have shown capabilities to manipulate the contracts to their own advantage.

-Plantation mismanagement often resulted in low productivity and low quality yields.

-Both FUF and Jiachuang claimed that Lao corn has excessively high moisture content reducing the crop's quality below the industrial standards for animal feed and alcohol production in China. The same complaints were made by the factories in China.

7.4 The Corn Market Chain

It was beyond the researcher's capabilities to follow the market chain beyond Laos' border. The following section reconstructs the chain drawing on secondary sources and integrating these with information collected on the Lao side of the border.

Since 2005, in Sing and Long, Vietnamese varieties replaced home-bred or Chinese-produced seedlings. In 2008, high quality hybrid Vietnamese seedlings were sold at the Sing market for 20,000 kip/kilo, while Chinese seedlings were sold for 3 yuan/kilo (3,670 kip/kilo). In Nalae, FUF and Jiachuang distributed Vietnamese (LVN10) and Thai seedlings to the farmers at respectively 17,000 kip/kilo and 20,000 kip/kilo.

Up until 2005, China was the main recipient of corn grown in northern Laos. Since the introduction of the quota system on corn exports to China, much Lao corn has been exported to Vietnam and Thailand. Currently, only a very modest volume of corn is still being sold to China. This is collected by Sing traders and exported to China through formal and informal channels. One part is being sold to Xuanxing[15], a Lao-Chinese partnership located in Muang Sing that in 2007 has been granted the exclusive rice collection rights by the Namtha provincial authorities. It remains obscure as to whether Xuanxing has a similar prerogative for corn. However, it is certain that this company collects corn from other parts of Laos and then sells it to the Jinggu firm in China. The Jingu company benefits from import tariff exemption, being registered in the poppy replacement program.

In early 2008, only a few traders in Sing were selling corn to Xiuxiang and Jingu. Despite the quota system, some traders were still able to sell small quantities of corn produced in Sing and Long to China through informal channels via the Mom-Mengrun border crossing. Smuggling was also an adopted trading practice. In some sporadic cases traders sold the produce to buyers in Bokeao where it was in turn shipped to Thailand or to traders from Oudomxay who then exported the crop to Vietnam. The produce came mostly from Oudomxay province.

As a previous study on corn has already elucidated (Yayoi 2006:11-17), the market chain from the Lao border proceeds within China as follows:

-informally traded corn reaches Chinese traders from border areas who in turn distribute the produce into different directions: 1) to middlemen from Kunming who then sell it to feed factories in Yunnan; 2) to Mengla livestock farms; 3) to

[15]Rice exports from Laos to China follow a similar pattern to corn. The Lao government has adopted a protectionist policy on Lao-grown rice and granted Xuanxing the monopoly on Lao non-milled rice exports. However, Lao local middlemen are still allowed to trade in rice from Burma or Thailand through the Pangthong-Chahe border crossing. The few that still pursue the trade do so by selling the produce to the Jinggu company or to Chinese Tai Lue traders from Mengman.

traders from Xishuangbanna who sell it to local piggeries and to feed and alcohol factories in the region or in Yunnan.

-formally traded corn through the Jingu Border Trade Cooperation Company is partly sold to livestock feed processing companies in Simao prefecture (Yunnan) (80%) and to Kunming (20%). The remaining 10% is sold to food processing and to state enterprises under the Grain Bureau in Xishuangbanna prefecture. The Laos-China market chain is visualised by Figure 7.4.

Up until 2005, FUF sold the produce to Chinese Tai Lue or Han middlemen from Mengman at the Pangthong-Chahe border crossing. The prices of corn sold to the traders varied over the years as follows:

Table 7-5 Corn Prices at Sale from FUF to Chinese and Lao middlemen

2005	2006	2007
920 kip/kilo	920kip/kilo	1,200 kip/kilo

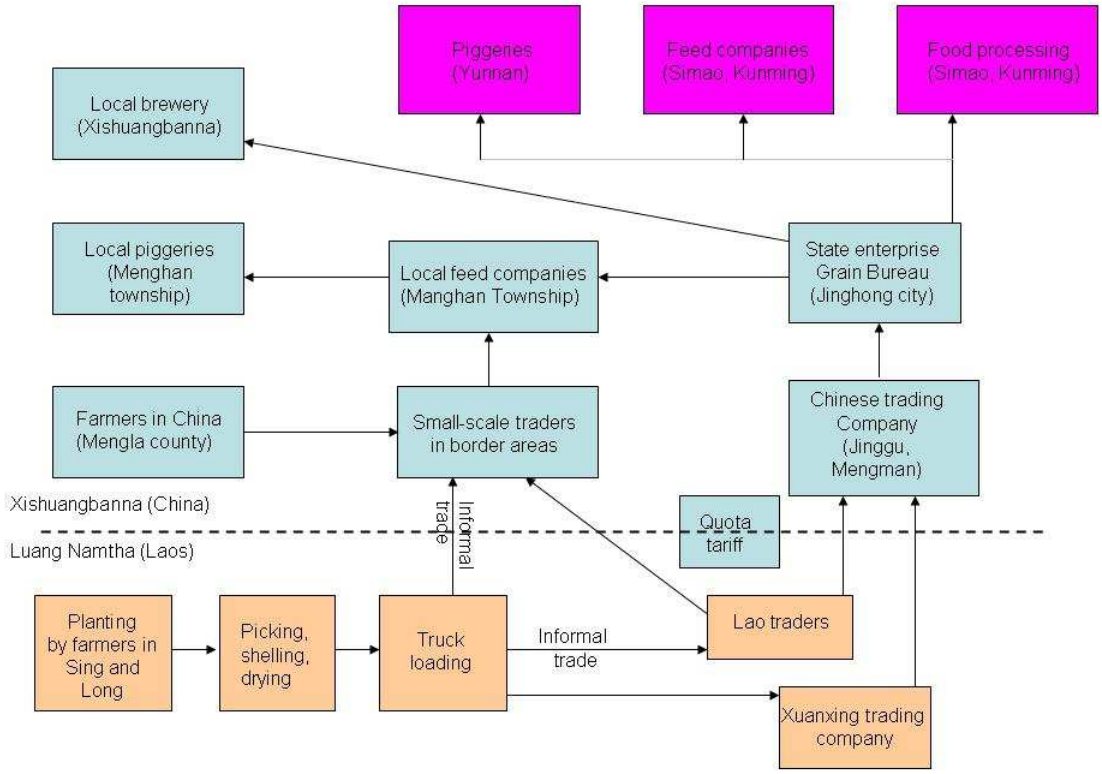
After the quota system was introduced by the Chinese government, in 2005 and 2006, FUF resorted to selling the produce to Lao traders from Sing. In 2006, the road improvement from Namtha to Huayxay (Bokeo) and the higher prices offered in Thailand made the company direct their sales to Thai middlemen in Huayxay. A further reason for looking at Thailand as alternative market was that FUF found Thai traders business practices more transparent than those adopted by Chinese traders.

Like FUF, to escape the quota system at the Pangthong-Chahe border crossing, Jiachuang directs all its produce to Huayxay where it is sold to local traders and companies who in turn ship it to Thailand across the Mekong to Xiengkhong. The company's agents were not open to disclose any details on export tariff or investment tax paid to the Lao government. It remains uncertain as to whether when shipped to Thailand corn is subject to preferential tariff regime.

According to Jiachuang agents, a small quantity of from Lao-grown corn from Thailand is shipped across the Mekong to China from upriver ports, supposedly Guanlei, Jinghong and Simao. If so, it is unclear how such trade can eschew the quota system. The research could not shed any light on these rumours.

Despite the imposition of import quota, the high demand for corn in Yunnan remains high. In 2006, the province bordering with Laos had a shortage of 40% in corn input to meet the demand utilized to produce livestock feed (Study Tour 2006:11). With the increase in consumption of pork meat in the country, China's demand for corn is expected to rise nationwide even further over the next few years. The China National Grain and Oils Information Center estimated that China' annual corn consumption from 2006 to 2007 would reach 144.5 million tons, a volume that can be met only by integrating national production with exports (Energy Bulletin, September 2007)

Figure 7-4 Corn Market Chain between Laos and China (Based on Yayoi 2006:10



Ch. 8 Soybean

8.1 Soybean Production in Sing and Long

Soybean has been produced among farmers in Luang Namtha province on a small scale for quite a long time, premarily for household consumption. The crop has found utilization both as human food and as animal feed. In Sing and Long, soybean has remained part of a subsistence system up until today, only minimally integrated into the local market economy. As discussed below, since the early 2000s, in Nalae attempts have been made to produce the crop on a larger scale and insert it on the broader Asian regional economy. Yet, such undertaking has not quite reached the expected results.

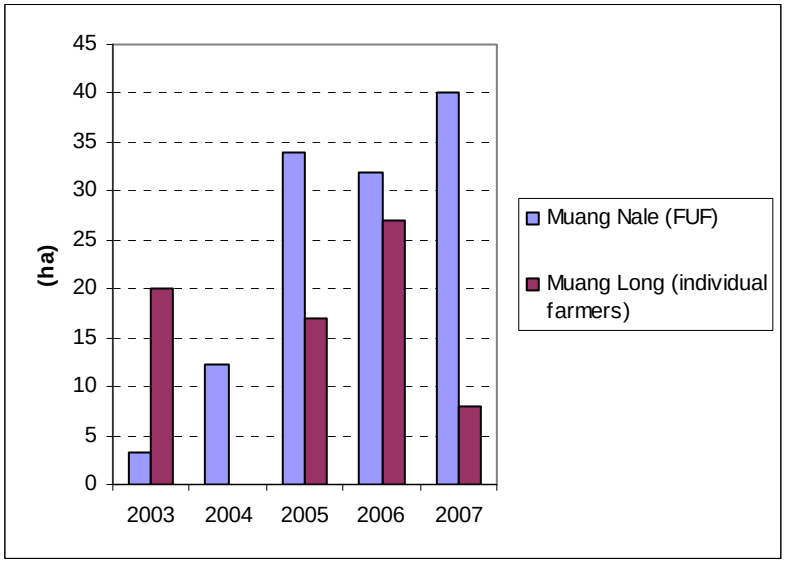
In Sing district, farmers of Hmong ethnicity stand out as having a long history of soybean planting and consumption. Drawing on such tradition, GTZ and DAFO encouraged three Hmong villages to grow the crop by providing seedlings for free in the late 1990s as well as in 2005. Some Akha villages in the area were also persuaded to take up soybean farming to generate an alternative source of income. Farmers reported that DAFO officials combined the crop extension with an agreement for purchase by a Chinese company/trader, whose name remains unknown. The foreign business committed to buy the crop for 3,500 kip/kilo. However, the farmers never signed a contract with their potential business partner, an omen that the agreement was not a promising solution. In fact, the soybean production under contract in Sing resulted in a failure for all farmers involved. The latter claimed that a combination of lack of technical skills with drought alternated with untimely rain ruined the harvest in the dry season: the beans harvested were black, small and of low quality. Moreover, for unknown reasons, the company never contacted the farmers for the purchase. Only a few entrepreneurial villagers were able to sell their harvest at the Muang Sing market for 5,000 kip/kilo, but claimed that they were confronted with more competitive, higher quality and cheaper soybean imported from China. The negative outcomes of the first soybean endeavor discouraged the farmers from pursuing the planting in the rainy season. Additional reasons for such lack of enthusiasm were that soybean is a low yield crop (according to the farmers 1 ha yields 200-300 kilos) and requires the use of large land areas; it is a high-risk produce; it necessitates high labor input for the picking process that the farmers, already involved in cultivating other crops, are not willing to provide. The high expectations on rubber planting and the possibility to make income from growing sugarcane, rice and other crops contributed to create disinterest in soybean.

Nevertheless, a few farmers interviewed in Sing said to be open to growing the crop, provided that a technical training is given to them by competent technicians and that the local government secures the purchase by a company at a

reasonably high price. Some more entrepreneurial Hmong farmers proposed an interesting type of agreement with a potential buyer designed to avoid that the latter withdraws from the business without compensating the growers: the company should sign an agreement with the farmers and provide 50% of the payment in advance for the planned quantity to purchase, while paying the remaining amount at the time of collection. Otherwise, the company should deposit part of the capital at a bank in Laos as a guarantee, so that the farmers can claim that money in case the business partner fails to purchase their harvest. As fair as this plan might be, unfortunately there is not a solid legal or financial framework that can support its implementation in the context or north-western Laos. Farmers themselves are aware that such type of agreement could only work in a situation of transparent policy making and business management. One more time, they feel that navigating the market through contract farming with the Chinese cannot escape the intercession of Lao government officials. In February 2008, some Tai Lue ethnic entrepreneurial farmers were bypassing the government officials' mediating trap by selling soybean purchased in Mengman on the Chinese side of the border at the Muang Sing market. The price at the Muang Sing stalls was 8,000 kip/kilo.

Line agencies were unable to provide the exact estimate of soybean production and area planted in Sing. Farmers interviewed claimed to grow an average quantity of 9-10 kilos per year. In 2008, the surplus was sold at the Muang Sing market for 5,000-7,000 kip/kilo. As shown in figure 8.2 in Long the production ranged around 20 tons in 2003 and gradually declined in the following years.

Figure 8-1 Area Covered with Soybean by District (ha)



Source: Long, Nalae DAFEO

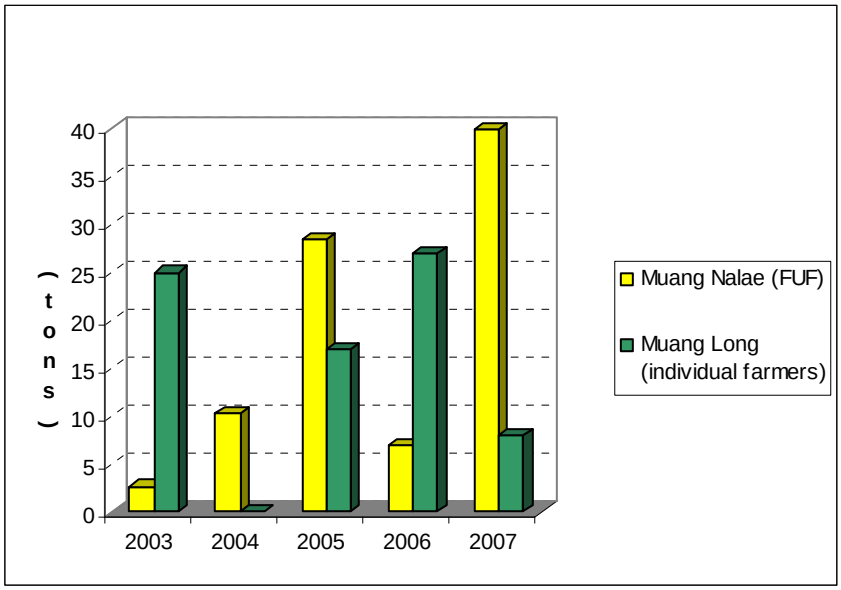
8.2 Soybean under Contract Farming with FUF in Nalae

FUF attempted to provide an alternative and transparent way for the farmers to navigate the market with soybean, by signing contracts in Vieng Phukha, Nalae and Luang Namtha districts from 2004 up until the company stopped operating in Laos in 2007. After a failed effort to implement the crops' cultivation with seedlings imported from the United States in 2005, the company started to provide the farmers with Thai varieties. Yet, even the introduction of regionally produced seedlings did not lead to a complete take off of soybean planting. Over a four-year period, the company reported a 525% increase in the production (amounting to 25 tons in 2006) in the three districts, a significant change when compared to the minimal volume previously grown by locals, but nevertheless insufficient to be commercially marketable (FUF 2008:9). In Nalae, the number of households growing the crop raised from 17 in 2003 to 101 in 2006 (Table 8.1). The area covered with soybean increased from 3.18 ha in 2003 to 34 ha in 2006 (Figure 8.1). The volume produced reached the highest peak in 2005 with 28.5 tons but declined to 7 tons in 2006 due to a severe drought (Figure 8.2)

Table 8-1 Number of Villages and Households Involved in Soybean Farming with FUF)

	2003	2004	2005	2006
villages	3	10	9	8
households	17	53	83	101

Figure 8-2 Soybean Production by District (tons)



Source: Long, Nalae DAFEO

8.3 Contractual Arrangements

The contractual arrangements made by FUF with the farmers were similar to those set for corn (see Ch 7). According to the 2006 contract, FUF supplied

seedlings to the growers on credit for 9,000 kip/kilo and purchased the harvest for 2,000 kip/kilo. The company also rewarded the farmers for loading the produce on to the trucks 10,000 kip/ton. The production team leader was rewarded 5,000 kip/ton for supervising the production and managing the collection by FUF.

8.4 From Contract to Implementation

Among the interviewed, none of the few households that had been involved in soybean planting had done so with success or considered soybean as a financially viable crop. In theory, one kilo of the Thai seedlings should yield 30 kilos of produce, but very few had harvested as much per kilo either in the dry or the wet season. The reason for the farmers' declining enthusiasm was the drop in the farm gate price from as much as 3,000kip/kilo in 2005 to 2,000 kip/kilo on the following year. Each household sold to the company between 200 and 300 kilos, making an average income of 600,000-900,000 kip in 2005. The table below shows the farmgate price offered by FUF.

Table 8-2 Soybean Farmgate Prices on Purchase by FUF

2000	2005	2006
600 kip/kilo	3,000 kip/kilo	2,000 kip/kilo

Prices unavailable from 2001 to 2004

In general, the villagers in Nalae had been quite dissatisfied with soybean planting most of the reasons being the same as those enumerated above for the Muang Sing farmers. Given that at the time of the survey none of the farmers were planting the crop with FUF it was impossible to ascertain the truth of their claims.

8.5 The Farmers' Voice

The obstacles for a sustainable soybean business as enumerated by the farmers can be summarized as follows:

-The farmers lacked adequate technical skills for planting the crop.

-The farmers were unwilling to grow the crop due to the unfair labor input/income ratio characterizing the production.

-Cheaper and better quality soybean coming from China prevents locally grown soybean in Laos is from being competitive on the market.

-Farmers are unable to find market outlets in China on their own.

-Farmers lack availability of buyers that guarantee the purchase of the produce at a fixed price.

Case 8-1 Nandii's Disappointment on Soybean Planting

Ban Lao is a Tai Lue ethnic village in Nalae, located on the road to Namtha four kilometers from the district capital. The village has been involved in corn contract farming with FUF for a few years and only recently with Jiachuang. In 2005 fourteen households in the community joined the soybean production with FUF, but the number dropped to five in 2006. Nandii is the head of one of the households that ventured in soybean on both years signing a contract with FUF. His experience exemplifies the general pattern of soybean planting in the district. Caught in the enthusiasm of the prospect for good profit, in 2005 Nandii with his eight family members planted 12 kilos of soybean seeds purchased from FUF. The first harvest was as abundant as 1,600 kilos which was entirely sold to the company for 3,000 kip/kilo. Nandii's family was able to earn 4,800,000 kip, a reasonable income that encouraged them to repeat the effort on the following year in the dry season. However, their expectations were disappointed by a severe drought that made the 10 kilo seedlings utterly unproductive. In 2006, Nandii's family was not able to harvest even a minimal amount of produce and lost all capital invested for the the inputs (90,000 kip). The loss discouraged them from pursuing soybean planting during the rain season, preferring to direct all their energy in rice production for family consumption. Nandii family's history of soybean contract farming had a negative epilogue. In February 2008 the household was planting corn to sell to Jiachuang, but all their hopes were laid in the rubber business.

8.6 Soybean Regional Market Trends

Laos' overall soybean production has been limited. Soybean exports from the Northern provinces have so far been directed to China, Thailand and to other Lao provinces. A US-owned company, the Wilaikhoun Group International recently started an extensive production of soybean in northern Laos. In 2005 the firm was producing for export markets, but it had plans to establish an oil seed crushing plant in Laos to produce soybean oil and soybean meal. It is uncertain as to whether such plan has been implemented (Vernon 2006:24).

As for many other products grown in northern Laos, China is expected to be the driving market for soybean sale. According to what Chinese farmers from Mengman and migrants to Muang Sing claimed, there is a high demand for soybean in China. This has already been anticipated by a previous study carried out by Vernon (2006). According to this research, China is the world's largest importer of soybean. Currently, China imports more than half of its soybean use. In the country soybean finds utilization in the production of cooking oil as well as animal feed. The 2005/2006 projection was that China would use 45 million tons of which only 17 million were to be produced in China and the remaining imported from other countries (Vernon 2006:24). Chinese sources reported that

the country' demand for soybean was as high as 22 million tons in 2004, with an annual output of approximately 15 million tons (People's Daily, August 2004). It has been projected that the demand for soybean in China will increase over the next few years, a factor that should encourage the crop promotion in northern Laos.

Ch. 9 Some Reflections on Contract Farming

Earlier chapters have explored in detail the signing and implementing of farming contract as articulated in the production and sale of five cash crops. In the light of the above discussion, the following section sums up pros and cons of contract farming in Namtha, elucidating its dark and positives sides.

9.1 The Dark Side

- The signing of a contract follows a top-down trajectory

As seen in Ch 3, the way contracts are signed and implemented follows a top-down trajectory. Contracts are designed by the company and ratified by government officials. Farmers do not have any say in the decision making process. When village level contracts reach the farmers, the latter are simply required to accept the terms set by the company and the Lao officials.

- Contract farming reinforces pre-existing social hierarchies

As noted in Ch 6, the *kum* (production group) system managed by the *huana* replicates pre-existing unequal socio-economic relations within the village communities. The *huana kum* are appointed by the companies to monitor the production of the crop under the payment of salaries or other forms of compensation. This often results in the *hua naa kum* acting in his own or/and the company's interest rather than in the farmers' interest. Similarly, DAFEO employees supposed to support the farmers in dealing with the companies often side with the companies from whom they receive various forms of payment.

Furthermore, village chiefs play a crucial role in the farmers joining a contract with foreign investors. When the chiefs establish social and economic connections with the companies, they trigger a disconnection between themselves and the village community (Ch 5 and Ch 6).

In Akha and Khmu villages, women are excluded from the decision making process of a household joining the contracts. Women rarely participate in the meetings held by the companies and DAFEO officials to negotiate a crop extension under contract. As a consequence, female farmers are often unaware of the terms of the contracts, relying on their husbands to negotiate production and sale to the firms.

- The terms of the contracts are very vague

The terms of the contracts are often very vague. This feature allows the companies much space for manipulation and to change the contract conditions at

their will. At times, farmers are not provided with a copy of written contracts and the terms set in the district level agreements are communicated only verbally to them (Ch 6). Not having a written contract specifying in detail the terms of production and sale prevents the farmers from understanding the exact conditions under which they and the company should operate. It also denies them the right to appeal to a legally valid document in case problems arise.

- The terms of the contracts are often unfair for the farmers.

The contract terms maximize the rights of the companies, while limiting the farmers' rights to question the company's way of operating. On the other hand, the farmers are subject to many obligations that serve the firm's purposes. For instance, the companies are entitled to delay the payment to the farmers by 30-60 days in case it lacks financial means (see Ch 6). The contracts deny the farmers the right to receive the payment at the time of collection or to claim it at their will (provided that they have sold the harvest).

- The farm gate prices of the products as set in the contracts are low compared to the labour input involved in the production.

Maximise their profit by exploiting cheap labour, while the farmers obtain limited returns at a high labour input cost. Often poor living standards makes the farmers accept these unfair terms.

- Written agreements do not have much legal validity

Despite the generalised unbalanced formulation of contracts on the side of the companies, it can be argued that written agreements do not have much legal validity in reality. Their validity is questioned by the companies' misleading way of operating, by the farmers' breaching them, and by the decentralized nature of the Lao state. It is widely acknowledged that the Lao legal framework is weak and its application is more dependent on personal negotiations than on the objective implementation of written rules. Contracts are based on agreements between the companies and government officials, rather than between the companies and the farmers. Therefore, they can be enforced only through the local government's intercession.

Furthermore, the Lao written word is a heritage that does not belong to all Lao citizens. Not all farmers master Lao language. To many farmers, contracts are simple abstractions. Few producers understand or value the legal binding effect of their signature on a paper sheet. Denied access to the written word along with generalized mistrust in the state and the law discourages the farmers from complying with contracts that set unfair terms for them.

Companies frequently breach the terms in the written contracts. An outstanding example of this is the cassava case. In the written contract the LYPBP agreed to

buy both fresh and dry cassava. At the time of purchase, the firm refused to buy fresh cassava, while limiting its purchase to dry cassava.

- The companies adopt a non-transparent way of operating

There is a lack of transparency in the way information is transmitted from the company to the farmers. For instance, the firms often do not make much effort in clearly explicating to the producers the terms of the contracts. In the case of sugarcane, farmers lamented that they had not been explained how the weighing system adopted by the firm worked. Many of those who followed their harvest to the weighing station were unable to or denied to read the scale. Farmers claimed that their lack of access to monitor the weighing of their harvest resulted in the company underpaying them. There have also been extreme cases of mistreatment by the company's employees towards the growers.

- The companies show negligence in implementing the contracts

Farmers reported delays in collecting the harvest (corn, cassava, sugarcane) by the companies. This resulted in the loss of crop and a subsequent reduction of income for the growers. Delays of payment by the company to the producers have also occurred. In some cases, growers never receive the payment.

- Farmers lack an understanding of the significance of signing a contract

Farmers often do not entirely understand the significance of signing a contract to produce for the investors. They are not aware of their rights and duties and of the rights and duties of the company. Furthermore, farmers not always have a clear understanding of the arrangements of the contracts, particularly the terms about credit on inputs and its deduction from the payment, as in the case of sugarcane. Some villagers were surprised that the payment received did not correspond to what they had been informed of by the company as they had mixed up gross and net income.

- Farmers lack information on market prices of the products they grow

Farmers without trading and social connections to China lack information on the farm gate prices of the products they produce to the companies. Such lack of information, forces them to accept the prices set by the firms.

- Farmers lack the cultural language to deal with the Chinese companies

The growers claimed that part of their inability to negotiate with the Chinese companies depends on their lack of Chinese language skills and their inexperience in dealing with the Chinese trading world. Overall, villagers who have strong social connections with China and through them have acquired some knowledge of market dynamics are more able to manage their contractual

relations with the companies. This is the case in many villages in Sing district. On the contrary, villages more distant from the Chinese border and with more feeble social and trading contacts with China are less prepared to manage farming with the companies. This trend prevails in Long and especially in Nalae where poor road link makes difficult access to market information.

- Poor technical skills and low quality standards are not divorced from lack of economic incentives

As pointed out by the companies, farmers often lacked adequate technical skills in planting and managing the crops. This often resulted in low productivity. By and large, the crops produced by the farmers in Laos did not meet international quality standards. From the cassava and corn cases (Ch 5 and Ch 7), it has emerged that farmers were not able to or willing to reduce the moisture of their harvest. This was attributed to a lack of drying facilities. However, much of the low productivity and poor quality standards can be linked to the lack of incentives due to the low income that farmers receive from the companies.

Nevertheless, a main problem remains: the farmers are not aware of the fact that producing high quality standard crops is a necessary condition to be more competitive in the market.

9.2 The Positive Side

- Economic returns are not high, but farmers regard contract farming as a valid strategy to improve their livelihoods

The chapters dedicated to each crop have elucidated that contract farming does not generate particularly conspicuous incomes for the farmers. Income ranges from as much as 9,327,000 kip for 5 tons of corn in one season to 108,000 kip for 15 sacs (1 sac=25 kilos) of cassava in one year. These revenues only represent subsidiary means of livelihood to subsistence agriculture. Yet, despite the many complaints about unfair price/labour input ratio, the unjust treatment by the company and the non transparent character of contracts, farmers support contract farming as a valid tool to improve their livelihoods. When comparing contract farming in the present with opium sale in the past, growers concluded that opium could generate much higher income (one household claimed to have earned up to 10-20 million kip in 1997-1998[16]) than other cash crops currently grown. However, most interviewees emphasised that the money they earned was not worth the devastating health and social effects and the decreased economic productivity deriving from opium addiction.

[16] In 1990, an average household could make up to 240 *man* per year (1 *man*=150,000 kip today) from selling opium.

Villagers who had made reasonable income from producing for the companies in the present expressed positive views on contract farming. A farmer in Ban Veen, Nalae, claimed that corn contract farming had contributed to improve his family's living standard. It provided access to those symbols of modernity that are part of Lao farmers' imaginary of personal and economic development: "In the past we did not have any cash. We only bartered rice for other products. Today, selling corn to the company enables us to buy clothes and consumer goods for the household. More importantly, with the money earned we can pay for our children's education."

- For many growers, contract farming is a fruitful tool to navigate their way through the market

There are certainly fears and scepticism about entering into contracts with Chinese companies due to the latter's ambiguous mode of operating. However, there is a conspicuous number of farmers who long for contract farming. They envision contracts as a secure means to navigate the market. To many of those living in remote areas, global market mechanics are alien concepts. They lack linkages to brokers, traders and consumers. They do not have access to price information. Even when a commercial link exists, often traders take advantage of the farmers' unawareness of market dynamics to set low prices on the products. Often, growers do not dare to grow a certain crop as they are not guaranteed the purchase at a fixed price. On the contrary, companies enable the farmers to access the market by purchasing crops at fixed prices. They provide stable and secure, even if not always high, income. As shown in Ch 6 and Ch 7 with corn and sugarcane, farmers can have positive experiences with contract farming.

- Farmers are acquiring expertise in planting and marketing their crops through producing for the companies

Case studies and sections on the 'farmers' voices' in this study have revealed that many growers have been negatively affected by the predatory practices of some Chinese investors. However, the farmers' resilience has also emerged. Many 'have learned the lesson' and built up the capacity to protect themselves from further mistakes or abuses of power. Through contract farming with the companies, villagers in Namtha are becoming acquainted with the Chinese market, a domain to which their economic future is deemed to be linked. Furthermore, from producing for the companies, the growers have acquired technical knowledge on planting the crops. As such, contract farming can be seen as a form of training for the farmers to better understand the mechanics of market economy. This newly acquired knowledge could be utilized in the years to come by the farmers to navigate the market on their own.

- Contract farming can be seen as a strategy to secure the farmers' rights over their land and avoid a 'proletarianisation' of the growers

Shi (2008)'s study on rubber has elucidated that the involvement of Chinese companies in rubber planting in Namtha has been undermining the villagers' hold over their land as well as generating a 'proletarianisation' of Lao farmers. Many villagers, having lost their land, resort to work as wage labourers for the companies in rubber plantations. On the other hand, from analyzing contract farming in the cash crops considered in this study, it can be concluded that the "2+3" formula is being effective. Farmers are secured rights over their land even if producing for a foreign investor. With contract farming, growers are not wage laborers of patrons, but land owners who can decide on the agricultural activities to be undertaken on their own land in the future.

- Contract farming under the aegis of the Chinese heralds an alternative mode of development

Combining business with AID is part of the Chinese companies' way of operating in Namtha. Often contracts do not only refer to the production of a crop and its purchase by the firm at a fixed price, but also to some services that the company commits to provide to local residents. These include road improvement, electricity supply, and the promise of building processing facilities to be handed over to the Lao government at the end of the contract. Certainly, the inclusion of business within a poverty alleviation framework is a strategy adopted to legitimate lucrative ends. Yet, many of the Chinese companies driven to Namtha by business purposes have turned themselves into efficient harbingers of development. We cannot deny that, over only a 3-4 year period, Chinese investors have been able to provide Lao locals with important tools of livelihood improvement that many years of Western AID oriented interventions have not been able to guarantee. To the farmers, infrastructure amelioration and market access are crucial steps to release themselves from the yoke of poverty. And the Chinese have had some success in capturing and fulfilling the farmers' desire for development.

For many westerners, the *modus operandi* of Chinese entrepreneurs remains incomprehensible. From "cultural other", China has now become the "business other". Certainly, it is an instinctive reaction to demonize the unfamiliar. Yet, if observed more closely, we discover that the Chinese business fashion is, after all, not that different from that of western companies: they both aim to maximize profits. The difference being that the Chinese mode has a stronger grip on Laos as it is nurtured by a conniving political class and a fertile social terrain.

- Not all is as it seems. Farmers have agency

It would be misleading to think that farmers remain passive victims of the companies' predatory practices and the patronage system at the basis of contract farming. Indeed, villagers have demonstrated resistance to the company-official axis by bypassing the unfair terms of the contracts. Many manipulate the unfair system and the vagueness of the agreements to their own advantage or strategically use naivety to ignore the contracts. It has been noted earlier that

villagers often do not comply with the contracts they sign if these do not have any advantageous financial returns for them. The cassava case provides evidence to this point. Given the unfair price/labour input ratio that characterizes cassava planting, farmers refused to pursue growing the crop at those conditions. The contracts were ignored. Some left the cassava in the soil; others sold to the company sacs filled with cassava and ginger to increase the weight of the harvest and reduce the labour input. Similarly, in the case of corn, farmers refused to dry the crop in the way requested by the company as they considered the labour involved not worthy their time and money. Moreover, growers pretended to misunderstand the contracts. They went against the terms of the agreements by selling to other traders the crop yielded from seedlings that had been given on credit by the company.

A further example of the farmers' agency is provided by sugarcane. As noted in Ch 6, farmers are denied access to the weighing system by the sugarcane company. Their income is dependent on the mediation of the production group leaders (*huana kum*) who, in theory, are in charge of monitoring the weighing and the payment on behalf of the growers. The *huana kum* often act in favour of the firm. However, farmers have found ways to bypass this corruption mechanism. They are able to estimate the approximate weight of the harvest they sell by calculating the number and the weight of sugarcane bundles that are loaded on a truck. This enables them to complain to the company if they received a lower compensation than expected.

Certainly these silent episodes of resistance by the growers cannot be accounted as markers of their invulnerability before the lucrative strategies of companies and Lao politicians. Yet, they demonstrate that villagers can account on facts to negotiate power with their business partners rather than appealing to a written legal system that is applied arbitrarily on them.

- Some farmers start to find their own niches within the market economy as alternative to contract farming with the companies.

There are an increasing number of farmers who have found their own niches within the market economy in alternative to contract farming with foreign firms. Many of them do so by deploying cross-border ethnic *phinong*/kin networks with China, especially in Sing district. As illustrated by the watermelon case, cross-border connections are very efficacious means of knowledge transmission on planting techniques, marketing strategies and price information. When a business partnership is established between a Lao farmer and a Chinese investor, the success of the venture often relies on trust and personal connection between the involved partners rather than on written agreements.

Ch. 10 Recommendations

Drawing on the reflections highlighted in chapter 9, this chapter formulates some recommendations to address the challenges and opportunities of commercial agriculture under the Chinese aegis in Namtha.

10.1 Contract farming

- Current contracts should not be enforced

Given the unfavourable outcomes for the farmers, contracts in the current format should not be enforced. Enforcement under the present conditions will further trap the farmers into an unequal price/labour input bottleneck. A lax application of contracts provides growers some room to redraw from the agreements when adequate returns are not guaranteed.

- Redefine the terms of the contracts and the contract formulating process

Action should be taken to modify the terms of the contracts in favour of the farmers. Farmers should be granted more rights than duties in the agreements. Companies should be pressed to set higher prices to compensate the farmers for the production. A way to prove evidence of inadequate payment would be to present the companies with a comparison of prices of the same crops produced in other regions of Laos, Thailand and China. Comparative research on this topic should be carried out.

Furthermore, the top-down approach at the basis of contract farming should be replaced with an increased participation of the farmers in the contract-formulating process. Farmers' consultation should be sought before signing provincial and district level contract and their consent should be obtained before guaranteeing rights on crop production in the districts.

- Press the Lao government to adopt a more neutral position

Development organisations should press the Lao authorities at provincial, district and village level to adopt a more neutral position between the farmers and the companies. Provided that the contracts are reformulated with better advantages for the farmers, the government should commit to monitor any contract violation by the parties and ensure that all stakeholders respect the terms agreed upon. Certainly, breaking the corruption wall at the basis of contract farming with foreign investors is a hard task. Yet, addressing publicly the issue will contribute to make a change.

- A mediating body in support of the farmers should be established

Government officials act more often than not in favour of the investors rather than if favour of the farmers. The latter are left on their own in their interactions with the companies. Farmers do not have many means to report problems and disputes. A mediating body that addresses conflicts and problems deriving from contract farming should be established. This could be managed by donor agencies in cooperation with the Lao government.

- Periodic monitoring of the companies' *modus operandi* is necessary

The companies' *modus operandi* should be periodically monitored by a *supra partes* entity. A committee of Lao and foreign observers could be set up for this purpose. The committee should observe the development of contract implementation and report to Lao government and donor agencies. This strategy could be invaluable to influence policy change.

- The Western AID community should be proactive in creating change

Critique of inadequate and unjust policies is not a sufficient basis for transformation. Western AID agents should take a proactive role in creating change. They should invite at the negotiating table companies and Lao government representatives and take advocacy for the farmers. Addressing problems openly and diplomatically with the stakeholders could result in a more efficient exchange of perspectives and solutions. This would help minimizing the East-West divide that currently characterizes development dynamics in Namtha province.

- Raise the farmers' awareness on the significance of contract farming

Farmers do not seem to have an in depth understanding of contract farming yet (what signing a farming contract implies, what their rights and duties are). They lack clear information on this issue. It is necessary to raise awareness among the growers. A team made up of Lao and foreign advisers could be established to provide transparent information on the terms of the contracts, and on the risks and advantages deriving from committing to them.

10.2 Production

- Improve farmers' technical skills and production facilities

As noted earlier, many farmers lack adequate technical skills to grow, dry and store their crops. As a result, Lao products do not meet international standards due to their low quality, and are less competitive on the market than crops produced in other countries in the region. Measures should be taken to enhance the farmers' technical expertise and raise awareness on expectations of buyers

and consumers. Village-based technical training involving western AID and DAFEO agents should be organized. Basic training should be followed up by on-going monitoring of the farmers' cultivating performances. Advice should also be provided on ways to increase productivity and improve drying and storing facilities for the crops considered in this study.

10.3 Marketing

- Set up market information centres for the villagers

Action should be taken to disseminate among the farmers information on market trends, crops, seedling, prices and market outlets. Villagers without social and economic links with China or Thailand lack access to such information. It would be advisable to set up cluster or district-based market information centres. To avoid corruption, centres should be run by a government body under the monitoring of AID agencies. Such centres should operate as points of reference so the farmers are constantly updated on market dynamics of the crops they produce or on other products for which they seek markets. The centres should appoint informants or agents to regularly collect accurate market information in China. It may be advisable for AID agencies to employ residents from villagers located near the Chinese border. Many of them are endowed with multiple languages, master Chinese and have an established network of relatives/friends in China. Farmers should be made aware of the value and market chain of the crops they grow. Lists containing market data should be regularly distributed to households and avoid that they become monopolized by village chiefs or a restricted number of individuals. Information should be presented to the farmers in a language familiar to them. Awareness of the market trends will increase the growers' negotiating power with the companies. It will also assist them in finding ways to access the market on their own eschewing dependency on investors.

- AID agents may consider acting as commercial mediators between farmers and traders

From previous chapters in this study, it has emerged that many farmers are willing to navigate their way through the market on their own but lack adequate links. When they identify buyers for their products, the latter do not guarantee purchase at fair prices. It would be advisable that AID agencies in Namtha become more directly involved in market oriented interventions in favour of the farmers. Action Contre la Faim (ACF), for instance, devised a system to avoid unfair pricing by the middlemen. The organization acted as commercial mediator between producers and buyers. It provided the farmers with seedlings for free and sought buyers, while assuring that the sale occurred at the fair price for the producers. The experiment had positive outcomes. This model could be adopted by other AID agencies. The above-mentioned market information centers to be set up in the districts could also operate in this direction. Regulations should be

formulated so as to direct traders willing to buy a crop to make negotiations with the district market information centers before doing any transactions with the farmers.

- Encourage diversified forms of marketing

The link between the Chinese market and Lao producers is a reality with strong social, economic and political roots. Yet, both Lao government and AID agencies should take measures to avoid that this link is limited to a dependency of Lao farmers on a restricted number of Chinese companies holding the monopoly of a few crops. Farmers should be directed to look for business partners other than major companies. Contract farming should be envisioned only as a stepping stone for the farmers to navigate their way through the market. Growers should be encouraged to produce alternative cash crops for which there is a demand on the Chinese side of the border and in China's urban areas. For this purpose, market feasibility studies should be undertaken in China. Niche market opportunities should be also sought within the Lao domestic market. Market outlets should be also expanded to Thailand and Vietnam.

- Preliminary crop processing could be initiated in Laos

As seen in Case 6.2, Ban So villagers have created an alternative Lao-based raw sugar "industry" that generates relatively good returns for the producers. Raw sugar production is conducted with quite basic technology and a lower environmental impact. AID agencies might encourage Lao farmers and small entrepreneurs to expand this small "industry" to other villages drawing on pre-existing local knowledge. Preliminary manufacturing of corn and cassava into animal feed or starch could also be encouraged among the farmers. This might contribute to increase the value of corn and cassava so far exported to neighbouring countries only as raw materials. The Lao government should take steps to support the building of starch processing plants in the province.

10.4 Further Recommendations

- New agrarian and fiscal policies should be issued in favour of the farmers

AID agencies should press the Lao government to implement more tolerant fiscal policies. A possibility could be to abolish land tax for farmers with low income. In 2007, China abolished land tax nationwide to reduce the farmers' fiscal burden. If this measure was taken in Laos, it would foster a more cooperative attitude of the farmers towards the government's regulatory framework.

- Link the promotion of alternative crops to the village bank system

One of the reasons for the Lao farmers joining contract farming is their lack of capital. Companies play an important role in supplying capital to buy inputs.

However, in encouraging the farmers to navigate their own way through the market with alternative crops, new modes of capital raising should be devised. A way to do so would be to link the promotion of crops to the the pre-existing village bank systems. Villagers should be directed to enlarge the funds of the village bank system and draw on them to start new businesses or simply buy the inputs to set up plantations. The village bank system has proven to be quite a reliable source of funding that escapes the widespread phenomenon of corruption.

- Learn from China through pre-existing cross-border socio-economic links

Cross-border ties with China have proven to be the most effective vectors of knowledge and technical skills' transmission for the farmers (see watermelon and rubber). AID agencies should draw on cross-border *phinong* and kin networks to improve the producers' capacity to enter the market. Training sessions on planting and marketing techniques should be organized by bringing skilled farmers from China through the pre-existing ethnic links. This strategy has already been successfully adopted by a few Chinese rubber companies.

- Provide the farmers with education in the Chinese cultural and business language

Learning the Chinese cultural and business language is a *conditio sine qua non* to succeed in trade in northern Laos. AID agencies may consider organizing Chinese language courses for villagers residing far from the Chinese border to enhance their negotiating skills with Chinese companies and traders. To do so, they could draw on Tai Lue or Akha individuals mastering Chinese, Lao as well as their own ethnic language, from nearby villages in China's Menman or Menpeng counties. To avoid empowering a single individual in village communities, a few worthy people with good Lao language proficiency should be selected to be instructed in Chinese. Gender equality should also be sought. An even number of male and female villagers should be chosen. The curriculum of Chinese language courses could include training on commerce Chinese terminology. AID agencies might consider setting up/funding Chinese language courses in the district secondary schools.

- Take a cooperative rather than oppositional approach with Chinese institutions

The Western AID community in the region has so far related to China by adopting suspicious and oppositional tones. As elucidated earlier, China's economic influence on northern Laos is a fact whose significance is deemed to further increase in the years to come. Efforts should be made to learn more about China rather than spending energy in stigmatizing the mysteries of its cultural and business world. A way to do so would be to establish cooperation with Chinese political and academic institutions in Yunnan. There is a vast pool of institutes, agencies, government bodies, and academics specialized in agriculture,

economic planning and policy making on Xishuangbanna. Since Namtha shares similar climate and geographical conditions with Xishuangbanna, it would also be worth opening a dialogue with these institutions to exchange experiences and solutions. AID agencies should consider employing Chinese speaking experts to act as mediators between the western development world and the Chinese business world.

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YPBPG, Yunnnan Power Biological Products Group. A Brief Introduction. Company's Brochure.

Appendix

Villages visited:

Muang Sing

village	cluster	Main ethnic group	Crops planted under contract farming and n. of HH
Ban Nam Hu	Thongmai	Akha	Cassava (2006:25 HH (2007:2 HH) Sugar cane: (2007:35 HH) (2008:79 HH)
Ban Tami	Thongmai	Akha	Cassava (2006:7 HH (2007:6 HH) Sugar cane (2008:37 HH)
Ban Eula	Thongmai	Akha	Sugarcane (2005:35 HH (2007/8: 65) Cassava (2006:2 HH) (2007:2 HH)
Ban Thongmai	Thongmai	Tai Neua	Sugarcane Cassava (2006:5 HH) (2007:0 HH)
Ban Lomeu	Mom	Akha	Sugarcane (2008:30 HH)
Ban Mom	Mom	Tai Lue	Sugarcane (2006:86 HH (2007:58 HH)
Ban Phabat	Mom	Akha	Sugarcane (2007:28 HH)
Ban Nakham	Nakham	Tai Lue	Watermelon
Ban Donmai	Xiengjai	Hmong	Sugarcane (2008:26 HH)
Ban Nasai	Xiengjai	Hmong	
Ban Sop I Kao	Xiengjai	Akha	Tea

Ban So	Xiengjai	Tai Lue	
Ban Siengle	Xiengjai	Tai Lue	
Ban Donchai	Nakham	Tai Lue	
Ban Tinthat	Namkeo Luang ??	Tai Lue	Sugarcane (1 HH) Watermelon
Ban Sopi Mai	Namkeo Luang	Akha	Sugarcane (2007:12 HH) Cassava (2006:45 HH) (2007:10 HH)

Muang Long

Village	District	Main ethnic group	Crops planted under contract farming and n. of HH
Ban Lanpha Mai		Akha	Cassava (?) Sugarcane (2009: expected 30 HH)
Ban Chakham Pin		Akha	
Ban Senkhankham Mai	Xieng Kok	Akha	Cassava (2007:47 HH) (2008:47 HH)
Ban Chanyi	Xiengkok	Kui	
Ban Phon Samphan		Museu	Cassava (2006:50 HH) (2007:188 HH)
Ban Donyen		Akha	Cassava (2006:24 HH) (2007:20 HH)
Ban Phattee		Akha	Cassava (2006:30 HH) (2007:20) (2006:30 HH (2007:20 HH) (2009: expected 30HH)
Ban Mo Leen		Hmong	

Muang Nalae

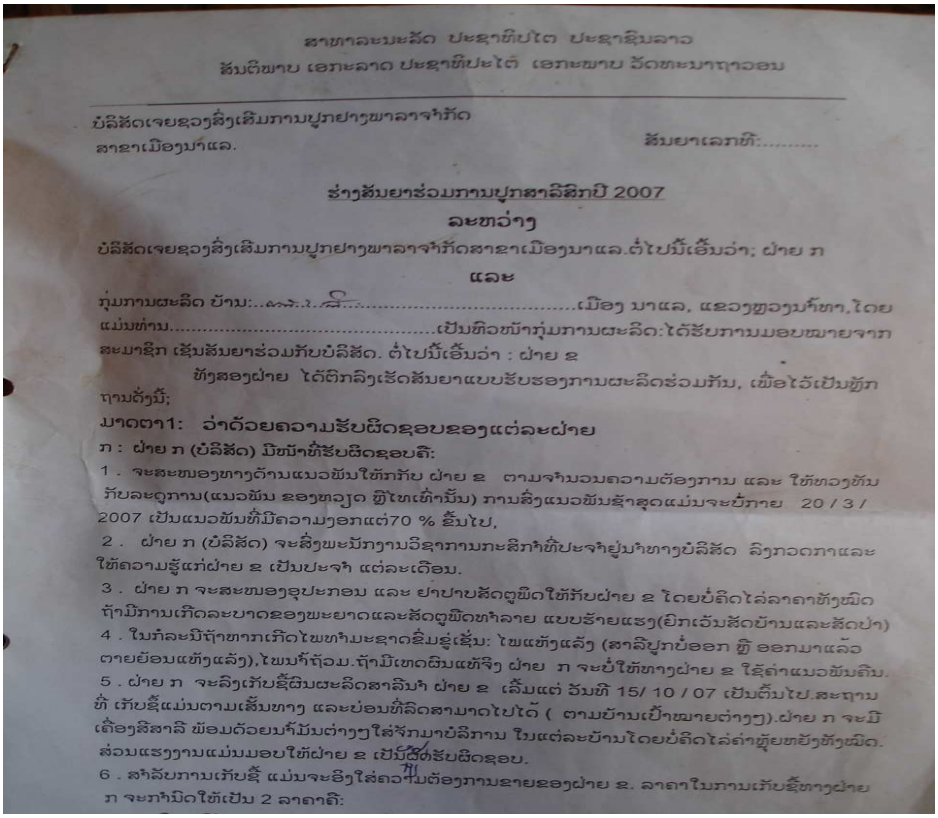
Ban Phavi		Lao Lum	Corn (FUF:36 HH) (Jiachuang: 31 HH) Cassava (2006/07: 15 HH)
Ban Ven		Khmu Lue	Corn (FUF:68 HH) (Jiachuang: 68 HH) Cassava (2006:20 HH (2007: 7 HH)
Ban Lao		Tai Lue	Corn (FUF:30 HH) (Jiachuang: 64 HH) Cassava (2006:20 HH) (2007/2008: 7 HH)
Ban Hard Loi		Khmu Yuan	Corn (FUF:27 HH) (Jiachuang:3 HH) Cassava 2006:35 HH 2007:35 HH
Ban Hardchala		Khmu Lue	Corn (FUF:41 HH) Jiachuang:5 HH) Cassava (2006: 24 HH) (2007: 24 HH)
Ban Phu Luang		Khmu	Corn (FUF:18 HH) Jiachuang:12 HH) Cassava (2006: 17 HH) (2007: 5 HH)

LYPBPC's sign of the Poppy Replacement Program

Cassava waiting to be collected by LYPBPC in Ban Senkhankham Mai (Long)

云南西双版纳州英茂糖业有限公司甘蔗种植预购定金发放表

Sugarcane village-level "pseudo-contract" with MPSMC



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ສາຂາເມືອງນໍ້າແຈ. ສັນຍາເລກທີ:.....

ຂ່າງສັນຍາຮ່ວມການປູກສາລີຣົດປີ 2007

ລະຫວ່າງ

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ແລະ

ກຸ່ມການຜະລິດ ບ້ານ:.....ເມືອງ ນາແລ, ແຂວງຫົວພັນ,ໂດຍ ແມ່ນທ່ານ.....ເປັນຫົວໜ້າກຸ່ມການຜະລິດ:ໄດ້ຮັບການມອບໝາຍຈາກ ສະມາຊິກ ເຊັ່ນສັນຍາຮ່ວມກັບບໍລິສັດ. ຕໍ່ໄປນີ້ເອີ້ນວ່າ : ຝ່າຍ ຂ

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ມາດຕາ1: ວ່າດ້ວຍຄວາມຮັບຜິດຊອບຂອງແຕ່ລະຝ່າຍ

ກ : ຝ່າຍ ກ (ບໍລິສັດ) ມີໜ້າທີ່ຮັບຜິດຊອບຄື:

1 . ຈະສະໜອງທາງດ້ານແນວພັນໃຫ້ກັບ ຝ່າຍ ຂ ຕາມຈໍານວນຄວາມຕ້ອງການ ແລະ ໃຫ້ທວງທັນ ກັບລະດູການ(ແນວພັນ ຂອງຫວຽດ ຫຼືໄຫເທົ່ານັ້ນ) ການສົ່ງແນວພັນຊ້ໍາສຸດແມ່ນຈະບໍ່ກາຍ 20 / 3 / 2007 ເປັນແນວພັນທີ່ມີຄວາມງອກແຕ່70 % ຂຶ້ນໄປ.

2 . ຝ່າຍ ກ (ບໍລິສັດ) ຈະສົ່ງພະນັກງານວິຊາການກະສິກໍາທີ່ປະຈໍາຢູ່ນໍ້າທ່າງບໍລິສັດ ລົງກວດກາແລະ ໃຫ້ຄວາມຮູ້ແກ່ຝ່າຍ ຂ ເປັນປະຈໍາ ແຕ່ລະເດືອນ.

3 . ຝ່າຍ ກ ຈະສະໜອງອຸປະກອນ ແລະ ຢາປ້ານສັດຕູພືດໃຫ້ກັບຝ່າຍ ຂ ໂດຍບໍ່ຄິດໄລ່ລາຄາທັ້ງໝົດ ຖ້າມີການເກີດລະບາດຂອງພະຍາດແລະສັດຕູພືດທໍາລາຍ ແບບຮ້າຍແຮງ(ຍົກເວັ້ນສັດປ້ານແລະສັດປ່າ)

4 . ໃນກໍລະນີຖ້າຫາກເກີດໄພທໍາມະຊາດຂຶ້ນຊຸ່ ເຊັ່ນ: ໄພແຫ້ງແລ້ງ (ສາລີປູກບໍ່ອອກ ຫຼື ອອກມາແລ້ວ ຕາຍຍ້ອນແຫ້ງແລ້ງ),ໄພນໍ້າຖ້ວມ.ຖ້າມີເຫດຜົນແທ້ຈິງ ຝ່າຍ ກ ຈະບໍ່ໃຫ້ທາງຝ່າຍ ຂ ໃຊ້ຄ່າແນວພັນຄືນ.

5 . ຝ່າຍ ກ ຈະລົງເກັບຊື້ຜົນຜະລິດສາລີນໍ ຝ່າຍ ຂ ເລີ່ມແຕ່ ວັນທີ 15/ 10 / 07 ເປັນຕົ້ນໄປ.ສະຖານ ທີ່ ເກັບຊື້ແມ່ນຕາມເສັ້ນທາງ ແລະບ່ອນທີ່ລົດສາມາດໄປໄດ້ (ຕາມບ້ານເປົ້າໝາຍຕ່າງໆ).ຝ່າຍ ກ ຈະມີ ເຄື່ອງສີສາລີ ພ້ອມດ້ວຍນໍ້ມັນຕ່າງໆໃສ່ຈັກມາບໍລິການ ໃນແຕ່ລະບ້ານໂດຍບໍ່ຄິດໄລ່ຄ່າຫຼຸ້ຍຫຍັງທັ້ງໝົດ. ສ່ວນແຮງງານແມ່ນມອບໃຫ້ຝ່າຍ ຂ ເປັນຜູ້ຮັບຜິດຊອບ.

6 . ສໍາລັບການເກັບຊື້ ແມ່ນຈະອີງໃສ່ຄວາມຕ້ອງການຂາຍຂອງຝ່າຍ ຂ. ລາຄາໃນການເກັບຊື້ທາງຝ່າຍ ກ ຈະກໍານົດໃຫ້ເປັນ 2 ລາຄາຄື:

Corn village-level contract with Jiachuang