

Rural Poverty Reduction by China's Agricultural Investment in Northern Lao PDR

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ABSTRACT

Foreign agricultural investment has contributed to poverty reduction in developing countries. China's growing agricultural investment in Laos has attracted more concern around the world. This study contributes to these ongoing efforts by investigating China's agricultural investment in the context of rubber and banana plantation in Northern Lao PDR, including household income, employment, infrastructure and community service. The conclusions state that China's agricultural investors played a particularly active role to local poverty reduction, China's agricultural enterprises accessed to land right by signing land contract and providing payment to land owners. Nearly 80% of employees were local farmers. Chinese enterprises had built roads, hospitals, irrigation systems, presented clothes and food to the poor, training agricultural skills in community level. It is suggested that strengthening the mutual understanding and capacities of enterprises and farmers are essential to enhance the China's agricultural investment and locally rural poverty reduction.

Keywords: China's Agricultural investment, Employment, Social Service, Poverty Reduction

1. INTRODUCTION

1.1 Background

There is growing evidence that investing in developing countries' agricultural sector is among the most efficient ways to reduce poverty and hunger [1,2]. The scholarly argued that Overseas Foreign Direct Investment (OFDI) has contributed to poverty reduction through the employment channel, as well as an increasing in government spending and trade openness [3,4]. China's growing agricultural investments have attracted more concern around the world [5]. It finds that China's OFDI has a positive impact on capital accumulation in developing countries, which also has a stronger effect on employment and productivity growth. Moreover, the growth impact of Chinese OFDI is stronger in low-income countries [6].

The investment of Chinese enterprises in Laos has quickly expanded both in scale and scope especially China's launch of the "Belt and Road" initiative (BRI) [7]. Statistics showed that there were more than 202 agricultural companies investing in Laos and the amount of investment reached to 900 million CNY.

The crops were more than 40 types which related to rubber, sugarcane, rice, corn, cassava, tropical fruits and other crops [8]. China-Laos agricultural investment improve the local development from multiple aspects, it brings in the funds for Laos economic growth, improves the infrastructure and enhances the ordinary citizens' living standards, like building schools, roads, bridges and hospitals for free, which were seldom knew by media [9,10].

However, Under the international context, many observers concerned that China's increasing investment could have modest impact to Laos [11-14]. Studies showed that the overall trends will be a huge increase in demand for rice product supply from Chinese into the future [12,15]. Chinese investors are not just sourced from tropical regions such as raw material, cheap hired labor, agricultural products, but also break biological environment [16]. Cecilie noted that banana has changed local farmers' resource obtaining, use of land and opportunity to develop livelihood [17]. Mark Grimsditch issued that most Chinese companies active in the north operated through contract farming agreements with local farmers, but in recent years the use of land rental agreements has become increasingly common [18,19]. The limited knowledge of companies' practice in Laos

and the connection with international societies, which made challenges to companies' getting understanding by host country, and also affect the Chinese government to make effective policy when face the FDI under the BRI [5].

1.2 The objective of the study

Little analysis has been done so far of poverty reduction by Chinese investors in Laos. This knowledge gap needs to be closed, 1) how the investors negotiate with local governments and farmers for the land contract? 2) Do the investors provide job opportunities to cooperated farmers? 3) What they've done to improve the local community's infrastructures? 3) Do the investors provide trainings on agricultural skills or other community service to farmers? Based on the field survey, the study will answer the above questions.

1.3 The importance of the study



Figure 1 The highlight blue words were the geographical location of the study sites in Lao PDR

Source of image:

<https://upload.wikimedia.org/wikipedia/commons/thumb/9/9b/Provinces-Laos.svg/600px-Provinces-Laos.svg.png> accessed Jan.20, 2020. Sorted by authors.

2.2 Field investigations and key informant interviews

2.2.1 Characteristics of sample companies

Field investigations were based on key informant interview. Interviews were carried in 2015 in Laos and

Aims to clarify the above questions and capture a diverse range of experiences, this study pays particular attention to the China-Laos' agricultural investment in land agreement, labor employment and public welfare in local community, so as to state the poverty reduction role of China's agricultural investor, enhancing the mutual understanding between companies and farmers, strengthening the cooperation and promote poverty reduction in Laos.

2. METHODS AND MATERIALS

2.1 Study Sites

The study investigates 7 Chinese companies in Laos, scattered in 5 Northern provinces, including Luang Numtha, Phongsaly, Bokeo, Oudomxay and Luang Prabang (see Fig.1).

some of the follow-up outreach visits were conducted among 2018 and 2019 for the sampling updating. Survey activities were conducted by vehicle or foot to companies, local farmer's house and local department offices. Collected information included process of land utilization permit, employment and community service so as to qualitatively clarify the central questions of investment impacts on poverty reduction. Details were as following(table1).

Table 1 Basic information of surveyed Chinese companies in 5 Northern provinces in Laos

Particulars	Rubber company A	Rubber company B	Banana company A	Rubber company C	Coffee company A	Banana company B	Rubber company D
Property	State owned	Private owned	Private owned	Private owned	Private owned	Private owned	Private owned
Character	Replacement investment	Replacement investment	Private agriculture	Replacement investment	Replacement investment	Private agriculture	Replacement investment
Establishment in Laos	2006	2000	2010	2009	2011	2014	2007
Investment province	Luang Numtha,	Luang Numtha	Luang Numtha	Bokeo	Phongsaly	Oudomxay	Luang Prabang
land cooperation	Land lease, contract agriculture	Land lease, contract agriculture	Land lease	Land lease, contract agriculture	Contract agriculture	Contract agriculture	Land lease, contract agriculture
Investment area(ha)	6666	6000	133	3108	2933	66	6000
Business scope	Rubber planting, processing and trading	Rubber planting, processing and trading	Banana, fructus amomi planting, trading	Rubber planting, processing and trading	Coffee planting, processing and trading	Banana planting, trading and sale of seeds	Rubber planting, processing and trading

NOTE: Sorted from the field surveys in 2015 and follow up in 2018 & 2019. In order to protect the company information, we use rubber company A or banana company A to state the samples.

2.2.2 Local department officials and village representatives

There were 3 officials from Department of Commerce (Luang Numtha), Bureau of Agriculture and Forest (Luang Numtha), Department of Environmental Protection (Oudomxay) interviewed (totally 7 officials) with an open-ended interview.

A semi-structure interview was also used to villagers or village head/ group leaders, with focal points on family member, source of income, changes on house, food and livelihood. There were 7 villagers' head/farmers from 7 sites were interviewed using open-ended interviews. Collected information/data were organized and categorized to evaluate the investors' impact to farmers.

2.3 Evaluation of the company's impact to poverty reduction and challenges

The impact was evaluated by four main points: land contract process, labors employment, community service done by enterprises. Related causes were concluded and categorized for analysis. Relevant recommendations were suggested with the intention to improve the issue of sustainable investment under BRI and LMC.

3. CONCLUSIONS

3.1 The investors improved local farmers' income

Most of farmers participating Chinese agricultural investment program got more income than before. They had diversified sources of income than before. Take the "3+2" mode as example, farmers need to management the coffee or rubber tree, in the meantime, they should farm their rest of land, which made them doing more work than before and earned more income. Moreover, the rubber company needs more labors to do the daily work in short-term or long-term manner; which were paid higher than other farmers. It was sorted by the coffee company in 2018 that farmers who participated in their program had gotten average income to 6,000CNY per year and the highest one had reached to 20,000 CNY per year. Rubber company A made statistics that farmers worked with company had gotten 800-1000CNY per month, after the operation of rubber factory, farmers' income reached to 10,000-15,000CNY per year. Rubber company D paid all the revenues to farmers from 2014-2016 since the price of market was low at that stage. However, the revenue sharing in the contract was company taking up 40% and 60% revenue

were paid to farmers. The rising of farmer's income also could be evaluated from their improvement of houses, purchasing motorbikes or electric appliances. These indirectly assisted the local community's poverty reduction since the coming of Chinese investors.

investors, they hired about 70% of positive and gradually skilled farmers as the group leaders or regional managers. The proportion did not cover group leaders in village level and the wage workers nearly 100% hired from local community (see Tab.2).

3.2 The investors provided jobs to local farmers

Lao employees took a big portion. More than 70% employees were Laos. Among all the interviewed

Table 2 Staff information of sampling companies

Particulars	Rubber company A	Rubber company B	Banana company A	Rubber company C	Coffee company A	Banana company B	Rubber company D
Number of total employee (In Laos)	\	24	23	18	83	14	25
Chinese employee	\	6	5	5	15	4	7
Lao employee (management/technical staff)	33	18	18	13	68	10	18
Percentage of Lao Labors (%)	\	75%	78%	72%	81%	71%	72%
Short-term workers (per capita)	7,000	\	300	9,000	\	150	\
Average daily income for wages labor (CNY)	40-100	60-100	80-100	\	\	50-70	100-200
Provide Trainings	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The statistics (2015) of Lao employees were in the middle management level of the enterprises and do not cover those in village level.

The companies with tasks on alternative planting provided more job opportunity to local people. Up to the end of 2017, the coffee program had successfully planted 2933ha coffee and covered more than 7,000 households of 143 villages in 6 counties in Phonsaly province, which provided opportunities to more than 30,000 persons, and successfully attracted about 10,000 farmers to plant coffee whose were poppy plant-dependent before. The official of Drug Control Committee in Phonsaly said that there were 186 villages

in coffee program areas, up to the end of 2017, the portion of poppy planting had decreased to 5.25%. These were highly apprised by the Lao government and International Drug Control Committee. The rubber company B invested in Nalian county where was remote and poorer than other areas. In order to solve the shortage of wage workers for daily farming, they built houses for farmers moving from opium planting villages and also picking farmers from villages nearly bordering Vietnam (See Fig.3).



Figure 3 Rubber company B (Nalian county) employed farmers from remote villages about 50 km away; it's 2 hours' round trip by Pick-up truck (Photos: by author).

3.3 The investors improved local infrastructures

The alternative investment companies were guided by Lao governments to remote and poor areas to develop opium replacement program, like Phonsaly province or NaLian County in Luang Namtha. These areas were backwards and had a slow process of industrialization. The challenges to develop program not only in poverty reduction and rural development, but also involve weak infrastructure and the rise in capital inputs, cost, technology and market which were far from adequate for agricultural production.

Rubber company A input huge amount of funds to build new roads for 193.9km(4.9million CNY), 3 stone

bridges, 297 drainage culverts, 14 impounding reservoirs for daily life, 43km drinking water pipelines, 17.8 km electric transmission lines(460 thousand CNY) for 580 persons in 170 villages in Bokeo province. Rubber company B built more than 100km road costing 1.5 million CNY to the contracted villages, 50 houses with electricity and water for free for immigrants from remote villages which had planted poppy before. The coffee company input approximately 6.5 million CNY to build 252.91 km roads to 21 villages, which effectively connected villagers' communication to the outsides. These companies also repaired the classroom, provide new desks and chairs, build new hospitals and donate the medical facilities.





Figure 4 Top left and right: Coffee company had built roads more than 250km, Phonsaly province, June 2018. Bottom left: Agricultural technology training school built by rubber company, Bokeo province, 2015. Bottom right: A hospital built by rubber company in Bokeo province, 2015. Bottom left: Rubber company sent stationery to rural kids, Luang Numtha, May 2017. (Photos: by author or interviewed company)

3.4 The investors provided trainings to farmers.

Each company definitely organized trainings on skills. The company provided training on seedling, management, pest control for officials and farmers more than 3672 persons. The rubber companies had organized

100 farmers' exchanging to MengLa county in China for mutual communication. Even the banana companies presented new cloth, 20-ton rice, digging ditches, sending emergency needs to poor farmers. These positively accelerated the agricultural production and promoted farmers confidence also (see Fig.5).



Figure 5 The technician from coffee company was training farmers and local officials.

3.5 Difficulties need further study

In the study, farmers got income by contract farming, land rent or wage labors. Nearly 80% of employee were local farmers. Chinese enterprises had built roads, hospitals, irrigation systems, presented clothes and food to the poor, training agricultural skills in community level. The research state that Chinese agricultural investors play a particularly active role on poverty reduction.

However, there are more aspects exposed in the survey which are valuable to be further discussed. The contract model, types of crops, regional institutional framework, social and economic condition in the investment area are important factors affecting the China's agricultural

investment. The follow of contract farming, the shortage of labors, the trainings on agricultural skills need to have more communication between companies and farmers. It is suggested that micro-field researches were given to these detailed parts so as to improve China's agricultural investment and locally rural poverty reduction.

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