The Impact of China's Agricultural Overseas Investment on Gender Equality

A Case Study of the Investment of China's Agricultural Enterprises in Laos and Cambodia



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Company profile



SynTao Co., Ltd., founded in 2005, is a leading independent consultancy promoting sustainability and responsibility in China. With our global vision and local practice, we provide consulting, education, and investment services on Corporate Social Responsibility (CSR).

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Abstract

With the continuous acceleration of China's "going global" strategy and the Belt and Road Initiative, China's agricultural overseas investment enterprises (CAOIEs) are faced with increasingly serious social responsibility risks despite the rapid growth. Paying attention to gender equality and improving gender equality issue management capabilities to cope with stakeholder demands are of great significance for CAOIEs to fulfill their social responsibilities, avoid related investment risks, and create a favorable business environment.

Through in-depth research of CAOIEs, this report takes a systematic overview of the management of and practices related to gender equality issues that occur when CAOIEs invest overseas. We found that CAOIEs promote local economic and social development by boosting local farmers' incomes, providing training and building infrastructure, so as to benefit women farmers and local residents in three major areas of the economy: medical, healthcare, and education.

At the same time, however, CAOIEs still have a very limited awareness of and give little attention to gender equality issues and lack the recognition of the impact of these issues on risk and opportunity, the two key factors relevant to the sustainable operation of enterprises. Without an up to date perspective on gender, CAOIEs will carry out business operations that will fail to benefit local women, and in some cases even widen the already existing gender gap in local areas.

Agricultural enterprises' workplaces, products, and their communities are closely related to women's interests as they provide women with work opportunities and development space and also empower women. They are of great significance for corporate and local economic development. Based on the analysis of the investment practices of CAOIEs that invest in Laos and Cambodia, we think that CAOIEs in the future should pay more attention to the important relationship that women's issues have with sustainable corporate development. The enterprises should actively respond to the challenges posed by these gender-related issues and turn challenges into opportunities.

Contents

Abstract	. 1
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Introduction

1.1	Research background	5
	Research purpose	
	Research methods	
1.4	Limitations	6
1.5	Key concepts	7

Gender equality as a key factor in promoting the sustainability CAOIEs

8

4

2.1	Mechanisms for promoting the sustainable development of CAOIEs	
	through gender equality	9
2.2	The Focus of the international community on gender equality through	
	enterprise investment	10
2.3	China's governmental focus on enterprises promoting gender	
	equality	10

03

The General Situation of Social Development and the Status Quo of Gender Equality Advancement in Laos and Cambodia 11

3.1	Laos	12
3.1.1	Brief introduction to Laos	12
3.1.2	Agriculture in Laos	13
3.1.3	China's agricultural investment in Laos	13
3.1.4	Development and the current situation of gender equality in Laos	14
3.1.5	Gender gap in the rural and agricultural areas of Laos	16
3.2	Cambodia	19
3.2.1	Brief introduction to Cambodia	19
3.2.2	Agriculture in Cambodia	19
3.2.3	China's agricultural investment in Cambodia	20
3.2.4	The development of gender equality and its current situation in Cambodia .	21
3.2.5	Gender gap in Cambodia's rural areas and agricultural field	22

04 t

Practice and Observation — Influence of CAOIEs on the Development of Gender Equality in the Host Country

4.1 4.2		28 31
4.2.1		31
4.2.2	Employment models	32
4.2.3	Income	33
4.2.4	Salary 3	36
4.2.5	Welfare benefits	37
4.2.6	Land and production data	37
4.2.7	The direct and indirect impacts on the community economy 3	39
4.3	The impacts of enterprises on medical services and the health of local	
	females	10
4.3.1	Childbirth and medical treatment 4	10
4.3.2	Safe Use of Pesticides and Fertilizers 4	1
4.3.3	Health facilities and garbage disposal	12
4.3.4	Protection of water resources 4	14
4.3.5	Work at night	15
4.4	Impact of enterprises on local women's education	ł7
4.4.1	Professional technical training 4	ł7
4.4.2	Leadership training	19
4.4.3	Support for community educational resources	19
4.4.4	School-enterprise educational cooperation	50

05 Suggestions

Afterword	 56
Bibliography	 57
Appendix	 61

51



Introduction

1.Research background 2.Research purpose

3.Research methods

4.Limitations 5.Key concepts

Introduction

1.1 Research background

By the end of 2016, 24,400 domestic investors in China have set up 37,200 overseas enterprises, scattered in 190 countries and regions worldwide. At the end of the year, the total assets of overseas enterprises amounted to USD 5 trillion.¹ From 2003 to 2016, China's outward foreign direct investment (FDI) increased for 14 years straight. The proportion of investment flows increased from 0.5% in 2002 to 13.5% in 2016, ranking second in the world (countries and regions included). China has thus begun to play a more important role in the global FDI market.²

In response to the growing competition in the international market, CAOIEs are also facing increasingly serious social responsibility risks, especially those related to gender equality issues. According to the 2017 Report on the Sustainable Development of Chinese Enterprises Overseas, 38 stakeholders including the host governments, non-governmental organizations, academic institutions and others expressed overall positive attitudes toward the social sustainable development performance of CAOIEs in the areas listed in the Belt and Road Initiative, but also point out that Chinese enterprises need to make greater efforts to promote "gender equality" and "social impact assessment".

CAOIEs should enhance their capabilities to manage gender equality issues so as to meet stakeholders' demands. This is of great significance for CAOIEs to fulfill their social responsibilities, avoid related investment risks and create a favorable business environment. CAOIEs should follow international conventions, as well as gender equality laws, regulations and policies issued in both the home country and the countries where they are located. This is a prerequisite for enterprises to gain legal and administrative permissions for overseas investment. CAOIEs should improve the institutional arrangements and the operation of practice programs related to labor management, supplier management, community investment and other fields, promote women's development together with stakeholders, and enhance local women's personal skills, living standards, as well as family and social status. This will not only help enterprises to gain social permits but also reduce the costs of communication with and management of staff and local communities, so as to support CAOIEs' sustainable business activities.

Women make up a large portion of the global agricultural population. The ratio reaches as high as nearly 50% in East Asia³ and Southeast Asia. Southeast Asia is a key area for CAOIEs

¹Ministry of Commerce (2017). Statistical Bulletin on China's Foreign Direct Investment in 2016 ²ibid.

³ Database of the Food and Agriculture Organization of the United Nations (FAOSTAT).

1.2 Research purpose

This report hopes to systematically understand the management and practices of gender equality issues in the process of overseas investment conducted by CAOIEs. The report is a record of in-depth research on China's agricultural overseas investment enterprises. The report analyzes the problems and challenges related to gender equality issues faced by these CAOIEs and puts forward relevant proposals in order to help CAOIEs to identify, prevent and manage gender equality risks, and achieve sustainable development.

1.3 Research methods

This report adopts four research methods, namely literature review, questionnaire survey, interview and case analysis.

• LITERATURE REVIEW

The literature review will cover the current situation related to the enactment of laws and policies concerning gender equality, local gender issues and gender equality in the agricultural sector in the countries of Laos and Cambodia. This basic research will contribute to an overall analysis and evaluation of CAOIEs' practices of promoting gender equality in local areas as well as suggestions for sustainable development.

• QUESTIONNAIRE

We consulted the standards for the sustainable development of domestic and foreign enterprises, women's empowerment principles, laws and policies relevant to women, as well as labor management standards or regulations. We also set benchmarks against the measures and indicators that outstanding multinational enterprises have adopted to promote gender equality. We combined these efforts with the goals of our research, reviewed all of the indexes related to our research, and compiled questionnaires tailored to corporate management staff and corporate employees.

In July and August 2017, to conduct research, we went to Laos and Cambodia, and also visited four CAOIEs, including Yunnan Nongken Yunxiang Investment Co. Ltd., Yunnan Pu'er Zhonghe Rubber Co., Ltd., Yunnan Liliang Biological Products (Group) Co., Ltd., and Guangxi Forword Agricultural Technology International Investment Co., Ltd., collecting a total of 77 questionnaires, among them 18 from corporate management staff, 29 from corporate employees, and 30 from local villagers.

• INTERVIEW

Together with the questionnaire, we also interviewed a total of 30 people, including company officials, management staff, employees (laborers/ cooperative farmers), mill operators, local residents and officials (village leaders) as well as the international NGO staff. Combining the survey results with the introduction and evaluation from relevant parties, we established a comprehensive understanding and analysis of CAOIEs' management and practice of gender equality issues.

CASE ANALYSIS

By reviewing the surveyed enterprises' practices related to gender equality issues, we developed three cases. Using these cases as a basis, we analyzed how CAOIEs impact the empowerment of women.

1.4 Limitations

First, there were limitations caused by language barriers and cultural differences. Although we translated the questionnaires into Laotian and Cambodian respectively, most surveyed local farmers were still unable to fill in the questionnaires due to their low educational levels, low literacy levels, and misunderstanding of the questions caused by the cultural differences. We thus had to rely on the accompanying translators to explain the questions in the questionnaires.

Second, given the limited time and manpower available for this research project, we only conducted surveys at four CAOIEs in the two Southeast Asian countries of Laos and Cambodia. We were only able to make an in-depth analysis of the management and practices of three of these CAOIEs so as to showcase the operations and situations of these CAOIEs on the ground. Due to language barriers and the limited number of translators, questionnaires and interviews oftentimes could not be carried out simultaneously. Moreover, the limited time available also negatively impacted the total number of survey samples that we might expect to collect for research.

Third, there are limitations caused by the incomplete questionnaire surveys and answers. There is a lack of overall evaluation and indexes for gender equality in the agricultural industry. This is because the agricultural industry is distinct from other industries, especially with respect to its operations and labor management and their relation to employees and farmers in different regions and enterprises. In addition, different languages and low education levels are the reasons that local farmers had difficulty understanding the survey questions. Therefore, in the questionnaires collected, there are many incomplete answers and responses, which also limit our analyses of the survey results.

1.5 Key concepts

• GENDER EQUALITY

Gender includes biological gender and socially constructed gender. Gender equality mentioned here in this paper refers to the latter — the socially constructed gender. The concept of socially constructed gender is used to describe the demographic characteristics, roles, activities, and responsibilities of the socially formed dichotomy of men or women in a particular society. Society is organized such that socially constructed gender identities determine how society looks at us as men and women, including

expectations for how we should think and act.⁴ Gender equality entails the concept that all human beings, both men, and women, are entitled to the rights to freely develop their personal abilities and make choices without the limitations set by the stereotypes, rigid gender roles and social prejudices. Gender equality means that different behaviors, aspirations, and needs of women and men are given equal consideration, attention and support. It does not mean that women should be exactly the same as men, but that their rights, responsibilities, and opportunities must not be determined by whether they were born male or female.⁵ In this paper, the term gender gap refers to the differences between men and women with respect to rights, obligations, and opportunities to acquire resources and opportunities to participate in society.

• WOMEN'S EMPOWERMENT

Empowerment means that all human beings, both men, and women, have the right to control their own life, including the rights to arrange their own schedules, acquire skills (or obtain recognition for their skills and knowledge), increase self-confidence, solve problems and improve their abilities to live independently. It is both a process and a result.⁶ Empowerment is a multi-level development process, related to the rights to economic, social, political and cultural participation. Women's empowerment aims to enable women to fully participate in economic, social, political, cultural and other activities. It aims to improve the well-being of women and increase the social capital of marginalized women. It aims to enhance women's discursive power for self-development. It aims to break the power relationship resulting from gender inequalities and to provide women with more decision-making power in the process of their own development.

• Overseas Investment

The term "overseas" mentioned in this report refers to the regions outside China mainland, namely the countries and regions with the actual administrative jurisdiction beyond the borders of China. The term "overseas investment" refers to the economic behavior by which an enterprise with its parent company in China, or a person maintaining Chinese nationality—as the main investment body—increases capital value through the cross-border movement and operations of capital, i.e. currency and industrial capital.

⁴ Candida March, Ines Smith, Maitrayee Mukhopadhyay, translated by resource group for social gender consciousness: Social Gender Analysis Framework Guidance. Social Sciences Academic Press, 2004.

⁵ UN Women, UN Global Compact Principle of Empowerment of Women, Economic Development by Gender Equality, the second version, 2011.

⁶ ibid.

Gender equality as a key factor in promoting the sustainability CAOIEs

 Mechanisms for promoting the sustainable development of CAOIEs through gender equality
 The Focus of the international community on gender equality through enterprise investment
 China's governmental focus on enterprises promoting gender equality

Gender equality as a key factor in promoting the sustainability CAOIEs

It is necessary for CAOIEs to obtain legal, administrative and social permission if they aim at achieving long-term operational sustainability. However, most CAOIEs are less concerned about gender equality issues when it comes to gaining permission. Clarifying the mechanisms for gender equality that can, in turn, promote the sustainable development of China's overseas investment will help enterprises understand the importance of gender equality issues and implement relevant practices with the mechanisms as a guiding framework.

At the same time, in order to obtain the necessary permission, when promoting gender equality, CAOIEs should not only comply with the laws, regulations and policies issued in both the home country and the countries where they are located, but also act in accordance with international treaties, agreements and initiatives, and take into consideration the situations of social development in the countries where the investment has been made, especially the status quo with respect to the promotion of gender equality, and the basic characteristics of the industry involved.

2.1 Mechanisms for promoting the sustainable development of CAOIEs through gender equality

From the perspective of business operations, CAOIEs need to invest and acquire not only physical, financial and human capital but also social capital.⁷ Among these forms of capital, the human and social capital is closely related to gender issues as female employees constitute an important component of human capital. Social capital can be achieved by obtaining the recognition, approval, and support from communities containing female residents. Social permission, as a form of social capital, can be used to assess risks. Therefore, CAOIEs should attach importance to gender issues and women's empowerment, so as to obtain social permission, accumulate and enhance social and human capital and ultimately reduce overseas non-traditional risks to obtain the benefits of sustainability.

Specifically, in the field of agriculture, gender issues are especially closely related to enterprise investment. First, a large number of agricultural projects are directly targeted at farmer households involving women. Enterprises usually develop relationships with local farmer households (in the form of employment, land lease and contract farming). As household members (i.e. wives, daughters or mothers), women will be directly influenced by enterprise's investment. At the same time, women's attitudes

⁷ For social capital, OECD defines it as a social network which is based on common standards, values and the understanding thereto and can facilitate the internal cooperation of teams or cooperation between them.

towards investment projects, participation, and modes of participation will also directly affect enterprise operations, or indirectly affect enterprise operations by influencing other household members who work in or have relations with enterprises. Second, in developing countries, agriculture, farmers, and rural areas are inseparable from each another. The sustainability of agriculture, especially in developing and poor countries, depends on farmers and rural areas. Women, especially rural women, are not only confronted with rural challenges such as poverty, but they are the main actors that affected by these challenges. Therefore, the extent to which agricultural investment has promoted gender equality in rural areas will determine rural labor liberation, the increase of land productivity as well as the harmonious and friendly business environment needed for enterprises' sustainable investment practices, which will help to protect and enhance enterprises' economic benefits.

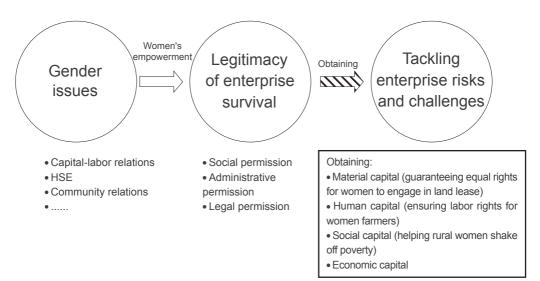


Figure 1:Gender Equality Mechanisms for Promoting the Sustainable Development of CAOIEs

2.2 The Focus of the international community on gender equality through enterprise investment

The international community has paid more attention to the issue of gender equality while raising the standards and requirements to a higher level. In 2010, UN Women and UN Global Compact jointly initiated a call to action, indicating the *Women's Empowerment Principles — Equality Means Business*, which offered seven practical principles to support and empower women in enterprises and other sectors. In 2015, world leaders adopted the *2030 Agenda for Sustainable Development* at the UN summit. In this agenda, the concept of gender equality covered and permeated many targets contained in 16 of the goals established, thus promoting gender equality and empowering all women and girls (10 specific targets were directly set out). The goal of achieving gender equality and empowering all women and girls has been listed as one

of the high-level principles for G20 to implement in the *2030 Agenda for Sustainable Development*. Gender equality has become an issue that cannot be ignored by global enterprises trying to fulfill their social responsibilities and enhance the competitiveness of their sustainable development.

The outstanding multinational enterprises of the globe are promoting the development of women together with stakeholders through institutional arrangements and programs in the fields of labor management, supplier management, and community investment. It has become a global trend for enterprises empower women by supporting women's equal development opportunities, enhancing their professional skills and leadership, and paying attention to the nutrition and health as well as educational development of women and girls in communities. The aforementioned global practices create competitive pressures for CAOIEs.

2.3 China's governmental focus on enterprises promoting gender equality

China's government has given positive attention to and promoted gender equality in the world. In 2015, the Information Office of the State Council released the white paper on *Gender Equality and Women's Development in China*. It points out that China will actively participate in the regional and global promotion of gender equality. In 2016, China National Development and Reform Commission, the Ministry of Foreign Affairs and the Ministry of Commerce jointly issued a document titled *Vision and Actions on Jointly Building the Silk Road Economic Belt and the 21st-Century Maritime Silk Road*. It set requirements that CAOIEs must follow during overseas operation and management, to actively help develop the local economy, increase employment, improve people's livelihood, and take the initiative to shoulder social responsibilities. It makes clear that China will promote extensive exchanges among youth and women through the Belt and Road Initiative.

The General Situation of Social Development and the Status Quo of Gender Equality Advancement in Laos and Cambodia

- 1. The two profiles
- 2. The two countries in agriculture
- 3. China investing in agriculture in both countries.
- 4. The development and status quo of gender equality in both countries.
- 5.Gender gaps in rural and agricultural areas of the two countries.

The General Situation of Social Development and the Status Quo of Gender Equality Advancement in Laos and Cambodia

The project team has utilized a literature review to go through the current situation of gender equality advancement in the field of agriculture in Laos and Cambodia, two countries that have received a great deal of investment from CAOIEs.

3.1 Laos

3.1.1Brief introduction to Laos

Laos is the only landlocked country in Southeast Asia with a territorial area of 236,800 km². The Mekong River flows through Laos with a length of 1,900 kilometers.

In 2016, the GDP of Laos reached nearly USD 15.903 billion with GDP per capita recorded at about USD 2,353.⁸ Despite its actual GDP growth rate of 7.023% (higher than the average rate of 6.4% achieved by other Asian emerging economies), Laos remains as one of the most economically underdeveloped countries in the world. The agricultural sector plays a leading role in the national economy as the industrial base is weak in Laos. The population living in rural areas accounts for 60.35% of the total population. However, agriculture contributes less than 20% to the total GDP.⁹

Women make up 50.2% of the total population of Laos, which amounts to about 7.02 million. Labor population in the country is about 3.44 million, of which women share 51.0%.¹⁰ The country has a total of 68 nationalities, which can be divided into three ethnic groups: Lao Loum, Lao Theung and Lao Soung.¹¹ Most of the citizens are Theravada Buddhists. About 65% of Laotians are followers of Buddhism, which is stipulated as the national religion in the constitution.¹²

The government of Laos welcomes foreign investment. In 2010, the government of Laos issued the amended Investment Promotion Law, which provided investors with legal

⁸ Data source: World Bank database. http://data.worldbank.org

⁹ The proportions of the three major industries in GDP are respectively: 19.48% for agriculture, 32.50% for industry, and 48.02% for the service industry. Data source: World Bank's database. http://data.worldbank.org

¹¹ The number and classification of Lao nationalities are not the same in different types of literature. This report selects the report 2012 of the Food and Agriculture Organization of the United Nations: Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

¹² The Ministry of Commerce Foreign Investment Cooperation Country (Region) Guidelines - Laos, 2016

protection and preferential investment policies. Industries of agriculture, manufacturing, handicraft and service were listed as promoted sectors where investment was encouraged. According to Laos Socio-Economic Newspaper, as of August 2017, 53 countries have made investments in Laos. These investments are focused in the mining, hydroelectricity, agriculture, service, manufacturing industry and handicraft industries. In 2016, the flow of foreign direct investment in Laos reached about USD 997 million, accounting for 6.27% of the total GDP.¹³

3.1.2 Agriculture in Laos

Agriculture is still the mainstay of development in Laos, and serves as the main source of livelihood for about 70% of the population.¹⁴ In 2016, Laos expanded its agricultural value by about USD 2.74 billion, but due to the increasing importance of other industries, such as mining, hydroelectricity and service, the proportion GDP generated by the agricultural industry dropped from 61.2% in 1990 to 19.48% in 2016.¹⁵

About 10.26% of the land in Laos is used for agricultural activities.¹⁶ The planting industry occupies a very important place in Laos' agricultural production.¹⁷ Laos is rich in land resources and has a population density of 28 people per square kilometer. It features a tropical monsoon climate with abundant rainfall and sufficient heat. Climate and geographical conditions are very suitable for crop growth. Although most of the agricultural products grown in Laos are still used for domestic consumption. This is changing, however, with changes in economic development and international trade. In recent years, the export of agricultural products increased by more than tenfold, to an amount equivalent to USD 436 million, accounting for 14% of the total value of exports, of which banana constituted 4.5%.¹⁸

About 60.35% of Laos' population lives in rural areas.¹⁹ Most of the labor force is concentrated in the agricultural sector, employed informally. This leads to Laos' relatively low labor productivity, compared with other countries. In particular, agricultural production is still at a stage of underdevelopment. The added value per capita for the agricultural population in Laos was USD 927 in 2016, which increased by only 5.34% since 2006. In 2012, about 28.6% of the rural population in Laos still lived below the national poverty line.²⁰

20 ibid.

¹³ Data source: World Bank database. http://data.worldbank.org

¹⁴ World Bank (2014), Lao PDR Development Report 2014: Expanding Productive Employment for Broad-Based Growth, Washington DC: World Bank Group, p.25.

¹⁵ Data source: World Bank database. http://data.worldbank.org

¹⁶ Data source: ibid.

¹⁷ The Ministry of Commerce Foreign Investment Cooperation Country (Region) Guidelines - Laos, 2016

¹⁸ Data source: The Observatory of Economic Complexity. MIT. https://atlas.media.mit.edu/en/

¹⁹ World Bank's database. http://data.worldbank.org

Usually, a farmer with a high school education in Laos is expected to have a wage of about LAK 4,100 (about USD 0.51) per hour. If the farmer should move to the city and engage in non-agricultural production, the farmer can earn about LAK 7,450 (USD 0.93) per hour. If the farmer should move to Thailand, he / she can earn about LAK 12,600 (USD 1.58) per hour.²¹ Due to low production capacity and low income level, a large number of rural residents have left the countryside in recent years, either to migrate to Vientiane (the capital), other cities or areas in Laos, or to travel abroad to work in Thailand and earn a higher salary. This leads to the phenomenon that the existing labor force in Laos' rural areas have low levels of education and skill, and cannot cope with the transformations that stem from changes in the economic structure. The development of the private sector, thus, faces the toughest challenge due to the low quality of the labor force and the country's low labor productivity.

3.1.3 China's agricultural investment in Laos

China has been ranked at the top for many years in terms of foreign investment in Laos. By the end of 2016, China's accumulated direct investment in Laos has reached USD 5.5 billion²², second only to Singapore when compared to China's total investment in all other ASEAN countries. There are about 764 investment projects that involve 14 industries, including the industries of mining, agriculture, electricity, handicraft, and tourism.²³

China has issued several policies to support the investment and agricultural cooperation carried out by CAOIEs in Laos. In 2000, China's government listed the development of Laos' rubber industry as one of the key cooperation projects between China and Laos. In March 2004, both countries' governments signed 11 agreements, including the *Agreement on Economic and Technical Cooperation between the Government of the People's Republic of China and the Government of Lao People's Democratic Republic.* In the same year, the government of Laos announced the prohibition of opium poppy planting in the four northern provinces, actively participated in an international drug control cooperation, and implemented the opium poppy substitution planting plan and the national poverty reduction plan.²⁴ In 2004, China established the "122 working group" to promote and coordinate China's enterprise investment in Laos and Northern Myanmar and the drug substitution planting. Chinese enterprises that participated in cross-border alternative cultivation could gain a number of concessions granted by China's government, including the relaxation of restrictions on investment conditions and labor

²¹ Emerging markets consulting; Lao PDR: The Labor Shortage

²² Ministry of Commerce (2017). Statistical Bulletin on China's Foreign Direct Investment in 2016

²³ Data source: Chen Dinghui (2017). Laos: Review of 2016 and Outlook for 2017. Around Southeast Asia, (1), 14-22.

²⁴ Research on Yunxiang Company's "Going-out" Rubber Development

regulations, as well as import tariff subsidies and VAT deduction.²⁵ In 2009, the working groups of China's Yunnan and Northern Laos drew up the Northern Laos Development Plan. It set the target for the planned rubber plantation areas which would be expected to reach 100,000 hectares in 2015 and 150,000 hectares in 2020.²⁶

China's agricultural investment in Laos increased from USD 31 million in 2000 to USD 350 million²⁷ in 2010, up more than tenfold in ten years.²⁸ Eleven percent of China's investment projects approved from 2000 to 2011 were agricultural projects, covering including crop planting, forestry, aquaculture, and processing and marketing of agroforestry products.²⁹ Geographically, China's investors were concentrated in northern Laos, mainly developing plantations for such crops as rubber, rice, sugar cane, corn, cassava, jatropha, castor beans, vegetables, tropical fruits, and tobacco.³⁰

According to the official statistics from Laos, by the end of the first guarter of 2015, a total of 735 Chinese enterprises have invested in Laos. Nearly 400 of them have been documented in the embassy, including about 125 agricultural enterprises (only two of which were state-owned enterprises). More than 90 of the 125 agricultural enterprises engaged in planting, while rubber plantation enterprises constituted more than half of the total.³¹ China's agricultural projects in Laos often adopt the model of "exclusively owned enterprise", "4+1 contract farming"³²or "3+2 contract farming".³³

²⁵ Lu, J. (2015). Tapping into the rubber market: opium replacement and the role of rubber in developing Laos. Transnational Institute website, May, 18.

²⁶ (Germany) Heike B., (USA) Kate, L.; Compiled by Zhao Yaqiao and Zhang Yi. Kunming: Yunnan Science and Technology Press, June 2012.

²⁷ International Institute for Environment and Development (IIED) (2012). Agricultural land acquisitions: a lens on Southeast Asia, April 2012. Briefing: The global land rush. London: IIED.

28 2010 is the latest relevant data found by the project team. In the past seven years, China's investment in Laos did not make any distinction among industries.

²⁹ GuoJiguang China's Enterprises' Direct Investment in Laos and Its Impact. Southeast Asian Studies5 (2013): 36-42.

³⁰ Global Environment Institute Investment Management System in Laos and Overview on China's Investment in Hydropower, Mining and Agriculture in Lao, 2015.

³¹ Refer to Dong Xiangshijie: Research on the Mode of Agricultural Investment and Production in Laos by China's (Yunnan) Enterprises(PhD-thesis, Yunnan Agricultural University), 2016 ³² The "4 + 1" mode refers to the mode in which civilians or villages provide land, and the company is

responsible for reclamation and management, labor, technology and product acquisition.

³³ "3 +2" mode refers to the mode in which the company provides seedlings and means of production, technical guidance, product acquisition, and civilians provide land, labor for joint operation.

3.1.4 Development and the current situation of gender equality in Laos

The Constitution of Laos amended in 2003 stipulates that the state, society, and families should work to implement developmental policies, support women's progress and protect the legitimate rights and interests of women and children. Men and women are entitled to equal rights in political, economic, cultural, social and family affairs. The National Assembly of the Lao PDR passed the Law on Development and Protection of Women in October 2004. The law provides the legal framework and measures to protect the interests of women and defines the responsibilities that the state, society, and families should shoulder so as to improve the status of women and eliminate all forms of discrimination against women. This law is aimed at preventing and combating the trafficking of women and children, as well as combating domestic violence against women and children. In 2010, Laos established the National Assembly Women's Caucus, which focuses on incorporating gender equality issues into the legislative process and supervising the implementation of the Constitution, gender equality as well as laws and policies related to women's progress and maternal issues. In addition, Laos also implemented the National Growth and Poverty Eradication Strategy and formulated a clear plan of action to promote gender mainstreaming in agriculture, education, health, transportation and political speech.³⁴ Laos has formulated and launched the National Strategy for the Advancement of Women (2016 - 2025) and its action plan and promised that it will continue to implement policies for gender equality until 2030, including the national social and economic development plan.³⁵

The *Global Gender Gap Report*³⁶ published by the World Economic Forum in 2016 showed that Laos stood at a score of 0.724 (0 for the largest gap, 1 for no gap) for the gender gap index, ranking 43rd out of all 144 participating countries, at the top middle position, and second only to the Philippines when compared to only the 9 other Southeast Asian countries.

In the economic field, the female labor force participation rate in Laos in 2016 was 77.81%. The ratio of men to women with respect to labor participation was 100.52%, much higher than the world average of 67.639%.³⁷ However, the employment rate of the female vulnerable

³⁴ Pursuit of Balance: Assessment of Social Gender Impact for Water Conservancy and Hydropower Projects/ (Australia) Michael S. Simon, (Australia) Virginia S.; compiled by Shi Guoqing et al. - Nanjing: Hohai University Press, September 2016.

³⁵ See the speech of deputy director of Ministry of Foreign Affairs of Laos, ThonglounSisoulith at the 2015 World Summit for Women. http://www.unwomen.org/en/get-involved/step-it-up/commitments/lao-pdr

³⁶ Leopold, T. A., Ratcheva, V., &Zahidi, S. (2016). The global gender gap report 2016. In Geneva: World Economic Forum. This Report weighs the gender equality from economic opportunity, education level, health and survival, and political empowerment, and to some extent reflects the status and development of gender equality issue in each country.

³⁷ Data source: World Bank's database. http://data.worldbank.org

groups in Laos³⁸ stood very high at 88.92% in 2010, while the rate for males was 78.87%.³⁹ This indicates that when compared to men, there are far more women who work at home either with or without salaries or self-employ themselves in Laos. Among all women employed, agriculture has become the industry that offers the most employment opportunities for women. In Laos, 71% of households, including 40% of the urban households, claim to be engaged in the economic activities for agriculture, forestry, animal husbandry and fishing.⁴⁰

In the field of education, the primary school enrollment rate for girls in Laos increased from 77.99% in 2005 to 92.15% in 2015. The secondary school enrollment rate for girls was 32.17% in 2005 and 53.53% in 2015.⁴¹ In addition, the gender gap in education in Laos is shrinking, and women perform even better than men, as shown in some data. In 2005, the primary school dropout rate for school-age girls in Laos was 22.01%, while the dropout rate for boys in the same year was 16.83%. This indicates an expanding gender gap. As of 2016, the primary school dropout rate for girls dropped to 7.85%, only a little higher than the dropout rate of 6.75% for boys.⁴² In general, although the situation of women's education has been improved, women's literacy rates and education levels are still much lower than those of men. The data from the Global Gender Gap Report shows that the literacy rate for men in Laos in 2016 was 87%, compared with only 73% for women.

In healthcare, the maternal mortality rate in Laos decreased from 418 per 100,000 people in 2005 to 197 per 100,000 people in 2015. The incidence of malnutrition for girls under 5 years of age in Laos dropped from 46.80% in 2006 to 42.10% in 2011. The average life expectancy for women also rose significantly from 63.14 in 2005 to 67.83 in 2015 in Laos.⁴³

In terms of political participation, more and more women play an important role in national public affairs. According to the latest *Report on the Implementation of the Convention on the Elimination of All Forms of Discrimination against Women*⁴⁴ submitted by Laos, there were 33 female members out of the 132 members in the Seventh National Assembly (2011 - 2015), accounting for 25% of the total number of members. In government agencies, there were six female ministers or officials at the same level, and 20 female deputy ministers or officials at the same level. There were 70 female directors, three female ambassadors, 11 female district governors and 191 female village chiefs. Women in government sectors occupied 43% of the total number of civil servants.⁴⁵

³⁸ Employment rate of vulnerable groups refers to the proportion of the employed persons from unpaid family and self-employed persons in all the employed population.

³⁹ Data source: World Bank's database. http://data.worldbank.org

⁴⁰ Country Gender Assessment for Lao PDR. Asian Development Bank, 2012

⁴¹ Data source: World Bank's database. http://data.worldbank.org

⁴² Data source: World Bank's database. http://data.worldbank.org

⁴³ Data source: World Bank database. http://data.worldbank.org

⁴⁴ Laos The Convention on the Elimination of All Forms of Discrimination against Women CEDAW / C / LAO / 8-9

⁴⁵ Quoted from the UN National Report Submitted as per Paragraph 5 of the Annex to Resolution 16/21 of Human Rights Council - Lao People's Democratic Republic

Index	Male	Female	Year of Data	Sources of data	
Economy					
Labor force participation rate (over 15 years of age)	77.41	77.81	2016	The World Bank	
Employment rate for vulnerable groups (%)	78.87	88.92	2010	The World Bank	
Education					
Primary school	83.17	77.99	2005	The World Bank	
enrollment rate (%)	93.25	92.15	2015		
Middle school	38.08	32.17	2005	The World Bank	
enrollment rate (%)	55.05	53.53	2015		
Primary school	16.83	22.01	2005	The World Bank	
dropout rate (%)	6.75	7.85	2016		
Literacy rate (%)	87	73	2016	The World Economic Forum	
Healthcare					
Maternal mortality	-	418	2005		
rate (per 100,000 people)	-	197	2015	The World Bank	
Incidence of	48.3	46.80	2006	The World Bank	
malnutrition (%)	45.5	42.10	2011		
Average life	60.41	63.14	2005	- The World Bank	
expectancy (year)	64.81	67.83	2015		

3.1.5 Gender gap in the rural and agricultural areas of Laos

The Lao government has made great efforts in gender equality and has also achieved some results. In addition, from a legal perspective, the state does not exclude women from social governance, employment or higher education. However, due to the existence of numerous social and cultural constraints, Laos still has much room for improvement in gender equality issues, especially in rural areas and agricultural industry.

• FEMALE HOUSEHOLDERS ARE FACED WITH HIGH PROPORTIONS OF POVERTY.

The Lao government has always put emphasis on poverty reduction and has invested a large number of funds in poverty reduction. For instance, the Poverty Reduction Fund established 10 provinces from 2012 - 2015, covered 1,951 villages in 42 poverty-stricken areas nationwide, with the cumulative amount reaching USD 65,700,000. The direct beneficiaries amounted to 683,797 persons, half of whom were females. These efforts have brought about certain results, as the proportion of the poor in Laos has decreased from 25.6% in 2007 - 2008 to 16.8% in 2012 - 2013.⁴⁶

However, there is still a large portion of the rural population struggling on the poverty line, and suffering from problems of seasonal food shortages. These problems are particularly prominent in families with female householders. Families with female householders account for only 10% of the total number of families in Laos, but in general, they are poorer than families with male householders. For example, in the Attapeu Province of Southern Laos, only 8% of the families have female householders, but all live under the poverty line. In Sekong and Savannakhet provinces, about 80% of female householders come from poor families.⁴⁷ A study carried out by the Asian Development Bank and the World Bank in 2012 showed that 80% of the female householders in Laos live below the poverty line.⁴⁸

• VERY FEW WOMEN OWN THE MEANS OF PRODUCTION, SUCH AS LAND AND LIVESTOCK.

Women's output and efficiency in agricultural production, and their discursive power in families and in the villages and towns are closely related to the land areas they own and the quality of this land. According to the FAO's statistics on gender and land rights, women only own 9.1% of the agricultural land in Laos. In addition, female householders make up only 10% of the total householders in Laos and are concentrated mainly in urban areas. Less than 5% of householders in rural areas are females, most of whom fall into the category of Lao Loum widows, which indicates that women are disadvantaged in agricultural production.⁴⁹

The main ethnic groups in Laos implement the matrilineal succession system, through which the youngest daughter in the family will inherit the land, live with her husband in her parents' home after marriage, and usually shoulder the responsibility to provide for her parents. Therefore, women's share of land ownership should surpass that of men. During the 1990s, Laos implemented a land ownership registration system. In the process of registration, the ownership of land was changed, leading to a huge disparity between the number of original land owners and the owners' names registered in the new land certificates (as shown in Table 2). This signifies a fact that men, who originally owned only 18% land property rights, after registration, would claim 58% of land property

⁴⁶ Data source: Laos The Convention on the Elimination of All Forms of Discrimination against Women CEDAW/C/LAO/8-9; Asian Development Bank, (2015).Promoting Women's Economic Empowerment in Cambodia.

⁴⁷ Data source: World Bank, (2007). Lao PDR House Wiring Program: Final Report. Vientiane: World Bank.

⁴⁸ Laos The Convention on the Elimination of All Forms of Discrimination against Women CEDAW / C / LAO / 8-9 ⁴⁹ Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

rights that recorded on the new land certificates. Nearly half of the women who originally owned 30% land property rights lost these rights during the registration process. Only 13% of the land formerly shared by husband and wife was registered as the common property owned by the couple, and the remaining 87% of the land was registered under the name of the male.

Original Ownership of Land			Names Registered on the Land Certificates		
	#	%		#	%
Husband's family	798	18	Husband's name	2,470	58
Wife's family	1,254	30	Wife's name	696	16
Common property	2,203	52	Couple's name	279	7

Table 2: Land Ownershi	ip Changes in Laos
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Data source: Lao The Report on the Implementation of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW/C/LAO/1-5)

• WOMEN'S LITERACY RATES ARE FAR LOWER THAN THOSE OF MEN.

Generally speaking, although the Lao government has made great efforts to improve women's education and achieved tremendous achievements, the literacy rate in rural areas still lags far behind that in urban areas, and women's literacy rates are far lower than those of men. As shown above, women's literacy rates in Laos in 2016 was 14% lower than that of men.

Many reasons contribute to this phenomenon. One of them is that, compared with men, women in rural areas need to spend more time to take care of their families and accordingly have less free time, to learn cultural knowledge and new agricultural skills for the purposes of increasing economic income and shaking off poverty. The third survey on expenditure and household consumption in Laos from 2002 to 2003 showed that men and women spent almost the same amount of time in agriculture. Women spent 2.3 hours a day and men 2.5 hours. In addition, women spent 2.6 hours on housework, while men only 0.6 hours.⁵⁰ The work of rural women in Laos includes: (1) almost all of the housework; (2) 50% - 70% of rice planting; (3) 50% of livestock feeding (pigs, chickens, ducks and geese); (4) 30% - 50% of fishing; (5) at least 50% of economic crop production; (6) 70% of opium poppy cultivation (in minority villages and towns); (8) most of the planting of vegetables and fruits in the courtyard; (9) textile, (baskets, etc.) weaving, housing construction; and (10) firewood and wild herbs collecting.

⁵⁰ Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

• CULTURAL CUSTOMS AFFECTING GENDER EQUALITY.

There is no doubt that the traditional ideas of a country will, to a large extent, promote or impede the achievement of the goal related to gender equality. This phenomenon is more obvious in rural areas because the educational resources in these areas are relatively scarce, and public assistance is limited. Some traditions that do not respect women and women's rights have not yet been abolished.⁵¹

Lao Loum, the main ethnic group in Laos, accounts for about 65% of the population, Lao Theung about 22%, and Lao Soung about 13%, most of whom belong to the Hmong people.⁵² Lao Loum people follow the matrilineal succession system, through which the youngest daughter in the family will inherit the land, live with her husband in her parents' home after marriage, and usually shoulder the responsibility to provide for her parents. However, even if there exists the tradition of a matriarchal society, the Lao Loum females are still reduced to the subordinate position in political and social affairs. The Lao Theung ethnic group integrates both patriarchal and matriarchal systems but conforms more to the patriarchal system. The family structure of the Hmong people, the main ethnic group belonging to Lao Soung, features a typical patriarchal system. The male descendants inherit the land, while the female descendants leave home to live with their spouses. Due to the lack of support from the original families, compared to Lao Loum and Lao Theung, women of the Hmong people remain in an even more subordinate status.⁵³

3.2 Cambodia

3.2.1 Brief introduction to Cambodia

Cambodia is located in the south of Indochina Peninsula, with a territorial area of 181,000 km². The Mekong River runs across the whole territory from north to south.

Cambodia is one of the fastest growing economies in Asian developing countries in recent years. From 2011 to 2014, Cambodia witnessed an economic growth rate of over 7% for four consecutive years. In 2016, Cambodian annual GDP reached about USD 20.017 billion, and the proportion of the three major economic sectors in GDP was

⁵³ Laos The Convention on the Elimination of All Forms of Discrimination against Women CEDAW / C / LAO / 1-5

⁵¹ Laos The Convention on the Elimination of All Forms of Discrimination against Women CEDAW / C / LAO / 8-9
⁵² The number and classification of Lao nationalities are not the same in different types of literature. This report selects the report 2012 of the Food and Agriculture Organization of the United Nations: Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

broken down as follows: agriculture 26.66%, industries 31.74%, and services 41.60%.⁵⁴ In July 2016, the World Bank announced that Cambodia formally rose from a least developed country to become a lower middle-income country.

According to the statistics of 2015, Cambodia had an estimated population of 15.68 million people, of whom women made up 51.2%. The labor population was estimated at 8.75 million, of whom women accounted for 48.7%.⁵⁵ There are more than 20 ethnic groups in Cambodia, with the main ethnic group Khmer constituting 80% of the total population. Religion plays a key role in the political, social and daily life of Cambodian people. Buddhism is the national religion, with followers of Theravada Buddhism occupying more than 85% of the national population. In addition, there are also followers of Christianity and Islam.

The Cambodian government takes the foreign direct investment as the main engine for the economic development and gives equal treatment to the foreign and domestic investment. The encouraging policies in Cambodia are mainly manifest in the sectors of agriculture and tourism.⁵⁶ According to the provisions in the *Investment Law*, the fields including innovation and high-tech industry, tourism, agriculture, processing industry, and regional development of rural areas are the key areas that the Cambodian government encourages to invest in, and are exempt from all or part of the tariffs and taxes. In 2016, Cambodia absorbed a total foreign investment of USD 2.015 billion, an increase of 25% over the same period, most of which flowed into the financial sector (USD 539 million), infrastructure construction (USD 390 million), real estate sector (USD 370 million), and agriculture sector (USD 232 million).⁵⁷

3.2.2 Agriculture in Cambodia

Agriculture is one of the pillars of the national economy of Cambodia. In 2016, the agricultural added value was about USD 4.231 billion, an increase of about 1.2% from the previous year, and the per capita added value of agricultural population was about USD 801, increasing by 15% over the past ten years.⁵⁸ The role of industry is increasing, and the role of agriculture in Cambodia's economy has been reducing year by year, dropping from 50.07% in 1995 to 26.66% in 2016.⁵⁹ However, by 2014, the population still primarily engaged in agricultural activities, accounting for 45.3%

⁵⁴ Data source: World Bank's database. http://data.worldbank.org

⁵⁵ Data source: World Bank's database. http://data.worldbank.org

⁵⁶ Ministry of Commerce, Guidelines for Foreign Investment and Cooperation Countries (Regions) - Cambodia,

⁵⁷ Source: National Bank of Cambodia, transferred from Khmer Daily. www.khmertimeskh.com/news/34577/fdiup-25-/

⁵⁸ Data source: World Bank database. http://data.worldbank.org

⁵⁹ FAO Country fact sheet on food and agriculture policy trends, April 2014.

of the total population, and about 79.5% of the population living in rural areas.⁶⁰ The agricultural land covered an area of about 54.6 thousand square kilometers, accounting for 30.13% of the total area of Cambodia.⁶¹ Moreover, the agriculture has made a great contribution to poverty reduction in the country. Over the last decade, about half of the poor population has benefited directly from the increased price and yield of rice, and the proportion of poor people in rural areas has decreased from 54.2% in 2003 to 20.8% in 2012.⁶²

The major agricultural products in Cambodia are rice, rubber, corn, and cassava. The major sources of income for most farmers is the cultivation of rice and its primary products, accounting for about 75% of the total income of the agricultural population. The sources of the remaining 25% are rubber and other crops. In 2015, the rice planting in Cambodia covered an area of 305.1 hectares, and the total yield of rice reached 9.335 million tons, an increase of 0.12% over the same period. While accounting for the rice consumed by the domestic population and the loss in the process of harvesting, there were still 4.5 million tons left.⁶³ In 2015, the export of agricultural products reached 4.157 million tons, of which the export of rice reached 544.8 thousand tons, an increase of 48.1%. It is worth noting that China has gradually become the most important export destination of rice for Cambodia over the past five years. In 2011, only 0.047% of rice in Cambodia was exported to China, compared with 23% in 2016, the highest among all exporting countries of rice.⁶⁴

Backward infrastructure and technology, and lack of funds and talents are the biggest constraints for the agriculture in Cambodia. According to the statistics of the Ministry of Agriculture, Forestry and Fisheries in Cambodia, most Cambodian farmers are small farmers who own less than two hectares of land. Besides, with the acceleration of industrialization in Cambodia, more and more young people leave the rural areas for other employment opportunities, and the consequent shortage of labor will have negative impacts on the future agricultural production. However, the young people who return to their hometowns may become the important information resources from which people in rural areas learn about nutrition and health of children, as well as ideas related to agricultural technologies or the commercialization of agricultural products.

⁶³ (2016c). Hun Sen's Ten-Point Plan for the Development of Cambodia's Agriculture. www.jianhuadaily.com. http://www.ccpit.org/Contents/Channel_4013/2016/0729/676915/content_676915.htm

⁶⁰ MAFF's Annual Report, 2015-2016 using NIS's CSES 2014

⁶¹ Data source: World Bank's database. http://data.worldbank.org

⁶² Data source: ibid.

⁶⁴ Data source: The Observatory of Economic Complexity. MIT. https://atlas.media.mit.edu/en/

3.2.3 China's agricultural investment in Cambodia

In 2016, China was the biggest source of investment of Cambodia with an investment of USD 502 million,⁶⁵ accounting for 22.02% of the total foreign investment; the investment in agriculture reached USD 55 million, accounting for 10.96 % of China's total investment in Cambodia.⁶⁶ Among all the Cambodia's foreign agricultural investments (USD 237 million) this year, the investment from China accounted for 23.21%.⁶⁷ The private enterprises dominated the enterprises of investment, accounting for about two-thirds.⁶⁸

In 2000, China and Cambodia signed the *Memorandum of Understanding on Agricultural Cooperation between China and Cambodia*; in 2002, agriculture was identified as one of the three major areas of key cooperation between the two countries; in 2010, the two countries signed an agreement to strengthen the agricultural cooperation between China and Cambodia; in October 2016, the two countries signed the *Summary of the China - Cambodia Agricultural Cooperation Conference*.⁶⁹

At present, 53 agricultural enterprises have joined the Agricultural Association of the Chinese Chamber of Commerce in Cambodia, accounting for 16.6%⁷⁰ of all 319 Chinese enterprises which invest in Cambodia. By the beginning of 2017, China has carried out about 30 agriculture-related projects in Cambodia, covering an area of about 237,406 hectares. However, only 42,081 hectares of land have been reclaimed, most of which were for rubber plantations.⁷¹ Besides, China has also invested 7 granary projects in Cambodia, producing and processing 699,816 tons of rice a year.⁷²

3.2.4 The development of gender equality and its current situation in Cambodia

Cambodia's Constitution stipulates that citizens of both genders are equal before the law, enjoy equal rights and freedoms, and perform the same obligations. In addition to the Constitution, Cambodia has adopted other regulations and specific measures to prohibit

⁷¹ Refer to ChheangVannarith (July 28, 2017) China and Investments It Has Made In Cambodia. Khmer Times. http://www.khmertimeskh.com/5075376/china-investments-made-cambodia/

72 Ibid.

⁶⁵ According to the Statistical Communique on Outward FDI in 2016issued by the China's Ministry of Commerce, China's investment in Cambodia reached USD 626.00 million and the stock was USD 4.369 billion in 2016. In order to ensure data consistency, the project team chose to use the data from National Bank of Cambodia.

⁶⁶ Data Source: National Bank of Cambodia. National Bank of Cambodia Annual Report 2016. April 2017.

⁶⁷ Data source: ibid.

⁶⁸ Sinosure: Report on the Status of Country Investment and Management Facilitation

⁶⁹ Refer to www.china.com.cn: http://www.chinanews.com/cj/2016/10-19/8036883.shtml

Chinese Chamber of Commerce in Cambodia: www.cambo-china.com/chinaneswid.asp? id=11689

⁷⁰ Open List of Foreign Investment Enterprises (Institutions) Disclosed by the Ministry of Commerce for Recording in November 2017

discrimination against women and to guarantee the basic rights of women, including the *Law on the Prevention of Domestic Violence and Protection of Victims, Monogamy Law and the Law on Prohibition of Human Trafficking and Sexual Exploitation*. Moreover, the principle of equality between men and women is also included in other major legislation, including the *Labor Law, the Marriage and Family Law, the Criminal Code and the Civil Code*. In order to ensure that all activities of the competent authorities and public institutions perform these obligations, the government of the Kingdom of Cambodia has authorized the Ministry of Women's Affairs and the National Women's Committee of Cambodia to monitor the activities of the competent authorities and public institutions in relation to the principle of non-discrimination against women. At present, Cambodia is implementing the fourth phase of a 5-year strategic plan of gender equality and women's empowerment, that is, *Neary Rattanak IV (2014 - 2018)*.

The introduction of a series of policies and regulations has guaranteed the rights of Cambodian women to a great extent, allowing women to have made great progress in each field. However, the gender gap is still obvious. According to the *Global Gender Gap Report* in 2016, Cambodia's score for gender gap was 0.658, ranking 112nd. It was in a relatively backward position among the participating countries, the lowest among the 9 participating Southeast Asian countries.

In the economic field, Cambodia's female labor force participation rate was 75.557% in 2016, 25 percentage points higher than the world's average level; the ratio of men and women for labor participation was 86.993%.⁷³ In Cambodia, 52.8% of women are employed in agriculture, which is far higher than 29.1 % of the service industry and 19.1% of the industrial industry.⁷⁴

As for education, according to the data from the World Bank, the enrollment rate of girls in primary school in Cambodia has increased from 93.64% in 2006 to 96.22% in 2016. Moreover, the gender gap is gradually shrinking. For example, the girl's graduation rate for primary school had been 11% lower than that of boys before 2001, but since 2007, girls have overtaken boys. In 2015, the graduation rates were 95.87% (girls) and 94.48% (boys) respectively. In general, although the situation of women's education has been improved, women's literacy rates and education levels are still much lower than those of men. According to the data in the *Global Gender Gap Report*, the literacy rate of Cambodian men was 85% in 2016, while 72% of women, which was still a considerable gap.

As for health care, the death rate of Cambodia's pregnant and parturient women has dropped from 315 per 100 thousand in 2005 to 161 in 2015; the proportion of pregnant

⁷³ Data source: World Bank's database. http://data.worldbank.org

⁷⁴ Data source:Promoting Women's Economic Empowerment in Cambodia, Asian Development Bank, 2015.

women who receive prenatal care has increased from 69.3% in 2005 to 95.3% in 2014. Correspondingly, the average life expectancy of Cambodian women has also increased greatly, from 65.31 years in 2005 to 70.57 years in 2015.⁷⁵

Index	Male	Female	Year of Data	Sources of data
Economy				
Labor force participation rate (over 15 years of age)(%)	86.85	75.55	2016	The World Bank
Proportion of agricultural employment to the total employment population (%)	39.4	43.9	2015	Planning Department of Cambodia
Proportion of industrial employment to the total employment population (%)	26.1	24.8	2015	Planning Department of Cambodia
Proportion of employment in the service industry to the total employment population (%)	34.4	31.2	2015	Planning Department of Cambodia
Education				
Primary school enrollment rat	95.32	93.64	2006	The World
(%)	93.67	96.22	2016	Bank
Completion rate of primary	56.10	45.87	2001	The World
school (%)	94.48	95.87	2015	Bank
Literacy rate (%)	85	72	2016	The World Bank
Healthcare				
Maternal mortality rate (per	-	315	2005	The World Bank
100,000 people)	-	161	2015	
Proportion of pregnant women	-	69.3	2005	The World Bank
who receive prenatal care (%)	-	95.3	2014	
Average life expectancy	60.74	65.31	2005	The World Bank
	66.47	70.57	2015	

Table 3: Gender Equality Development in Cambodia

75 Data source: World Bank's database. http://data.worldbank.org

3.2.5 Gender gap in Cambodia's rural areas and agricultural field

• THE NUMBER OF WOMEN PARTICIPATING IN AGRICULTURAL ACTIVITIES IS DECREASING.

Mechanization and migrant worker migration trends are affecting the structures of the labor force in Cambodia's rural areas, especially for the female labor force. According to an investigation done by the World Bank's Agriculture Global Practice in 2015, because of higher and more stable wages in the textile industry, more and more Cambodian women have chosen to work in the textile industry or other non-agricultural industries instead of the agricultural industry, and women in the agricultural population have gradually decreased.⁷⁶ Although more and more men go to the cities to participate in the engineering projects, the drop in the female agricultural population is more obvious. The report shows that 60% of rural women in Cambodia have moved to the capital of Phnom Penh.

In addition, compared with men, women have more difficulty obtaining agricultural technology and services to improve their work efficiency. As woman-headed households have more difficulty obtaining realizing the mechanization of services, their participation has gradually reduced in agricultural production. Harvesting, threshing and other agricultural activities that used to be done by women are now done more by men operating machines.⁷⁷ Meanwhile, because of limited opportunities for disaster risk management training, natural disasters have also had a serious impact on the woman-headed households.⁷⁸

• WOMEN'S LOW OWNERSHIP LEVELS OF MEANS OF PRODUCTION, LIKE LAND AND LIVESTOCK. Many documents show that Cambodia had a long history of matriarchy. The land was traditionally passed down to the daughter, and the husband would live in his wife's house after marriage.⁷⁹ This system means that in Cambodia, where the land is private, women should have no less land than men, and women, as heads of households, should not have less than men. However, in 2015, the proportion of female heads of household in Cambodia was only 23.5%, and the women-headed households have a total of 452 thousand hectares of agricultural land, accounting for only 12.7% of the total agricultural land in the country.⁸⁰

78 Ibid.

⁷⁶ Cambodian Agriculture in Transition: Opportunities and Risks. World Bank. 2015.

⁷⁷ Promoting Women's Economic Empowerment in Cambodia, Asian Development Bank, 2015.

⁷⁹ e.g.:Ebihary, May. Svay, A Khmer Village in Cambodia. Columbia University, 1968; Cambodia The Convention on the Elimination of All Forms of Discrimination against Women CEDAW/C/KHM/4-5.

⁸⁰ Cambodia Socio Economic Survey, Ministry of Planning, October 2016. https://www.nis.gov.kh/nis/CSES/ Final%20Report%20CSES%202015.pdf

Similar to the situation in Laos, the phenomenon that women are excluded from the registration and transfer of land ownership also appears in Cambodia. During the 10 years from 2000 to 2010, more than 1.3 million land property certificates were approved by the government of Cambodia, but women did not receive the property right certificates in a corresponding proportion. The land that some women inherited from their parents was registered as community property without their knowledge. Some women had even been separated from their husbands for a long time when the land was registered.⁸¹

In addition, the area and quality of land owned by women in Cambodia are not as good as that of men. The rights to use the land is not strong enough, putting women in an unfavorable position in agricultural production. Moreover, women are not as adept as men at buying land and solving the problem of irrigation, which leads to a lower agricultural productivity for female householders. Because of social customs, wives are not always involved in land-related decisions. If a couple divorces, the wife may lose ownership to the land, which had been owned by the couple. Besides, when the land is acquired by a developer, women tend to be at a disadvantage in the negotiations, and cannot get the earnings that they should.⁸²

In breeding poultry and livestock, the Cambodian women are at a disadvantage compared with men. According to statistics, 57% of Cambodia's farmers raise poultry and livestock, among which 47.9% of the women-headed households have livestock, compared with the 60.3% of man-headed households that have livestock.⁸³

• THE LITERACY RATE OF ADULT WOMEN IS FAR LOWER THAN THAT OF MEN IN RURAL AREAS.

The gender gap in education in Cambodia is more evident in rural areas than in urban areas. In 2015, among people aged 15 and above, the gender gap for literacy rates in rural areas of Cambodia was 12.7%, while only 6.6% in the capital of Phnom Penh (see Table 4).⁸⁴ Among the male agricultural population over 5 years old, 10% completed grade 7 education, 5% completed grade 12 education, and 0.9% completed college education; by comparison, 10% of the female agricultural population completed grade 2 education, 3% completed grade 12 education, and 0.6% completed college education. ⁸⁵In 2016, the literacy rate of women in Cambodia was still 13% lower than that of men.⁸⁶

⁸¹ Mehvar, M., C. Sore, and M. Sambath. (2008). Women's Perspectives: A Case Study of Systematic Land Registration in Cambodia. Gender and Development for Cambodia and Heinrich BoellStiftung Cambodia. Phnom Penh. Retrieved from Asian Development Bank, (2015). Promoting Women's Economic Empowerment in Cambodia.

⁸² Promoting Women's Economic Empowerment in Cambodia, Asian Development Bank, 2015.

⁸³ Cambodia Socio Economic Survey, Ministry of Planning, October, 2016. https://www.nis.gov.kh/nis/CSES/ Final%20Report%20CSES%202015.pdf

⁸⁴ Cambodia Socio Economic Survey, Ministry of Planning, October, 2016. https://www.nis.gov.kh/nis/CSES/ Final%20Report%20CSES%202015.pdf

⁸⁵ Census of Agriculture of Cambodia. National Institute of Statistics of Cambodia. December, 2015

⁸⁶ Data source: World Bank's database. http://data.worldbank.org

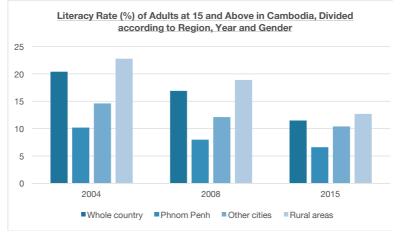


Figure 2 Literacy Rate (%) of Adults at 15 and Above in Cambodia, Divided according to Region, Year and Gender

One of the important causes of the gender gap in education in Cambodia, especially in the remote rural areas, was economic pressure. When the Cambodian teenagers under 18 years old were asked about their reason for dropping out of school, most of them replied, "I have to make money to support my family". 41.9% of girls chose this answer, higher than 35.2%⁸⁷ for boys. Besides, in the vast rural areas, educational resources are not properly distributed. Boys can live in Buddhist temples for free, but girls usually need to live in towns or cities, so girls' families must pay for the extra expenses of board and lodging.⁸⁸

Secondly, traditional views have prevented females from receiving education to some extent. In Cambodia, anthropologists found that the society believes the unmarried girls should be protected by their families and even stay indoors to avoid contact. Second, many families feel that girls will do mischievous things after classes get out, such as writing love letters for boys. Finally, boys in Cambodia are not willing to marry girls who are more educated, and educated girls have a difficult time finding husbands.⁸⁹

https://www.nis.gov.kh/nis/CSES/Final%20Report%20CSES%202015.pdf

⁸⁸ LuoYang.Ethical and Spiritual Nature of Power - An Anthropological Analysis of the Family Status of Women in Cambodia. Journal of Shanxi Normal University: Social Sciences Edition, 43 (2), 8-15

89 Ibid.

Data source: Cambodia Socio-Economic Survey of Planning Department of Cambodian government

⁸⁷ Cambodia Socio Economic Survey, Ministry of Planning, October, 2016.



Practice and Observation — Influence of CAOIEs on the Development of Gender Equality in the Host Country

1.The gender equality consciousness of the management staff2.Economic Impact of the Enterprises On the Local Women3.The impacts of enterprises on medical services and the health of local females4.Impact of enterprises on local women's education

Practice and Observation — Influence of CAOIEs on the Development of Gender Equality in the Host Country

From July to August in 2017, we conducted research for four China-funded agricultural enterprises in Laos and Cambodia and visited local agricultural planting bases and rubber processing plants as well as the residences of the farmers and management staff, the local villages, the partners and other stakeholders. According to the nature of the enterprise and the business type, we chose enterprises to focus on in this report, that is, Yunnan Nongken Yunxiang Investment Co., Ltd. as the representative of state-owned enterprise, Yunnan Pu'er Zhonghe Rubber Co., Ltd. as the representative of private enterprise, and Guangxi Forword Agricultural Technology International Investment Co., Ltd. as the representative of private enterprise. This last enterprise undertook the international public welfare assistance cooperation project of China's government. We carried out case analyses on the social gender equality consciousness of the management staff of the three enterprises, we analyzed the operation and management of the enterprises in the local area, and the practices with respect to gender equality issues.



• YUNNAN PU'ER ZHONGHE RUBBER CO., LTD.

Pu'er Zhonghe Rubber Co., Ltd. (hereinafter referred to as "Zhonghe Company") was incorporated on October 9, 2007. The registered capital of the company was RMB 40 million, and the company is mainly engaged in planting, processing and selling rubber,

coffee and fruit, as well as foreign trade and investment. The company is a private enterprise engaged in overseas investment approved by Ministry of Commerce. The company has obtained the overseas opium poppy substitution planting certificate approved and issued by Yunnan Provincial Chamber of Commerce. It is one of 189 overseas opium poppy substitution planting enterprises in Yunnan Province.

In 2006, Zhonghe Company registered the Luang Prabang Zhonghe Rubber Co., Ltd. in the Luang Prabang Province of Laos, and received the franchise right of government land in Nane district and Chomphet district of Luang Prabang Province of Laos.⁹⁰ The enterprise is solely owned and operated independently. The Laos provincial government grants foreign companies land for their rubber plantation bases within its authority and collects land fees according to the law. Zhonghe Company recruits the workers by itself and bears the operating expenses. Before the rubber plantation enters the rubber tapping period, the company relies mainly on bank loans and government subsidies to maintain operation. In 2017, the rubber plantation went into operation, with about 16 thousand mu of rubber tapping. The company has hired local farmers to tap the rubber and entrusted local people in Laos to process it. After the standard rubber is made, it will be sold back to China. It is expected that the amount of rubber produced in 2017 will be 20 million tons. By the end of October 2017, the company will have established a total of about 81 thousand mu of rubber plantation area and completed a total investment of RMB 197.2 million, of which the bank loan funds were RMB 80 million.

In recent years, as the international rubber price continues to decline, Zhonghe Company has adjusted its industrial strategy. At the end of 2014, after consulting with local farmers, the shareholders of the company rented 2,000 mu of land privately owned by the farmers in the Nam Bak of the Luang Prabang Province to plant bananas, and set up a separate subsidiary of "Luang Prabang Qingfeng Fruit Co., Ltd." The operation model of the banana project of shareholders in Zhonghe Company is "4 + 1" joint operation and distribution model. The company has signed the agreement for labor contracts with the local farmers according to laws in Laos. The company purchases bananas from the farmers at the market price after harvesting and rents local vehicles in Laos to transport them to the border between China and Laos. After the customs clearance, the bananas will be loaded into Chinese vehicles and transported to China for selling. The annual output fluctuates between 5,000 and 6,000 tons.

Besides, the company is investing in building a natural rubber processing plant in the local area, which is planned to be put into production in April 2018.

⁹⁰ Franchised operation refers to the operation which is developed and carried out with the approval of the Lao government and access to national property use right and other rights. In May 2012, the Lao government suspended the land lease and franchises for rubber and eucalyptus cultivation. By the end of 2012, China's enterprises had achieved more than 300 land concession projects in Laos with an area of more than 200,000 hectares (Dong Xiangshijie, 2016: 14).

• LAOS YUNXIANG INVESTMENT CO., LTD.

Under the background that China and Laos cooperate to implement the opium poppy substitution planting project, Yunnan Nongken's development and preparation team for rubber in Laos entered and was stationed in Luang Namtha of Laos in 2005. After 12 years of development, Yunnan Nongken now has 4 branches (Luang Namtha branch, Sainyabuli branch, Bokéo branch and Luang Prabang branch) and three rubber plantations in Laos, covering an area of 89,180 mu.

Laos Yunxiang Investment Co., Ltd. (Yunxiang Company for short), a wholly-owned subsidiary located in Luang Namtha, was incorporated in Luang Namtha Province of Laos in February 2006, with the registered capital of USD 2,714,788. Luang Namtha Rubber Making Plant was constructed in 2008 and was officially put into operation in 2009 with a total investment of more than RMB 47 million, covering an area of 5.8168 hectares. A production line for producing standard concreting rubber at 3 tons/hour and a production line for producing compound rubber at 2 tons/hour were built. The designed annual process capacity is 20,000 tons.

Based on cost control and risk reduction, the investment model of Yunxiang Company in Laos is mainly divided into three types. The first one is the sole ownership and demonstration model, in which the Laos provincial government grants foreign companies land as their demonstration bases for rubber plantation within its authority, and collects land fees. Then, Yunxiang Company recruits the workers by itself and bears the operating expenses. The second one is "4 + 1" joint operation and distribution model, in which villagers are encouraged to participate in the rubber substitution planting and paid for labor at the lowest price. The third model is the "3 + 2" joint operation and distribution model.

• GUANGXI FORWORD AGRICULTURAL TECHNOLOGY INTERNATIONAL COOPERATION CO., LTD.

Guangxi Forword Agricultural Technology International Cooperation Co., Ltd. (hereinafter referred to as "Fuwode Company" was founded in Nanning city of Guangxi in 2009. It mainly cooperates with ASEAN countries for agricultural projects through technology and capital investment. In 2015, the company started the project of "China - Cambodia Agricultural Promotion Center". The project adopts "3 + 15" operation model, in which China's government provides the company with funds to carry out agricultural technology training and to promotions in Cambodia in the first three years, and in the last 15 years, the company continues to operate under the authorization of the Ministry of Commerce of China, and introduces the market mechanism by itself to carry out the work of public welfare assistance. The company has sent 12 Chinese agricultural experts and 3 managers to help increase the production and income of Cambodian people by improving agricultural technology from the aspects of breeding better seeds, experimentation and demonstration, and technology promotion. The company is aiming to establish a complete system for the promotion of agricultural technology in Cambodia by 2018.

At present, the "China - Cambodia Agricultural Promotion Center" mainly engages in the demonstration, training and promotion of the management technology of crop cultivation, the technology for the use of agricultural machinery and resources, the technology of post-harvest processing of agricultural products, and driving the scientific research institutes and enterprises to carry out project exchanges and trade cooperation. Forword Company has formed the central core demonstration park in Phnom Penh (the capital of Cambodia) two provincial large-scale demonstration areas, and six provincial demonstration park, covering the three-levels of promotion systems in nine demonstration provinces. In addition to the "China - Cambodia Agricultural Promotion Center" project, the company has also contributed to the cooperation in intergovernmental agricultural projects of "China - Cambodia Demonstration Base of High Quality Vegetables and Fruits", "China (Guangxi) - Cambodia Test Station of Good Varieties of Crops" and "China (Guangxi) - Cambodia (Siem Reap) Agricultural Science and Technology Demonstration Park".

4.1 The gender equality consciousness of the management staff

Social gender equality consciousness mainly refers to respecting the equal rights of men and women in every field and aspect of society, family and personal life, and acknowledging that men and women should have equal opportunities to enjoy all kinds of resources, i.e. resources related to the politics, economy, society, culture, and health. Any cultural customs and institutional provisions that restrict the above equal rights and opportunities of both genders need to be changed.⁹¹

The understanding and recognition of social gender equality of the management staff of enterprises have a significant impact on the development of local gender equality, and can either serve as a thrust or restraint for the promotion of local gender equality development. Enterprises can formulate and practice gender-related rules and regulations to standardize employees' behavior with respect to gender-related issues. Enterprises can even gradually influence and change gender awareness and behavior in local communities.

The project team sent out questionnaires to the management staff of four CAOIEs, hoping to learn about their understandings of local gender-related laws and regulations, the overall understanding of gender issues, and the views on gender-related laws and regulations. A total of 18 questionnaires from management staff were collected by the project team, including those from 15 men and three from women, accounting for about 7% of the total number of the management staff of the visited enterprises (senior level and middle level). The management staff who filled out the questionnaires were all Chinese and belonged to the senior management staff of the company. Their gender equality consciousness has a more

⁹¹ Definition of "Gender Equality Consciousness" by National Working Committee for Children and Women under State Council. http://www.nwccw.gov.cn/2017-03/30/content_145462.htm

direct impact on the formulation and practice of regulations of enterprises, so their opinions are important and perhaps make up for the small sample size. After analyzing the questionnaires and interviews, the project team discovered the following issues:

• THE GENDER RATIO OF THE MANAGEMENT STAFF OF THE ENTERPRISES IS UNBALANCED.

As introduced in the beginning of this chapter, the gender proportion of management staff of the three enterprises introduced in the case is not balanced, ranging from 4: 1 to 13: 1 (see Figure 2). Moreover, among the management staff responsible for local operations, women usually engage in administrative work such as finance, secretarial work and so on, and seldom have the opportunity to engage in the business type of work, such as the management of the plantation and the supply chain. This means that women's work usually belongs to the cost department of a company, rather than the profit department. Women usually have to stop at the level of heads of departments and are less likely to be promoted to higher level.

The existence of this phenomenon, on the one hand, is affected by the gender awareness of the management staff of the enterprise. The management's disapproval of women leadership and the disapproval of women's role in management (see the part, "the awareness for gender equality of the management of enterprises is low" in the below) may lead to a neglect of leadership training for female employees and limit the promotion in and development of women's careers, subjectively leading to the situation in which the number of men in leadership position is far higher than that of women; on the other hand, local women's education levels, unskilled use of mechanized agricultural tools, less land and other means of production, as well as other factors, also weaken their bargaining chips in negotiations with enterprises, making the management more willing to allow men to be involved in management positions.

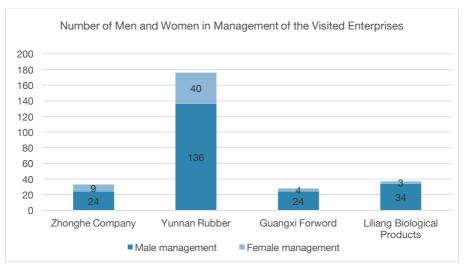


Figure 3 Number of Men and Women in Management of the Visited Enterprises

• More THAN 30 % OF THE MANAGEMENT LACK THE UNDERSTANDING OF GENDER-RELATED LAWS More than one third of the management of the visited enterprises (7 of 18 respondents) did not know that "there are laws and regulations on the promotion of gender equality, such as laws protecting the rights and interests of women, guaranteeing against domestic violence and ensuring the equal employment in the country in which the company operates" (see Figure 3). In the follow-up interview, the management of many enterprises gave relatively vague answers, for examples, "I'm not clear, maybe." and "It should be the same as China" to this question.

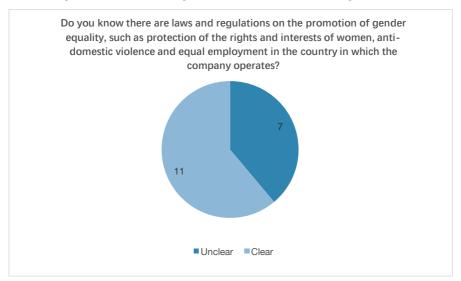


Figure 4 The Understanding of Gender-Related Laws of Management Staff

• GENDER EQUALITY CONSCIOUSNESS OF THE MANAGEMENT STAFF AT THE ENTERPRISES IS Low. As shown in Table 5, although most of the management staff believes that women should be involved in production work, the enterprises' management staff shows low acceptance of women's leadership. Nine of 14 respondents (64.28%) said they did not agree with the statement (1 - 3 points) that "women should give priority to families, and men should make money to support their families". Only six respondents agreed with the statement (5 - 7 points) that "the proportion of men and women in the leading position should be roughly equal", accounting for 46.15% in the 13 respondents. Correspondingly, only five respondents expressed a clear disagreement with the statement that "women's leadership (decisiveness, organization, management and communication ability) is not as good as men's (1 - 3 points), accounting for 38.46% in all respondents (13 people).

How do you think the popularity (accepted) of the following statements in the surrounding environment? (Score with 1 - 7 points; 1 is the lowest point, representing the lowest degree of acceptance, and 7 is the highest point, representing the highest degree.)									
	1	2	3	4	5	6	7	(blank)	Average point
Women's abilities are as good as those of men.	1	1	1	3	2	4	3	4	4.87
Women should give priority to families, and men should make money to support their families.	5	2	2	1	2	1	1	5	3
The proportion of men and women in the leading position should be roughly equal.	1	4	1	1	1	4	1	6	4
Women's leadership (decisiveness, organization, management and communication ability) is not as good as that of men.	3	1	1	3	1	4	0	6	3.77

Table 4: Answers of Enterprises' Management on Social Gender Awareness

• Gender Equality Awareness Of Enterprise's Management Staff Is Lower Than That Of The Local Employees.

Besides, it is worth noting that the degree of recognition of the management is clearly lower than that of the local employees on some matters. Although most management (9 of the 15 respondents) expressed a clear recognition of the statement that "women's abilities are as good as those of men" (5 - 7 points), the average point of 4.87 is 1 point lower than that of the local employees (see Figure 4).

The degree of recognition by the management of the statement "the proportion of men and women in the leading position should be roughly equal" is 2.5 points lower than that of the local employees (see Figure 4). The attitude of the enterprises' management staff on the proportion of men and women in the leading position is more or less a 1:1 correlation with the current proportion of men and women in the management.

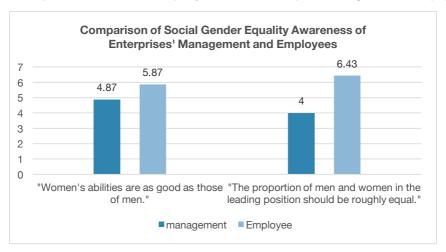


Figure 5 Comparison of Social Gender Equality Awareness of Enterprises' Management and Employees

4.2 Economic Impact of the Enterprises On the Local Women

Women's economic empowerment is the key to achieving gender equality. Lakshmi Puri, deputy director of the UN Women, said on the eve of International Women's Day in 2017, "If women do not have equal rights in the economy, their equal rights in other fields cannot be guaranteed."

Women's economic empowerment means that women can equally obtain the rights to use land, property, natural resources for production, basic services and infrastructure, and it means that women have equal rights to get good jobs, to receive equal salaries, to continue pursuing education and to pursue promotion opportunities. Whether China's overseas investment can bring more employment opportunities and economic income, greater economic autonomy and more equal opportunities in the labor market to women, should be a crucial part of measuring the impact of China's overseas investment on gender equality.

4.2.1 Employment opportunities

All the four Chinese enterprises visited have brought a lot of employment opportunities to the local people. Moreover, because of the industrial characteristics of agriculture, most of the local employment is family-based, except for a few divorced or widowed families. Most of the employment opportunities provided affect both husband and wife, and there are about half female employees in the fixed staff. This means that the local employment opportunities brought by the enterprises basically benefit both male and female farmers in a relatively equal way.

Zhonghe Rubber Plantation usually signs yearly contracts with the farmers, but short-term contracts also exist for busy farming season. According to the growth cycle of the rubber trees, the number of farmers who sign contracts with the rubber plantation is not fixed, with a yearly average number of 600. Before rubber tapping, the main work of the farmer includes contracting, planting, fertilizing, weeding and so on. Besides, the contracted farmers also need to dig roads and cut down the plants that block the sunshine in the rubber forest. After rubber tapping in 2017, the company hired about 200 tapping workers while the number of farmers who were in charge of weeding and fertilizing decreased to about 400 correspondingly. In 2016, 90% of the contracting farmers were husbands and wives, and 10% were single persons who were divorced or widowed.

However, similar to the arrangement of men and women in management staff, the project team found that the jobs performed by female base-level employees tended to be more stereotyped and simplified. The management staff of enterprises matched the work for men and women based on their cognition, so as to realize the division of labor. On one hand, for the sake of women's health and safety, some enterprises tend to arrange women to work in the office; on the other hand, since women normally have better skills in rubber tapping than those of men, some enterprises are more willing to hire women to work as rubber tappers. Although this arrangement safeguards women's rights and interests, allowing them to give full play to their expertise, it also limits their ability to discover and improve other abilities and limits the breadth and height of their career development (see 3.3.5 "nighttime work" in this chapter for more related content).

In the Luang Namtha base of Yunxiang Company, because observation, insect proof drugs spraying and other work must be done on hills from 10 p.m. to 8 a.m. of from January to March every year. Unmarried female employees and employees without children are not arranged to complete this frontline work for the sake of protecting their health. The users of mechanized farm implements are all men. Female employees can be fully involved in other positions, which mainly include accounting, translation and other civilian positions at the headquarters and branch offices.

4.2.2 Employment models

Labor contracts are an important means of protecting the rights and interests of employees. According to the type of contract, there are usually three types of employment at the CAOIEs visited by the project team: (1) seasonal employment: employment according to the agricultural production process, such as rubber tapping workers and piece-workers of bananas; (2) employment with a labor contract, in which a labor contract is signed according to the *Labor Law*, which is common in local management, logistics, and administrative positions; (3) employment with a contract, in which the contract is signed with the family as a unit and based on the number of persons. The number of specific laborers is not limited. This employment is common for maintenance worker of woodland and rice grower.

In these employment models, employment with a contract is conducted with the family as a unit. In order to ensure the stability of employment, the enterprises also tend to hire the family as a unit in the recruitment of seasonal workers. The project team learned that in the signing of the contract, no CAOIE stipulates that every member of the family must sign the contract. Although the work will be jointly done by family members, most of the contract signing is done by the male members in the family, which may lead to the neglect and lack of protection of women's demands and rights. For example, if the husband and wife have different opinions as to whether to accept a job, in a typical maledominated society or family (such as Hmong), women may have to compromise with men's work decisions, deferring to the male's decision. Another example is that if the man who signs the contract on behalf of the family dies before the contract expires, his spouse is not the Party B of the contract, so the contract may not be continued because of the loss of the responsible person.



Besides, because of the low level of culture and lack of legal knowledge, it is difficult for the farmers to understand the potential meaning and risks of the contracts. This is more common among women with lower levels of education. In the process of field investigation, the research team found that most women farmers (especially in Laos) have literacy difficulties. Few literate women cannot quite understand the questionnaire which was translated into Lao, and needed the guidance of the Chinese translators or more highly educated men from Laos. The helpers needed to translate the written language into oral language, which is more easy to understand and provide a lot of examples. Meanwhile, it is worth noting that some CAOIEs have not signed a written labor contract with the farmers. The local law stipulates that the labor contract can be made in the written or oral form,⁹² and the practice of Chinese enterprises is in line with the local law. In fact, however, the oral contract is a hidden danger to both employers and employees. For the local employees, if there are disputes like arrears of wages, it will be difficult to obtain evidence for oral contracts, and the employees' rights and interests are hard to be guaranteed. For the employers, the employees' working hours are hard to be guaranteed without the constraints of a written contract, and the daily operation of the enterprises will be thus be challenged. The employees are vulnerable compared with the employers, while female employees are more vulnerable than male employees. The protection of and appeals for labor rights and interests of these female employees are risks related to gender issues at CAOIEs.

A Chinese manager of a visited enterprise said, "(the failure to sign a written contract) results from the fact that the local employees often ask for a leave because they have to till the land or get used to eating and playing after making money. The mobility of the employees is high, and the company often faces the problem of labor shortages."

4.2.3 Income

Some studies show that in developing countries, foreign investment in the agricultural industry usually improves production efficiency and agricultural output, thereby increasing the income of local farmers and improving their living standards.⁹³ Based on the situations observed by the project team in Laos and Cambodia, it seems that the overall income of farmers has been improved significantly after the entry of the CAOIEs.

First, the local farmers employed by the CAOIEs gained salaries which were more than the income from agricultural production before the entry of the enterprises. For example, in the northern mountain area of Laos with high concentrations of CAOIEs, most farmers were used to slash-and-burn cultivation before the entry of the CAOIEs. People in the mountains planted upland rice, corn, cotton and other economic crops in accordance with the seasons, and collected firewood, wild vegetables and bamboo shoots in mountains and forests. People in the valleys mainly planted glutinous rice which was

⁹² Article 65 of the Cambodian Labor Law stipulates that a labor contract can be verbally signed. The full text of the Labor Law is available at: http://www.ilo.org/dyn/travail/docs/701/Labour%20Law.pdf

⁹³ Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

one crop a year and raised cattle, buffalo, and other large livestock.⁹⁴ Because of the low efficiency and the small scale of planting and the lack of modern agricultural knowledge, such as the knowledge related to pesticides and chemical fertilizers, the output was low. A rubber farmer in Luang Namtha said that there was little rice left for sale after the rations were deducted and that a year's harvest could be sold for LAK 4 million (about RMB 3,500). Some local people lived on planting opium poppy, and their life was extremely poor.⁹⁵

After entering Laos, CAOIEs usually calculate the salary in the following three ways according to the different employment models and positions. The salary for the management staff (contract system) is a monthly salary plus bonus. The salary of the contracted farmers (contracting system) is calculated by parcels. Farmers can receive living expenses, which are no more than 50% of the salary of last month in advance every month. The farmers' salary is calculated according to the output of agriculture and forestry products (such as banana or rubber) and the market price after harvesting. Farmers draw the cash wages after deducting the pre-paid living expenses. The salary of seasonal workers is calculated according to a "sharing system", which means that the company will determine the proportion of sharing according to the output and market price every year, and the proportion usually fluctuates between 6: 4 and 5: 5.

If farmers disagree with the market price given by the company, they can keep their part of shared products and sell by themselves, but the company's part of products shared must be sold by the company. The income from rubber tapping in the first month of the first year of tapping is completely owned by the farmers, and from the second month, it will be shared on a fifty-fifty basis. When the rubber price is lower than LAK 6,000, the minimum-guaranteed sharing price of the farmers given by the company is LAK 3,000 per kilogram. Farmers share the transportation cost of rubber of the shared part.

— Zhonghe Company

In the year of low rubber prices, Yunxiang Company has acquired rubber from the farmers at a protective price which is twice higher than the market price, increasing the income of farmers, and enhancing their confidence in the rubber substitution planting industry.

— Yunxiang Company

In general, the income of the local employees and farmers is several times what they would earn planting rice (see Figure 5). Taking Zhonghe Company as an example, the average monthly income of staff (team leader) in Laos in charge of field management is RMB 1,600 - 1,800. The income of rubber tapping workers is calculated according

⁹⁴ Friis, C., Reenberg, A., Heinimann, A., &Schönweger, O. (2016). Changing local land systems: Implications of a Chinese rubber plantation in Nambak District, Lao PDR. Singapore Journal of Tropical Geography, 37(1), 25-42.

⁹⁵ Xinhua News Report. http://news.xinhuanet.com/world/2017-04/20/c_1120845711.htm

to production-sharing, and the enterprise provides protection of a minimum purchase price. Their average monthly income is stable at RMB 2,000 - 3,000. The daily income of foresters and banana piece-workers is LAK 60,000 - 80,000, and their monthly income is about RMB 1,200 - 1,400. The daily income of hourly worker who has relatively low incomes is LAK 40,000, equivalent to RMB 30 per day. In view of the fact that most of the contracted farmers sign contracts as families, the average yearly income of a family, which includes two adult laborer, is about RMB 30,000.

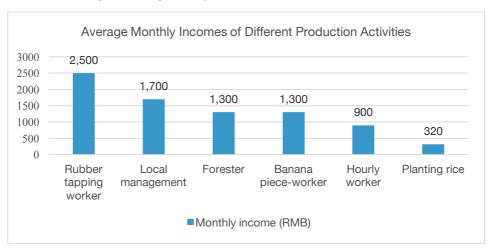


Figure 6 Average Monthly Incomes of Different Production Activities

Second, after the entry of CAOIEs, some farmers will receive other subsidized income in addition to their wages. For example, under the "3 + 2" and "4 + 1" models, farmers will get corresponding rent subsidies every year by renting private land to the CAOIEs. Moreover, the rubber enterprises often encourage farmers to plant crops, that do not affect the rubber trees, in the inter-plant. The laborers' harvest of these crops is completely for them to keep or sell.

Zhonghe Company encourages farmers in the inter-plant of grain crops in the rubber forest that they manage and maintain. These farmers plant grains while managing rubbers crops, and the company also pays the wages for the management and maintenance done by the farmers. Moreover, all the grain obtained is owned by the farmers themselves, and the company also organizes vehicles to send the grain to farmers' homes for free. Meanwhile, the company will also provide the Chinese members of the management with the land, and encourage them to plant their own rubber trees to increase their income.

Some studies show that after the villagers in Laos lease their land to the rubber enterprises that are financially backed by Vietnamese investors, they lose the usage rights to the forests that were once public, and women have to spend more time collecting firewood or switch to charcoal. Thus the yield that comes from signing a contract with a CAOIE has fewer by-products.⁹⁶ However, according to the field research of the project team in Laos and Cambodia, even taking into account the factors of inflation and rising prices, we can still say that several CAOIEs visited in Laos increased the income of local contracted farmer households and the disposable income of every member of these households (including the female members). Besides, because of the widespread belief in the rubber industry suggesting that women are better skilled at rubber tapping, more women are hired in rubber tapping, so they can be more involved in the paid work.

The questionnaires filled out by local farmers have also reflected the positive impact of CAOIEs on the local people's economy. In 13 questionnaires that were completed by workers in Laos, with regard to the question "How about the impact on your economic situation after you work in the current company?", five people (three women and two men) answered: "It is great and positive".

However, on the other hand, according to the definition from the Institute for Gender Equality of the European Union, women have three roles of production, reproduction and social management. The role of reproduction refers to family related labor, including child-rearing and housework.⁹⁷ As shown in Chapter 2, rural women in Laos spend about the same time in agricultural production as men, but 4.3 times as much time on housework as men.

Therefore, we need to take into account that women will have less time to take care of their families after they start working for CAOIEs. Or in order to finish the reproduction jobs after work, they have to work longer hours than men without getting the corresponding economic compensation. Due to time and other constraints, we cannot carry out an indepth research of the impact of CAOIEs on the reproduction jobs completed by local women. Given that reproduction jobs are an extremely important part of women's role in society, the project team suggests that this field should be studied further in future.

"In addition to going to work (weeding and fertilizing in Forword Company), we (women) also need to do housework. We undertake 80% of the housework. We have less time to rest and do what we like to when compared to men."

-Interview with female employees of Forword Company in Phnom Penh base

⁹⁶ (Germany) Heike B., (USA) Kate, L.; Compiled by Zhao Yaqiao and Zhang Yi. Kunming: Yunnan Science and Technology Press, June 2012.

⁹⁷ The reproductive role of women includes the care and maintenance of the actual and future workforce of the family (childbearing responsibilities and domestic tasks). European Institute for Gender Equality. http://eige. europa.eu/rdc/thesaurus/terms/1442

4.2.4 Salary

The project team notices that in some enterprises, more men pick up the paycheck on behalf of the whole family, with a proportion of men to women of 10:1. Moreover, no enterprise has made provisions to force each person to pick up their own salaries based on their own workload. This proportion of men to women in salary receiving does not directly reflect the domination and discursive power that is relevant to spending a family's salary. In fact, the Chinese management staff of several enterprises visited by the research team mentioned that the local women were in charge of the family's money. In the face-to-face interviews with female villagers in Cambodia, two of three interviewees said that they were in charge of the money. Their husbands would hand in the salary for family expenses after getting it, and draw small amounts of pocket money from it to pay for daily fixed expenses, such as commuting expenses.

This phenomenon is related to the traditional social customs of Laos and Cambodia. As mentioned in 2.4.2.4, the main ethnic groups in Laos and Cambodia are traditionally matriarchal in structure. The local employees of the enterprises in this report are from the major ethnic groups, so women have greater say over how the families money is spent or saved.

"In Cambodia, women are in charge of money at home, and the husbands must turn in all their income. Some husbands may kill themselves because they have lost their income after divorce." — A female villager in Cambodia

"Here (Laos), women call the shots at home, and they are in charge of the money. " —A member of management in a CAOIE in Laos

However, it is to be pointed out that the saying that "women are in charge of the money" may be more about daily matters such as buying daily necessities and food, rather than the decision-making power of more important economic matters. In the questionnaire distributed in Laos and Cambodia, the research team asked: "Who will make the decisions in the matters of family's daily expenses (such as buying daily necessities and food)?" Of the 35 valid questionnaires collected, 22 people answered "the wife", accounting for 66.86%, three answered "the husband", five answered "discuss together", and the remaining five answered "unclear". However, with respect to the important economic matters, such as "buying large goods", "buying or building a house", "investment or lending" and "the kind of production you are engaged in", 22, 21 and 24 of the 35 people answered "discuss together" respectively, of the 35 valid questionnaires (see Figure 7).

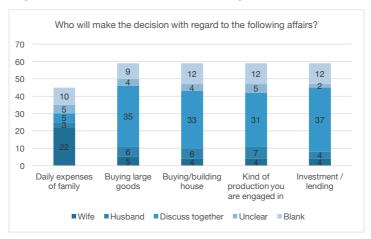


Figure 7 Results of the Questionnaire on the Right of Economic Decision

4.2.5 Welfare benefits

As for welfare benefits, all the Labour Laws in China and in the host countries of Laos and Cambodia stipulate that enterprises need to pay social insurance premiums including medical insurance premiums for their employees and that women employees should enjoy paid maternity leave before and after childbirth.

The CAOIEs we visited provide social insurance, maternity leave, reduction and exemption of work intensity during pregnancy and other welfare benefits for their official employees according to the regulations. However, this is limited to a small proportion of contract workers, while the local workers who account for the highest proportion still do not enjoy the benefits. This is mainly because the contracts they signed with the enterprises are not labor contracts, but forest contracts and/or purchasing contracts for agriculture and forestry products. According to legal relationship, these farmers are not official employees of the enterprises, but the lessees and suppliers. Therefore, the enterprises deem themselves to not have any obligation to provide medical insurance or maternity leave. At the same time, the enterprises have no right to interfere with whether farmer women who have undergone delivery continue their work after adequate rest and recovery, which can only be decided by the women and their families. So this may lead some mothers to start intensive agricultural work when their physical condition has not recovered to the desired level, which adversely affects their health. The relevant contents of pregnant and parturient women are shown in Section 3.3.1 "Childbirth and medical treatment".

The Chinese management staff enjoys a yearly physical examination in China, without medical insurance in Laos. Therefore, they usually rely on the medicine brought from China for the treatment of minor diseases. For relatively serious disease, they usually choose a local hospital in Laos which is operated by Chinese workers. Local farmers usually go to a community convenience store to buy drugs or ride a motorcycle to a hospital for medical treatment. If the farmers are injured on the job, the company will be responsible for sending them to the hospital, assuming the medical expenses, and paying an additional RMB 40 daily allowance.

-Zhonghe Company

The welfare for Chinese and Laotian female (official) staff is carried out in accordance with the legal standards of China, for example, providing six months of maternity leave and annual physical examinations.

—Yunxiang Company

4.2.6 Land and production data

CAOIEs in Laos and Cambodia usually need to lease land directly from local villages. The *Land Law* of Cambodia allows for the private ownership of land, but this right is limited to citizens of Cambodia. However, although the *Land Law* of Laos stipulates that the land is owned by the country, the actual situation is more complex. Some land is permanently used by farmers or rural areas collectively without a time limit for the right to use. Therefore, the government agrees that, in fact, there are three types of land property rights in Laos, namely, state-owned, collective and private. This means that the CAOIEs cannot directly purchase land for agricultural investment, but must negotiate land leasing with local farmers.

In Laos and Cambodia, the land and property that are inherited by many women from their native families are registered under the name of the husband and wife, and sometimes only under the husband's name (see Chapter 2 of this report for details). At present, the women-headed households only account for 10% in Laos, mainly in urban areas. The women-headed households account for less than 5% in rural areas, many of which are women of Lao Loum who have become widows.⁹⁸ According to the database for gender and land rights of the Food and Agriculture Organization of the United Nations, the females only own 9.1% of agricultural land in Laos.

⁹⁸ Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO. http://www.fao.org/docrep/017/aq293e/aq293e.pdf.

The company has only rented 240 mu of land in the fruit and vegetable base of Kampong Speu Province. In the process of negotiating land lease contracts, the company will communicate with both the husband and wife, but the land lease contracts are mainly signed by men.

—Forword Company

Normally, the company does not specifically stipulate that the lease contract must be signed by a male or female member of the family, but only a member is required to be a representative. It is estimated that in most families, male members sign the lease contract as a representative, and most of the women signing contracts with the company are divorced women.

-Yunxiang Company

This means that women have fewer land resources compared with men, and are more difficult to rely on land leases and foreign agricultural investment as a form of income. They can only rely on jobs to maintain their livelihoods, and their income sources are less selective. Therefore, they are more likely to be further marginalized in the process of foreign investment.

The situation that was learned by the project team in Laos and Cambodia shows that, to a certain extent, females have less decision-making power than men with regard to land-related matters. The project team discovered that in most families, male members sign the lease contract as a representative, and most of the women that sign contracts with the company are divorced women. Although this phenomenon does not mean that the land ownership rights of the villagers are much more in the hands of men, it can indirectly reflect that men handle more land-related matters on behalf of the family. This may be caused by the fact that women have less say over the negotiation of land lease matters with the enterprises, and thus women's protection of interests is weakened.

The project team found that none of the CAOIEs are involved in the above compliance activities, and makes adjustments to protect the rights of women against potential risks from the perspective of women. Even in the process of land leasing, enterprises may unconsciously solidify the existing gender gap in land allocation and convert the unequal distribution of means of production into economic inequality.

In fact, in order to prevent a spouse or child from having his/her land lease contract terminated after the death of his/her spouse or parent, CAOIEs tend to sign contracts with the couples or the adult children of farmers, but none of them are required to do this. Such a choice on behalf of the enterprises cannot proactively narrow the local gender gap and also creates potential risks for future disputes.

4.2.7 The direct and indirect impacts on the community economy

All of the CAOIEs visited by the research team are aware of the importance of community economic development for business operations. They have different practices. Some enterprises provide superior crop seedlings and technical training on

planting for community residents free of charge so that farmers can achieve the increase in their incomes. Moreover, as most of the men in these communities are part-time workers in the cities, 75% of the people who benefit from such programs are women. Through agricultural technical training and the crop planting and extension, the CAOIEs provide revenue opportunities for local female villagers.

Forword Company uses plastic greenhouses to grow vegetables and fruits in the eco-village base and promotes the local development of vegetable cultivation through the demonstration sites. One hundred and one villagers in the eco-village are divided into five groups which are given agricultural skill guidance by specially-assigned persons. At present, a total of 45 local villagers volunteer to participate in the economic model planting in the compound. The company provides vegetable seeds required for the land of 0.2 mu and the necessary agricultural materials required for production for each volunteer. By producing vegetables such as cabbage, cucumbers and sponge gourd, the farmers gain an increase in their monthly income by about USD 50 and if they continue the cultivation, their annually increased income will reach USD 600.

On the other hand, while investing in and operating projects in Southeast Asia, in addition to constructing road, bridges and setting power lines necessary for production, CAOIEs also try their best to construct roads and bridges for the communities where the enterprises and projects are located, provide solar energy power generation devices, donate to building schools and hospitals and providing the corresponding facilities, etc.

The local infrastructures that CAOIEs invest in and improve can play long-term roles, and their scope of influence is also wider than that of operations of enterprises, with more people affected. For women, these infrastructural projects can profoundly affect their lives. For example, roads linking villages and towns to schools make home-school commute paths more secure and accessible than trails crossing the jungle. These safer roads are conducive to dispelling parents' worries about girls going to school. Building schools close to villages also produces the same effect. Roads and bridges also help women gather more firewood and forest by-products faster, and increases their efficiency in finishing these tasks. Wells that the enterprises build for communities/plantation sites provide conveniences for women and reduce their time spent on housework.

In 2012, Zhonghe Company provided more than USD 40,000 to build a new hospital building in Chomphet District of Luang Prabang province in Laos and USD 60,000 to build a new teaching building in Nane District, which consists of four classrooms and one teacher's office. It built a total of seven bridges and about 380 km of roads for the locality, a considerable portion of which are common roads between the company and villages, including 12 km of road for two villages. The company also spent more than RMB 100 million on helping local communities build a total of five km of high-voltage lines. In the remote areas where it is difficult to set up high-voltage lines, the company provided contracted farmers with free solar power systems, including photovoltaic panels, batteries, converters, bulbs and other devices, with one set of equipment shared by every four to five households. By October 2017, the company helped about 100 farmers benefit from solar power generation. Besides, it continues providing additional equipment with as the number of farmers increases and the demand for electricity also increases.

Regrettably, while providing these infrastructural works for the communities, most CAOIEs fail to take gender into account, thinking that infrastructure will benefit the public without any difference. However, numerous studies show that the female and the male undertake different social roles with different divisions of labor, their demands for infrastructure are also different and they are affected by these infrastructure projects to different extents.⁹⁹ Fortunately, though CAOIEs lack the gender sensitivity in designing and building these infrastructures, the research team observed that local women still enjoyed the benefits considerably. For example, considering that women are more likely to do household chores such as gathering firewood and water (see Chapter 2 of this report for more details), wells constructed by CAOIEs for communities/plantation sites bring conveniences for women and save their time spent on housework.

4.3 The impacts of enterprises on medical services and the health of local females

Affected by physical and social factors, including decreased immunity during pregnancy, low immunities, work sites which cause easier access to disease vectors, and lack of knowledge about health care, women in developing countries are often involved in higher health risks than men. On the other hand, due to the large amount of manual labor required for agricultural production, adequate nutrition, and good health status are particularly important for women involved in agricultural work. Therefore, whether CAOIEs can enhance women's ability to access basic medical and health services or bring them positive health effects is paramount for the development of local women.

⁹⁹ Ahmad, Nilufar. (2010). Making infrastructure work for women and man: a review of World Bank infrastructure projects (1995-2009). Washington, DC: World Bank Group. http://documents.worldbank.org/ curated/en/240311468330964719/Making-infrastructure-work-for-women-and-man-a-review-of-World-Bankinfrastructure-projects-1995-2009

4.3.1 Childbirth and medical treatment

The 2015 World Bank statistics show that the maternal mortality rate is 197 per 100,000 people in Laos and 161 per 100,000 people in Cambodia, both of which are higher than the rate established in the third UN sustainable development goal, "the global rate of maternal deaths per 100,000 live births will decrease below 70 people in 2030". The economic conditions are regarded as the main factors restricting women's access to medical services in Laos and Cambodia. In 2014, the average expenditure on medical and health services per person was USD 33 in Laos and USD 61 in Cambodia.¹⁰⁰ Because of their low economic income, many rural people will not choose to go to hospitals for medical treatment.

In order to solve this issue, in addition to raising the incomes of local farmers through labor remuneration, most CAOIEs also provide the necessary support to farmers for medical treatment through advanced payment of salaries. Although a relatively mature micro-financial service system is established in Cambodia, it is very difficult for ordinary farmers in Laos to obtain credit loans from the formal financial institutions. To some extent, these measures taken by CAOIEs can make up for the lack of micro-credit services to ensure farmer's smooth access to medical treatment, and minimize the impact caused by medical expenses outside of a family's budget.

In addition, poor transportation is also taken as a major obstacle for women in Laos and Cambodia to obtain medical services. Since most of the planting bases of agricultural enterprises are located in the suburbs and far away from urban areas with a lack of corresponding medical facilities, farmers often can only travel by motorcycle if they go to the hospitals or clinics themselves. This is very inconvenient for pregnant women and seriously ill farmers. About half of all women in Cambodia reportedly give birth at home, and only 11% of them are assisted by medical staff during childbirth.¹⁰¹ In Laos, about 90% of rural women give birth at home due to lack of transportation.¹⁰²

CAOIEs in the localities improve this situation to some extent. In addition to investing in infrastructure, such as roads and bridges, most of the CAOIEs which were interviewed in the field research mentioned that farmers can communicate their needs to the CAOIEs through team leaders so that pregnant women or seriously ill farmers can be sent to hospitals by vehicles provided by the CAOIEs, which to a large extent reduces the difficulty for rural women to access the medical services.

¹⁰⁰ Data source: World Bank's database. http://data.worldbank.org

¹⁰¹ Cambodia's Rural Health Markets and the Quality of Care, World Bank, November 2014

¹⁰² Lao People's Democratic Republic Health System Review, WHO, 2014

Women usually go to a local hospital for the record after pregnancy and are fully exempted from the medical expenses according to the Lao Maternity Policy. If the pregnant women live in places far away from roads, the hospital will send a car to pick them up. The company once repeatedly transported pregnant women to the local hospital.

-Zhonghe Company

When rubber farmers get seriously ill or need to go to the hospital for childbirth, they can directly notify the team leader who reports to the company so that the company can send a car to transport the patients to the hospital for treatment. In accordance with their own wishes, pregnant farmers can choose to give birth to children at home or in hospital. The company once repeatedly received emergency calls from 2:00 - 3:00 in the morning, and provided vehicles to send pregnant women with dystocia to the hospital. For economically disadvantaged families, the company also paid wages in advance to help pay for medical expenses. Many female rubber farmers had children during the contract periods.

—Yunxiang Company

On the other hand, in order to enable mothers to receive adequate rest and recovery after giving birth, both the Laotian and the Cambodian *Labor Laws* stipulate that women workers should have paid maternity leave before and after childbirth. The CAOIEs visited this time also provided employees with formal benefits, such as maternity leave, reduction of work intensity and other benefits according to the regulations. However, since many women engaged in agricultural work sign order contracts with enterprises, they are not regular employees. Therefore, they cannot enjoy paid maternity leave, and the enterprises have no right to interfere with whether women farmers who have undergone delivery continue their work after adequate rest and energy recovery. This can only be decided by these women and their husbands. So this may lead some mothers to start intensive agricultural work when their physical condition is not recovered to the desired level, which adversely affects their health.

4.3.2 Safe Use of Pesticides and Fertilizers

Women have higher health risks in using agricultural chemicals such as pesticides than men, because of their lower levels of education and the lack of access to relevant safety training.¹⁰³ The CAOIEs that were visited generally provide free training for their employees and surrounding farmers to explain how to use pesticides and protective equipment such as masks and gloves.

¹⁰³ Mehra R, Hill Rojas M (2009) Food security and agriculture in a global marketplace: a significant shift.

In the prevention and control of plant diseases and insect pests, the company insists on using low-toxic and low-residue biological pesticides, and before the pesticide application, it explains to the employees how to use the chemicals and provides protective equipment such as masks and gloves.

—Forword Company

To protect the health of workers and community residents, the company avoids the use of high-risk pesticides during planting and all pesticides used are examined and reported to the People's Government of Laos for approval before use. All pesticide preparation work is handled by a Chinese technical commissioner, and full and complete personal safety appliances are provided to the rubber farmers who spray pesticides. These farmers are supervised by Chinese technicians during the spraying. Taking into account health factors, only male staff can be arranged for pesticide spraying.

—Yunxiang Company

However, since the level of education is generally low among rural households who usually have the levels of education from primary and junior high schools at most, with low literacy rates. Few people can even read and understand the local languages correctly. It is very difficult to carry out training on the safe use of pesticides. In the actual spraying of pesticides, the technicians will be assigned to follow and supervise the farmers. In some enterprises, Chinese technicians are solely responsible for the allocation of pesticides and women laborers are not allowed to use or be exposed to pesticides. Although this can protect the health of women from being affected by pesticides at the current stage, it cannot fundamentally improve local women's knowledge about the safe use of pesticides. It cannot be ruled out that in the absence of corporate oversight, women farmers are still likely to have access to pesticides, and misuse of or exposure to pesticides can endanger their health.

On the other hand, the use of low-toxic, low-risk pesticides and fertilizers is also one of the common measures for health risk reduction taken by the CAOIEs visited in this field research. Since the establishment of the relevant standard systems in Laos and Cambodia is relatively low, most of the CAOIEs in this interview chose to use pesticide and fertilizer products that are in line with China's domestic standards.

However, at the same time, the project team also learned from the research that some CAOIEs that the project team did not conduct research on do not standardize their use of pesticides and fertilizers. Thus, after the local government raised the relevant environmental requirements, their use of the pesticides and fertilizers was halted because these pesticides and fertilizers couldn't reach the standards. In January 2017, Tshopo Province of Laos issued an order banning 18 banana planting companies that used large quantities of pesticides and fertilizers, which had negative impacts on the

environment and health of surrounding rural households.¹⁰⁴ For the same reason, in June 2017, the Oudomxay Provincial Bureau of Agriculture and Forestry in Laos also indicated that 11 companies that lease land in the province for banana planting need to stop banana planting after the contract expires and return the land to local farmers without renewal.¹⁰⁵ All of these examples suggest that CAOIEs should pay more attention to the relevant risks when they invest in the countries where the relevant standards and regulations have not been established. The potential negative impacts on the environment and human health cannot be downplayed, and the relevant national standards or higher international standards should be adopted to regulate the behavior of these CAOIEs.

4.3.3 Health facilities and garbage disposal

Health conditions and facilities have significant impacts on the safety, well-being and educational prospects of women. "By 2030, everyone will enjoy due and fair healthy environment and individual hygiene, eliminate open defecation and especially ensure to meet the needs of women, girls and vulnerable groups in this regard." This is a specific action goal of the UN's sustainable development goal VI:clean drinking water and healthy environment. According to the statistics of World Bank 2015, 44% of the rural population in Laos did not have access to adequate basic sanitation facilities, whereas, in Cambodia, this figure reached up to 69.5%. In this context, the basic sanitation facilities provided by CAOIEs, including public toilets and domestic garbage pools, at the project sites are particularly important for meeting the environmental and personal hygiene needs of local women.

¹⁰⁴ (2017c). As planned, 18 banana plantations are to be closed in Bokeo Province of Laos. Vientiane Times. Transferred from the official website of China's Ministry of Commerce

http://www.mofcom.gov.cn/article/i/jyjl/j/201701/20170102506306.shtml

¹⁰⁵ Data source: World Bank's database. http://data.worldbank.org

The waste generated by Forword Company's labors at the agricultural bases is collected, piled up and disposed of in piles in a concentrated manner. Household waste of farmers is piled up in the open air and incinerated separately. In the rainy season, the company excavates reservoirs to accumulate water and uses intelligent water-saving irrigation to actively protect the environment and save resources.

—Forword Company

"We built the public toilets for men and women separately. Behind the public toilets, we built a septic tank to concentrate the manure."

-Chinese management staff of Yunxiang Company

"Zhonghe set up two bathrooms and four toilets (two for males and two for females) at its headquarter, with two bathrooms and two toilets (available to both men and women) for each of farmer bases. There are more men than women with men accounting for about 60% and women accounting for 40%. Some farmers chose to live in the mountains, and the company provided colored steel tiles for the construction of buildings without furnishing the related facilities for a single household. These farmers generally did not set up toilets, but some farmers did. "

"The excrement from headquarters and bases was pumped by local farmers with a special vehicle for centralized disposal at the garbage dump. It can be used as a fertilizer for rubber or banana, and the company requires workers to periodically bury manure at the foot of rubber trees and banana trees."

---Chinese management staff of Zhonghe Company

Toilets are indispensable basic sanitation facilities in people's lives and are vital to public health. Without clean and safe toilets, especially during menstruation, young women cannot recognize the risks posed by unhygienic conditions on time and will feel ashamed and feared for long periods.¹⁰⁶ In order to facilitate the work of farmers, most of China's agricultural enterprises build rendezvous points for farmer households within a few planting points and set up sanitary facilities such as public toilets, and garbage pools. For farmers living in countries with poorly developed basic sanitation facilities such as Laos and Cambodia, this can reduce their risk of illness to a large extent.

However, the project team also sees some issues during this research. First, some CAOIEs do not collect the waste generated collectively during agricultural production. For example, plastic bags used for protecting bananas from pests during the growing stage are largely discarded in the plantation after use. At the same time, other large amounts of waste piled up in the open air may also threaten the health and safety of rural households, especially women farmers. Improperly disposed of solid waste may

¹⁰⁶ We Can't Wait: A Report on Sanitation and Hygiene for Women and Girls. Water Supply and Sanitation Collaborative Council (WSSCC). November 2013. http://www.zaragoza.es/contenidos/medioambiente/ onu/1325-eng_We_cant_wait_sanitation_and_hygiene_for_women_and%20girls.pdf

breed pathogenic microorganisms, and also cause contamination of the surrounding soil, groundwater and surface water, as well as may cause a fire or poisoning due to residual pesticides.¹⁰⁷



In addition, due to the lack of garbage disposal centers around the park, most of the household garbage is still disposed of by means of separated incineration or concentrated incineration. The smog generated by the open burning is very likely to contain toxic and harmful substances including dioxin, furan, arsenic, mercury, PCBs, lead, carbon monoxide and nitrogen oxides, which can pose a hazard to human health.¹⁰⁸ Short-term exposure may cause headaches, nausea, and rashes. Long-term exposure is more likely to increase the risk of heart disease.

¹⁰⁷ Hygiene and Environmental Health Module 22: Solid Waste Management. The Open University. http://www. open.edu/openlearncreate/mod/oucontent/view.php?id=209&printable=1

¹⁰⁸ Open Burning of Garbage: Health and Environmental Risks. Government of Canada. https://www.canada. ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/environment/openburning-garbage-health-risks.html

4.3.4 Protection of water resources

Water resources are very important for agricultural production, domestic work, and daily life. Polluted water may not only contain toxic and hazardous chemicals but also is regarded as the vector for the transmission of infectious diseases such as malaria. As women are more involved in housework, it is usually the case that female members of the family are exposed and use water more frequently than men. Therefore, the impact of water pollution on women's health is also greater than that on men's health.¹⁰⁹

Improperly disposed of waste can breed pathogenic microorganisms while causing contamination of surrounding soil, groundwater and surface water, and may cause a fire or poisoning due to residual pesticides.¹¹⁰ Inevitably, pesticides and chemical fertilizers are needed during the farming process. They may infiltrate into the soil and pollute the groundwater, or flow into the nearby rivers after being washed away by rainwater. In addition, during the processing of natural rubber, a large amount of highly-concentrated organic wastewater will also be produced, which will greatly affect the domestic water for local residents if being directly poured into the river without any treatment.

Due to the fact that in Laos, there is no strict regulatory requirement for rubber product quality inspections and environmental inspections, in 2012, Yunxiang Company independently invested RMB 3.00 million to install the wastewater treatment equipment in accordance with the construction standards of domestic rubber plants in China. In addition, the company provided the rubber product inspection room, air purification facility and other environmental protection facilities.

Furthermore, to know about the quality and amount of surface water, the company carries out two tests for the surrounding rivers every year respectively in the dry season and rainy season and examines the decline in water level caused by rubber tree planting and pesticide residues. The surrounding rivers are slightly affected, which has no influence on the production of the planting base and life of the surrounding community residents.

—Yunxiang Company

For some countries with a relatively backward level of development, there is no strict regulatory requirement for environmental testing, or rigid standard for wastewater discharge by enterprises (or low standard). Some enterprises in the field research provide the wastewater treatment equipment according to the relevant standards in China. They test the quality and amount of surface water in the surrounding area on a regular basis, and examine the drop in water level and pesticide residues. Similar approaches should be more widely promoted among CAOIEs. The deteriorating quality

¹⁰⁹ Okwa O (2007). Tropical parasitic diseases and women. Ann Afr Med 6(4):157–163

¹¹⁰ Hygiene and Environmental Health Module 22: Solid Waste Management. The Open University. http://www. open.edu/openlearncreate/mod/oucontent/view.php?id=209&printable=1

of water in rivers and the reduction of its quantities not only negatively affects the daily operations of the plantations and the production and living of the residents in the surrounding areas, but may also causes conflicts between enterprises and residents over the limited available water resources.¹¹¹

4.3.5 Work at night

A large proportion of the COAEIs investing in Laos and Cambodia are engaged in rubber plantation investments. As the speed and yield of latex from rubber bark is greatly affected by air temperature and relative humidity, it is often the case that tapping takes place around 4:00 in the morning, when the temperature is the lowest and the humidity is highest during the day. Working at night cannot be avoided for a rubber worker who works on a rubber plantation. Such nighttime work can pose a significant health risk to female rubber cutters. Several studies have shown that working at night has a greater impact on women's health than on men's¹¹², and increases the risk of breast cancer.¹¹³

But on the other hand, the labor input for cutting rubber accounts for more than 70% of the total rubber production labor input,¹¹⁴ and it is a manual operation that requires higher skills than types of physical labor. The results of the interview during the field research also show that many female rubber farmers can work more efficiently than male rubber farmers with regard to cutting rubber. Therefore, prohibiting women from participating in the rubber cutting for the reason of health will greatly weaken women's labor participation on the rubber plantations.

¹¹¹ CecilieFriis, Small-scale land acquisitions, large-scale implications: The case of Chinese banana investments in Northern Laos, 2015

¹¹² Paddock, C. (2016c). Night shift work may affect women more than men. Medical News Today. https://www.medicalnewstoday.com/articles/309243.php

¹¹³ Eva S. Schernhammer, Francine Laden, Frank E. Speizer, Walter C. Willett, David J. Hunter, Ichiro Kawachi, Graham A. Colditz; Rotating Night Shifts and Risk of Breast Cancer in Women Participating in the Nurses' Health Study, JNCI: Journal of the National Cancer Institute, Volume 93, Issue 20, 17 October 2001, Pages 1563–1568, https://doi.org/10.1093/jnci/93.20.1563

¹¹⁴ Yan Xiqiang, Liao Yulan. Exploration of Rubber Cutting Technologies[C]. // Proceedings of The Third Academic Annual Conference of Nationwide Local Mechanical Engineering Societies and Cross-Strait Mechanical Technology Forum. 2013 : 129-132.



The Laos government is always very concerned about the health risks faced by women who work at night. The Labor Law stipulates that, women workers are not allowed to work at various industrial positions from 22:00 p.m. to 5:00 a.m. the next day.¹¹⁵ However, with the continuous deepening in the understanding that women should have equal opportunity to work with men, and the international community's emphasis on whether women should independently choose to participate in nighttime work, the Lao's *Labor Law*¹¹⁶ amended in 2013 changes the original regulations for the purpose of prohibiting the pregnant and 12-month from birth childbearing women from working at night. Although most CAOIEs engaged in rubber plantation sign a contract based on piecework system instead of an employment contract on a household basis, they will not compel or prohibit women from participating in night-time labor, as long as the work is in compliance with the *Labor Law*. However, based on considerations of health risks and the right to participate in labor, enterprises should still focus on whether women farmers' participation in nighttime work is the result of their own choices or whether they are forced by other family members.

¹¹⁶ Lao People's Democratic Republic Labour Law, 2013 (No. 43/NA), http://www.ilo.org/dyn/natlex/natlex4. detail? p_lang=en&p_isn=96369

¹¹⁵ Refer to the Laos Labor Law, transferred from the website of the Commercial Counselor's Office of the China Embassy in Laos: http://la.mofcom.gov.cn/article/ddfg/200504/20050400033203.shtml

4.4 Impact of enterprises on local women's education

Education and training are important elements of the "Empowerment of Women Principles" jointly developed by UN Women and the Global Compact. It requires that businesses should provide women with opportunities to advance their development at all levels and in all fields of the workplace; it ensures equal opportunities for women to participate in Company-sponsored education and training programs, and it provides employees with equal opportunities to engage in formal and informal exchanges and accept informal guidance. The lack of opportunities and resources for education and training is the main cause for long-term poverty and unfavorable social status of women in remote rural areas. Bridging the gap in the training and education is of great significance for rural women to improve their economic development capacity and social status.

4.4.1 Professional technical training

Professional technical training is a key part of an enterprise's local operation and development. It is the field of training that the interviewed CAOIEs invested most in the localities. The interviewed CAOIEs are mainly engaged in rubber, banana, rice, fruit and vegetable production. Therefore, the contents provided to their employees through training mainly include rubber cutting, flower wiping, thinning, seedling raising, seedling transplanting, field management, use of agricultural mechanical tools, and crop disease prevention, water and fertilizer management, pesticide use safety, etc.

In response to the question, "What was a specific training provided by your company for the professional development and skills enhancement of female employees?" Professional technical training is the most selected option for the management team of each enterprise, that is to say, it was selected by 15 of 19 respondents (see Figure 8).



Figure 8 Respondents' Answers

In the field of rubber plantation, women have obvious advantages in grafting, cutting etc., those who can participate in the technical aspects of rubber cutting need to go through half-a-month training and assessment. It is generally accepted by the management that women farmers are outstanding in terms of grasping the technical essentials, patience, and meticulousness, rubber cutting quality assurance and have become the preferred target of training for enterprises in this field. In the field of rice and fruits planting, women are mostly involved in the sowing, seedling raising, transplanting, pollination, pruning and harvesting of vegetables. It can be said that these are the key technical contents of training no agricultural plantation skills in the enterprises, which had a positive impact on improving the quality and yield of their own crops, and economic income.

In the rubber projects, Zhonghe Company provides farmers with on-the-spot guidance on rubber plantation techniques such as fertilization and cutting. However, the training is not open to all farmers, but only to those who are suitable for fertilization and rubber cutting as selected by the company. The company translates the Chinese material related to the rubber cutting methods into Lao and invites rubber cutting experts to deliver on-site guidance during the training. The training contents involve the way to grind a knife, the angle to cut the glue line and the method to determine whether the rubber tree is available for cutting, etc. After half-a-month training, the rubber cutters needed to be assessed and take the job only after passing an assessment. In the technical training, women may account for 80% with regard to the grafting, and the males and the females evenly split the rubber cutting and blade sharpening training. 2017 is the first year of rubber cutting at the rubber plantation, and at present, more than 200 people have received the training.

-Zhonghe Company

Forword Company's technical experts mainly adopt the field training, centralized training and the household guidance by expert technicians in the locality, and provide seedling nursery, transplanting, field management, disease control, water and fertilizer management etc., cultivation and management techniques for rice, vegetables and cassava, as well as technical user training on agricultural machinery for base staff and eco-village farmers. Meanwhile, the company also conducts agricultural technical training for local agricultural officials, technicians and agricultural college students, which play a certain role in promoting local agricultural talents and capacity building.

—Forword Company

However, the project team also found that enterprises tend to be "compartmentalized" in the training of local farmers, which means that the interviewed CAOIEs' management targets the farmers who are more capable depending on their different work processes, and local farmers are generally not systematically trained in the entire process from crop planting to harvesting. For women farmers, less agricultural training is required with regard to the use of agricultural mechanical tools, spraying of pesticides and other work which consume a certain amount of physical strength but need a certain kind of technology.

The development of agricultural mechanization is playing an important role in the

development of agricultural modernization. The degree of and capacity of mastery of agricultural mechanical tools determines the level of labor productivity. Thus the technical abilities of women are closely related to their income-generating ability. It was learned from the visit that the training of individuals at the CAOIEs on the use of agricultural mechanical tools mainly targets men farmers. Weeding machines, pesticide sprayers and other agricultural machinery are mainly operated by men with the male to female ratio of 10:1. Tools such as walking tractors are mainly used by Chinese employees or Lao employees with higher education levels and driver's licenses. All users are male. For the time being, agricultural mechanical tools or key labor tools are mainly operated by men. CAOIEs consider the heavy working tools to be like the spraying of pesticides in that they may be more detrimental to the female body's health. This also reflects the long-term marginalization of women and their use of agricultural modernization tools. which restricts women's access to the resources of technical tools. Overall, the CAOIEs interviewed have not started large-scale use of agricultural mechanical tools in their local farming, and are currently gradually promoting the use of these tools. Due to the limited number of the tools, the actual number of men farmers who are able to operate the tools for farming is small.

"Due to the low education level of base level farmers, the company currently provides little training on the use of mechanical agricultural tools for rubber farmers. At present, these tools are mainly used by regular Chinese or Laotian employees in China or Laos, and all the users are male. "

-Chinese management staff of Yunxiang Company

On the other hand, we need to pay attention to whether training can eventually be shared with women, and to what extent sharing this training can promote the building of women's development capacity and equal development of women and men. According to interviews with the management and local staff, corporate training methods are mainly held as centralized training and on-site guidance. For communicating training information, enterprises mainly consult the local management (including the head of bases, team leaders, or local village head) to call farmers to carry out training, or to make direct communication at the scene of farmers' gathering place. The training messages are basically delivered to every household, and the overall ratio of men to women is the same in terms of gender coverage.

However, it is worth noting that these channels are "one-way" rather than "two-way". This means that the interviewed enterprises mainly aim to serve agricultural production and improve the efficiency of agricultural production at present, providing farmers with top-down technical training. This implies that due to low education level and the lack of experience in agricultural cultivation, the development and training needs of local farmers for agricultural technological capabilities or other aspects are not well communicated to management staff. Women farmers have not clearly understood the issues related to limited training and inadequate development opportunities.

4.4.2 Leadership training

Training and development of women's management abilities are very important to giving women the opportunity to take part in the management and economic decision-making for narrowing the gender gap and promoting the equal development of males and the females.

The interviewed CAOIEs focus on selecting and cultivating local farmers as a team or group leaders, who are responsible for contacting and convening farmers, supervising the progress and quality of agricultural work, and conveying daily information of the company. The management of the company provides guidance for the team or group leaders on the methods of management and capacity improvement, including communication and coordination, team management and quality management of agriculture.

However, as mentioned at the beginning of this chapter, there is a gender imbalance in the management staff of the interviewed CAOIEs with fewer female management staff, and the female is mainly engaged in clerical work such as accounting and documents translation, thus their participation in the company's local internal and external communication and liaison, organization and coordination and management is very limited. So far, no woman farmer has been included in the selection of any local team or group leaders by any company. The training of management ability is mainly provided for local men farmers. The advantages of women in communication and coordination, organization and management have not been fully recognized by the management staff of the company, which is not conducive to women receiving fair development opportunities.

The company has not consciously focused on the balance of gender structure of management staff. The investment in managerial capacity training mainly serves for agricultural production with concerns about the training of individual target managers, and management capacity training has not covered more farmers. On the basis of equal access and mastery of the basic skills provided by the company, local women farmers are more disadvantaged than men in terms of their personal prestige, their activeness in the village, and their participation in the coordination of the rural households, which constitutes one of the reasons why it is easier for men farmers to be selected as the management members.

On the other hand, corporate leadership's awareness of and attitude towards women's leadership has also limited the channel for females to get promoted to a certain extent (for the management's gender awareness, see Chapter 3.1Corporate Management's Awareness of Gender Equality). Women's leadership skills have not been universally recognized by the male-dominated management staff. Women are limited to work in terms of position and work fields, lack opportunities to participate in management training and are unable to participate in corporate management and decision-making.

4.4.3 Support for community educational resources

At present, the primary educational infrastructure in Laos and Cambodia are still not perfect, and the teaching hardware and equipment are very scarce, which limit the development of local basic education to a certain extent. According to the UNDAF Lao Growth Report 2015, there are nearly 9,000 primary schools in Laos, but more than half of them do not have access to water, sanitation, and related environmental facilities. Although with the assistance of other countries or non-governmental organizations, some school buildings appear to be complete, however, classrooms are not provided with electric and students can only have classes in the dark in the evenings. The environment is extremely harsh.¹¹⁷

The villages where the interviewed CAOIEs operate are provided with teaching places for basic education. Enterprises mainly fund the building of schools, provide the teaching facilities, such as desks and blackboards, and students' learning materials, to ensure that the local farmer children can receive an education.

Meanwhile, the emphasis on education by CAOIEs, and especially their enhancement of the income-generating capacity of local farmers through technical training make these farmers aware of the importance of education for the future development of their children and to a certain extent to change their indifference towards children's dropping out of school and raising the level of their emphasis on the development of children's education.

Under the conditions that the same educational resources are available at the localities, girls and boys can basically enjoy equal educational opportunities. However, for the individual needs of female and male students, the interviewed CAOIEs have not provided differentiated educational resources as support, and the type and content of services are relatively simple, with insufficient planning and continuity of service. The training of local teaching faculties, teaching quality improvement, as well as voluntary service and other forms of services are not mentioned.

4.4.4 School-enterprise educational cooperation

Combined with their own advantages, the interviewed CAOIEs provide local schools with training in agricultural technology theories and practices and make more efforts to popularize and promote agricultural technology training and education. For women, obtaining school-enterprise cooperation training resources provides many opportunities for enhancing professional abilities, professional skills and obtaining employment opportunities.

¹¹⁷ Poverty in Rural Areas of Laos: Purpose of Education is Not Just about Alleviating Poverty but also Letting Children Choose the Future They Want. Chinese webs in Laos. October 10, 2017.

The company continues to sign a cooperation agreement with the Boleilie Academy of Agricultural Technology and King Sihamoni Technical School, the two colleges to provide free agricultural-related technical training courses for students at the two schools and carry out skill training at the agricultural base. By June 2017, agricultural technology demonstration training and promotion have been carried out at the Porret Academy of Agricultural Technology, King Sihamoni Technical School, the core base of Sino-Cambodian Agricultural Promotion Center, Kampong Speu Province, Kampong Cham Province, and Siem Reap Province. A total of 34 agricultural technology training courses, 71 theoretical and practical training courses have been held with a total of 2,478 trainees.

-Forword Company

In Cambodia, the interviewed CAOIEs provide free agricultural technology training courses for students of local colleges and universities and train them at agricultural bases. Due to the fact that the proportion of women in agriculture-related majors at local colleges and universities is higher than that of men, the agricultural skills training conducted by the interviewed CAOIEs plays an active role in promoting the professional skills of female students and their employment competitiveness. After training, whether a female student can remain in the company or be competent for other positions in the professional fields is an important aspect to evaluate the effectiveness of the CAOIE training. However, the interviewed CAOIEs have not gathered and tracked the statistics after training. At present, fewer students are capable of holding positions and willing to stay in the company, and the conversion rate of interns that become professionals at the company is not high.



Suggestions

Suggestions

Agricultural enterprises' workplaces, products, and communities are closely related to women's interests as they provide women with more work opportunities and development space and also empower women. They are of great significance for corporate and local economic development. Based on the analysis of the investment practices of CAOIEs in Laos and Cambodia, we think that in the future, due attention should be paid to the importance of women's issues for the sustainable development of the company. Potential risks and challenges brought by women's issues should be actively identified and handled when Chinese agricultural enterprises invest overseas. According to the field research, we make the following development proposals to help CAOIEs enhance their ability to manage gender issues and to turn challenges into opportunities.

5.1 Integrate female perspective into project evaluation and deepen communication and cooperation with stakeholders

Women are important participants and are indirectly affected by the overseas investment and operation of Chinese enterprises. Throughout the investment process, the enterprises should consider the female perspective, strengthen their communication with stakeholders and actively create a favorable investment and operating environment. In recent years, it is frequently seen that the implementation of Chinese enterprises' cooperative projects using overseas investment is protested or hindered by nongovernmental organizations (NGOs) and local community residents, which seriously affects the project benefits. In order to realize the sustainable development of overseas operation, it is suggested that at the early stage of investment, the enterprises should strengthen their communication with NGOs and residents of the community where the project is located to know about the development of the local economy, environment, and society, identify the development demands of local women, and gender issues concerned by the NGOs as well as the potential development risks of the investment projects with respect to the environment, social impacts and resettlement issues from the female perspective (such as: whether investment projects interrupt the paths for women's water intake and firewood collection, etc.) to optimize or adjust the design of investment projects. During the implementation of investment projects, it is suggested that the enterprises should strengthen their monitoring of project impacts and establish a system of public consultation for women farmers, community residents, NGOs and other related parties to promote public participation and incorporate them into the implementation of investment projects. In addition, the enterprises can conduct indepth discussions on jointly concerned areas such as agriculture, health, and education through deepening exchanges and cooperation with international and local NGOs that are concerned with gender-related issues. They can enhance their pertinence, effectiveness, and influence in providing relevant services locally, maintain good community relations and ensure the smooth implementation of investment projects.

5.2 Rationalize salaries, pay attention to developing community economies, promote the increase women's income and their direct economic benefits

The CAOIEs are responsible for ensuring equal pay for equal work of males and females at all posts, equalizing the value of their work and eliminating wage discrimination. For formal employees or farmers who sign contract agreements, the CAOIEs should provide fair compensation and purchasing prices and try to sign long-term contracts with them to ensure their steady source of income.

The CAOIEs should focus on driving economic development in communities and encourage farmers to grow grain or industrial crops, raise poultry and livestock to increase additional income. The CAOIEs are suggested to facilitate and help the above actions by providing access to good seeds, cheap leasing of large farm tools, and free technical guidance.

5.3 Regularize the contract signing process to ensure the legitimate rights and interests of women

As proposed, the CAOIEs should try their best to sign employment contracts in written form, which clearly define the rights and obligations of both parties. The low education levels of women farmers pose a greater obstacle to their understanding of written texts. The enterprises should try to find prestigious or unrelated third persons in the villages to help women farmers understand contracts more fully. In the absence of a written contract, oral consultations should be conducted in the presence of all the three parties, with the corresponding audio record or other evidence saved, if possible. If the contract of employment is signed with a family unit, it should be ensured that both husband and wife joining the workforce have no objection to the contract, and sign the agreement.

5.4 Respect and safeguard the right of women to work independently

Abiding by the laws and regulations of the country where the investment is located, as well as international conventions is an important foundation for CAOIEs to achieve sustainable development overseas. Due to the particularities of rubber cutting, nighttime work is necessary for the collection efficiency and quality of latex, affecting the economic benefits of the majority of rubber farmers. On the basis of guaranteeing that women have equal rights and employment opportunities with men, the CAOIEs should protect women's legitimate rights and interests that differentiate themselves from men due to their physiological and social characteristics. For agricultural production and operation activities that require nighttime work, the protection of women laborers' rights and interests should also be taken into account. Considering that the China's rubber enterprises and local farmers adopt the contracted and cooperative model of operation, rather than the management model of the employment system, farmers have more freedom and flexibility to arrange their own agricultural activities. As proposed,

the CAOIEs should clarify to all cooperating farmers that the nighttime work may bring health, safety, and other risks to ensure that women farmers with the advantages of rubber cutting technology have the right to choose whether to participate in the labor work with full knowledge. At present, there is no institutional requirement for nighttime working hours of agricultural business activities in the locality. As proposed, the enterprises should pay attention to and refer to the relevant local laws and international conventions, incorporate the provisions of avoiding women's 7-hour labor participation during nighttime into the company's regulations and management system to make farmers informed and agree, and guide the farmers to reasonably arrange working times to avoid unnecessary misunderstandings.

5.5 Provide basic medical support and financial facilities to facilitate women's access to medical services

As proposed, the CAOIEs provide social insurance or medical insurance for their employees, both Chinese and foreign employees, even when there is no mandatory requirement in the country where they are located. Meanwhile, where conditions permit, the necessary support should also be provided for informally employed farmers to get basic social security or health care.

Providing basic emergency medicine at the plantation gathering places, building roads leading to regular hospitals from the project sites and surrounding villages, and offering pregnant and parturient and seriously ill farmers with shuttle buses to the hospital are all important steps. Besides, it is important to provide the necessary medical and economic assistance, such as advance payment of salaries to reduce the proportion of farmers who give birth to babies at home as much as possible. For those pregnant women who are still willing to give birth to babies at home, the enterprises must help to contact a qualified midwives and avoid childbirth at home without any formal medical service.

5.6 Improve the health status and ensure the health and safety of women's life and childbirth

As proposed, the CAOIEs help farmers and surrounding communities build water intake facilities for clean drinking water, such as water wells and bottled water. Then women will not go a long way to fetch water. They will build toilets and garbage pools to avoid open defecation and open stacking of rubbish. They will help farmers and communities to dispose of their waste, and substitute the open-air burning with other handling methods as much as possible. They will recycle the reusable waste, for example, the plastic bags protecting growing bananas form pests.

The enterprises will choose the acceptable pesticides and fertilizer products in strict accordance with the laws of the country. In case of no strict legal requirements in the country, the Chinese standards or higher international standards should govern the choice. Meanwhile, the enterprises will construct the pollution treatment facilities, and regularly test the surrounding air, soil, and water, and mainly check the drop in water levels and pesticide residues. As proposed, the enterprises will also provide the safety and health training and protective equipment suitable for physical characteristics of the females so that they are not directly exposed to pesticides. They will introduce to the surrounding communities the possible negative effects of pesticides and fertilizers, establish preventive measures, and encourage women to participate in environmental protection activities. Meanwhile, they will avoid making residents feel scared due to lack of relevant pollution, health and safety information, through information disclosure.

For the work that will inevitably cause potential negative influences on employees' health, including nighttime work, as proposed, the enterprises will develop adequate health and safety training for their employees to explain the possible health risks, particularly the gender-based differences that may produce risks and the measures to reduce the work's influence on health. In addition, in view of the particularity of nighttime work, the enterprise will take more safety protection measures and provide farmers with sufficient and user-friendly lighting tools and safety equipment.

In order to improve the personal hygiene conditions of local farmers, as suggested, the enterprises should establish a reasonable number of clean toilets respectively for men and women according to the ratio of male and female employees and cooperative farmers, with the privacy of the toilets taken into account. Meanwhile, the enterprises will establish a reasonable number of bathrooms, provide locker rooms etc. for local female employees and farmers, and ensure to protect the women's privacy.

5.7 Focus on cultivating female leadership with professional technical training as the key

CAOIEs can train literacy, increase education of common laws and regulations for farmers, and encourage women farmers with low education levels to participate in the training. Meanwhile, they can provide differentiated training on financial and health management and social communication for women farmers at the base to enhance their abilities to manage their finances and health and to get involved in the social participation.

The enterprises can also encourage willing and capable women to try to use agricultural mechanical tools and master the methods to operate them. After passing the examination, these women can voluntarily decide whether to continue the mechanization related operations. To promote information sharing and exchange and mutual support, the enterprises can support women farmers to establish conversion groups for mutual assistance. The women with good cohesion and great influence can organize interchange activities for mutual assistance for the purposes of sharing agricultural technologies and information technologies user experiences etc. and enhancing women's social relationship networks and community participation abilities in villages.

Enterprises can encourage the representatives of women farmers with good mastery of agricultural technologies to share planting techniques with farmers at the base or in nearby villages to enhance their influence and confidence and gradually develop their leadership. Meanwhile, the enterprises should pay attention to the selection and assessment of local female candidates for management, provide the training for management positions of more women farmers, such as goal planning management, quality supervision and management, and communication skills etc., and make full use of women's advantages in communication and coordination to provide more development opportunities for women farmers.

5.8 Suggestions for relevant government departments, industry associations as well as investment and financing institutions

Emphasizing and promoting women's development has aroused widespread concern in China and the international community. During the overseas investment, CAOIEs push the females in the country of residence to develop the economy and improve their abilities, which is of great strategic significance for promoting Chinese enterprises' image abroad, and enhancing China's important role in implementing the Belt and Road Initiative, globalization and South-South cooperation. As proposed, in combination with the institutional arrangements for women and the requirements for responsibilities and obligations of foreign-funded enterprises in Southeast Asian countries, the relevant government agencies and industry associations should integrate the gender perspectives into investment guides, industry development proposals etc., as well as industry development forums to encourage CAOIEs to pay attention to and attract local women to work, improve the local women's labor skills, increase the assessment of investment projects' impacts and ensure to consult local women, community residents, NGOs etc.. In addition, as recommended, the relevant departments and supporting NGOs, which are concerned with gender issues in China, should enhance their development capabilities, and promote the "going-out" of China's NGOs in order to better communicate the aim of China's external investment and assistance in the country where the investment is made and to assist CAOIEs to improve their ability to manage sustainable development issues management such as gender equality and to enhance CAOIEs image of responsibility.

In addition, as the performance of social responsibility has become an important reference for investors to assess the profitability of enterprises, it is a social consensus that the quality of development of the enterprises is judged through the fulfillment of social responsibility. As an important part of enterprise social responsibility, gender equality should be more emphasized by investors. As proposed, financial regulators such as the CSRC should increase the requirements for disclosure of information on gender issues in the information disclosure of listed companies. As proposed, China's investment and financing institutions should increase the contents of risk identification and assessment for gender issues, and their impacts and performance evaluation in investment and financing projects.

Afterword

In this project, a thorough investigation of the management and implementation of gender equality projects, which have been carried out by CAOIEs in Laos and Cambodia, revealed the overall attitude towards gender equality of the management team and employees of the interviewed CAOIEs, as well as the coverage and influence of their practices on the local women and men. However, many problems are to be further explored and studied to provide further suggestions for the enterprises from theory to practice. According to our recommendation, the future research should focus more on the following aspects.

1) Research should be carried out on the participation levels in work, time allocation, and domestic labor burden of the local women where China's agricultural investments have been made. The research should also include the enterprises' influences on the above aspects after the women work in the CAOIEs.

2) Research should also focus on the impacts of the management and implementations for gender equality in CAOIEs. Research should use the gender equality perspective on the family level.

3) Research should make a detailed study and discussion of the indicators required for assessing gender equality issues in CAOIEs, as well as the operations necessary for the management of such issue.

Bibliography

English Bibliography

Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G., & Vaz, A. (2013). The women's empowerment in agriculture index. World Development, 52, 71-91.

Akkhavong, K., Paphassarang, C., Phoxay, C., Vonglokham, M., Phommavong, C., & Pholsena, S. (2014). Lao People's Democratic Republic health system review. Geneva: World Health Organisation.

Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B., & Pustika, A. (2017). Women's empowerment and gender equity in agriculture: A different perspective from Southeast Asia. Food Policy, 69, 270-279.

Cooper, A., & Link, B. (2015, May). Women in the Banana Export Industry. In Regional Report on West and Central Africa World Banana Forum.

Daley, E., Osorio, M., & Park, C. M. Y. (2013). The gender and equity implications of land-related investments on land access and labour and income-generating opportunities. A case study of selected agricultural investments in Lao PDR. FAO.

Eliste, P., & Zorya, S. (2015). Cambodian agriculture in transition: Opportunities and risks. World Bank: Washington, DC. USA

FAO (2013). CEDAW-A tool for gender-sensitive agriculture and rural development policy and programme formulation. Guidelines for Ministries of Agriculture and FAO.

Fortmann, L. (2009). Gender in agriculture sourcebook. Experimental Agriculture, 45(4), 515.

Friis, C., & Nielsen, J. Ø. (2016). Small-scale land acquisitions, large-scale implications: Exploring the case of Chinese banana investments in Northern Laos. Land Use Policy, 57, 117-129.

Gordon, A. (2001). Contract labour in rubber plantations: Impact of smallholders in colonial South-East Asia. Economic and Political Weekly, 847-860.

Grimsditch, M. (2017). Chinese Agriculture in Southeast Asia: Investment, Aid and Trade in Cambodia, Laos and Myanmar. Heinrich Boll Stiftung: Southeast Asia.

Lee, K. (2013). Sino-Laos and the Hmong (\pm) in Laos. In Golden Dragon and Purple Phoenix (pp. 369-405). World Scientific Publishing Pte.

Lu, J. N. (2017). Tapping into rubber: China's opium replacement program and rubber production in Laos. The Journal of Peasant Studies, 1-22.

Malapit, H. J., Sproule, K., Kovarik, C., Meinzen-Dick, R. S., Quisumbing, A. R., Ramzan, F., ... & Alkire, S. (2014). Measuring progress toward empowerment: Women's empowerment in agriculture index: Baseline report. Intl Food Policy Res Inst.

Manorom, K., Hall, D., Lu, X., Katima, S., Medialdia, M. T., Siharath, S., & Srisuphan, P. (2011). Cross-border Contract Farming Arrangement: Variations and Implications in the Lao People's Democratic Republic. Asian Development Bank.

Meredith, W. H., & Rowe, G. P. (1986). Changes in Lao Hmong marital attitudes after immigrating to the United States. Journal of Comparative Family Studies, 117-126.

McAllister, K. E. (2015). Rubber, rights and resistance: the evolution of local struggles against a Chinese rubber concession in Northern Laos. Journal of Peasant Studies, 42(3-4), 817-837.

Nelson, S., Sisto, I., Crowley, E., & Villarreal, M. (2012). Women in Agriculture: Closing the Gender Gap for Development1. *Feeding a Thirsty World*, 25.

Ong, A. (2011). Translating gender justice in Southeast Asia: Situated ethics, NGOs, and bio-welfare. Hawwa, 9(1), 26-48.

Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A., & Peterman, A. (2014). Closing the knowledge gap on gender in agriculture. In Gender in agriculture (pp. 3-27). Springer Netherlands.

Phoumanivong, S., & Ayuwat, D. (2013). The impacts of contract farming on rural farm households, Lao PDR. ISS & MLB.

Robert G. Blanton & Shannon Lindsey Blanton (2015) Is Foreign Direct Investment "Gender Blind"? Women's Rights as a Determinant of US FDI, Feminist Economics, 21:4, 61-88

Shi, W. (2008). Rubber Boom in Luang Namtha. A Transnational Perspective. GTZ RDMA.

Sydney Calkin (2016). Globalizing 'Girl Power': Corporate Social Responsibility and Transnational Business Initiatives for Gender Equality, Globalizations, 13:2, 158-172,

Thinh, H. B. (2009, March). Rural employment and life: challenges to gender roles in Vietnam's agriculture at present. In FAOIFAD-ILO workshop on Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty, Rome(Vol. 31).

Weeratunge, N., Joffre, O., Senaratna Sellamuttu, S., Bouahom, B., & Keophoxay, A. (2016). Gender and household decision-making in a Lao Village: Implications for livelihoods in hydropower development. Gender, Place & Culture, 23(11), 1599-1614.

World Bank. 2008. Gender in agriculture sourcebook (English). Agriculture and Rural Development. Washington, DC: World Bank.

Yoshida, K. (2012). Gender Perceptions in Southeast Asian Countries: Findings from JICA-RI Value Surveys. World Development Report.

Chinese bibliography:

陈定辉. (2017). 老挝: 2016 年回顾与 2017 年展望. 东南亚纵横, (1), 14-22.

董向诗杰.(2016).中国(云南)企业赴老挝农业投资生产经营模式研究.(博士论文),云 南农业大学.

海克 (Heike, B.), 凯特 (Kate, L.) 著;赵鸭桥,张毅编译 (2012). 外国农业投资对老挝反 贫困的机遇与挑战.云南科技出版社

坎迪达•马奇、伊内斯•史密斯、迈阿特依•穆霍帕德亚著,社会性别意识资源小组译(2004). 《社会性别分析框架指南》.社会科学文献出版社

联合国妇女署、联合国全球契约(2011).《赋权予妇女原则•性别平等带来经济发展》

罗有亮. (1997). 老挝的苗族. 世界民族, (3), 58-63.

田东林, 雷磊华 (2011). 境外替代种植:保障云南粮食安全的新途径. 云南农业大学学报 5 (4): 34-38.

中华人民共和国商务部、国家统计局、国家外汇管理局 (2017).2016 年度中国对外直接投 资统计公报

张毅, & 张玉. (2012). 中国企业农业投资对老挝社区和小农户的影响研究——基于老挝北部地区的实地调查. 当代经济 (3). 135-137

张毅, & 张玉. (2014). 境外农业投资企业社会责任问题研究——以中国对老挝农业投资企业为例. 经济研究导刊 (1), 15-17.

Appendix I

A brief description of the provisions in the laws related to gender equality in Laos and Cambodia

Laos

Tanlard	[A brief description of the provision of the set			
Topic of Discussion	Laws and regulations	A brief description of the provisions of the relevant laws			
Political participation	The Constitution Law on Development and Protection of Women Law on Election of National Assembly (1997)	Citizens of both sexes have equal rights to vote and to be elected, and to take the right position in various organizations; Citizens of both sexes have equal rights to engage in political, economic, social and cultural activities, as well as familial, national defense and security, and foreign affairs. Citizens of both sexes have equal rights to vote.			
Equal employment	Labor Law	Employers are not allowed to discriminate against employees on the basis of gender. Employees receive equal pay for equal work. The age of retirement is the same for men and women.			
Fertility and health care	on Social Security System for Enterprise Employees Law on Development	An employer has no right to terminate the labor contract with a female employee who is pregnant or whose newly born child is less than one year old. Female workers have the right to enjoy at least 42 days of paid maternity leave. Females protected by social security systems, when unable to work during pregnancy or within six months after childbirth, have the right to receive the same allowance as those of illness. Young women and women of reproductive age in Laos have the right to medical examination and vaccinations.			
Marriage and family	Law on Development and Protection of Women, Family Law	Marriage must be based on mutual consent and will from both sides. Husband and wife have equal rights to discuss and make decisions on internal family affairs, and jointly decide their place of residence, employment, childbearing and other matters. Husband and wife have equal rights in all aspects of the family.			
Civic Affairs	Law on Development and Protection of Women	Children have equal rights to inherit properties.			
Education	Law on Education	All citizens, irrespective of their sex, have equal rights to education.			

Cambodia

Topic of Discussion	Laws and regulations	A brief description of the provisions of the relevant laws				
Political participation	The Constitution	Citizens of both sexes shall enjoy the rights to vote and to stand as candidates for an election.				
Equal employment	The Constitution Criminal Code Labor Law	Citizens of both sex shall enjoy the rights to choose any employment according their abilities. Citizens of both sex shall receive equal pay for the same work. An employer shall not refuse employment on the grounds of marital status. A female employee has the right to enjoy 90 days of maternity leave after giving birth, and an employer shall not terminate her during this period.				
Financial service	The Civil Code	Citizens of both sex are equal and free from discrimination and enjoy the rights to borrow from the banks and obtain other financial credit.				
Marriage and family The Civil Code Law on the		A man and woman have equal rights to marry and to dissolve their marriage. A husband and wife have equal rights in marriage and family affairs, including the equal rights to use, benefit from and manage joint properties.				