

Mr. DANIEL LINDGREN – Founder, Rapid Asia consulting Firm
Mrs. KEO KANEKA- Policy Advisor Oxfam in East Asia Region-*Oxfam America*
#94, Russian Boulevard Sangkat Teuk Laak 1, Khan Toul Kork, Phnom Penh
E-mail: kkeo@oxfamamerica.org and lindgren@rapid-asia.com

*Presenting Authors attending the Conference
#Non-attending Authors1- Ms.Keo Kaneka

**Paper prepared for presentation at the
“2017 WORLD BANK CONFERENCE ON LAND AND POVERTY”
The World Bank - Washington DC, March 23-27, 2017**

Copyright 2015 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Abstract

Rapid economic expansion has led to an increase in demand for agricultural land, creating land tenure insecurity for the small-scale farmers. It also leads to negatively affected, as key industrial sector and other development project. Land grabbing, or the acquisition of land by the individual and cooperate investors or government is become a major threat to small scale famer and put their food security at risk “Why have smallholders been ignored or regularly stigmatized as old-fashioned, resistant of innovation, inefficient, and a barrier to modernization?” They contribute to the production of about 50% of the world’s food, which quells hunger in developing countries. In addition small-scale farmers in Lower Mekong Basin Countries also face challenges on several other fronts. In rural areas, involuntarily imposed landlessness is one of the main drivers of poverty. Considering this context, this paper aims to identify the characteristic and implications of economic growth’s effect on small-scale farmers, women farmers and landless in access to land and other resources in order to help understand and investigate the underlying issues of growth and its distribution in those LMB countries and analyzes How to minimize the negative impact of current policies and practices on smallholders `wellbeing and livelihood.

Keywords: Implication of Macroeconomic Growth, Access to land, Landless/Land-poor, Smallholder, inclusive growth, Gender, women, Pro-poor policy

Title: Understanding the implication/impact of Macroeconomic Growth on smallholder Farmer, Landless, Land-poor and women's livelihood and Land Right in Lower Mekong Basin Region- from the case of Thailand.

Presenting Authors: Mr. **Daniel Lindgren**

Main Authors: Mr. **Daniel Lindgren, Mr. Hemantha Kumar Pamarthy and Ms. Keo Kaneka**

Presenting Author Bios:

Daniel Lindgren, founder of Rapid Asia, has extensive experience in international business consulting, project management and research. He is a true International consultant having lived, worked and studied on four continents including Europe, US, Australia and Asia. During his career he has held a number of senior positions with leading global consulting firms, working with economic consulting, finance, business consulting, monitoring & evaluation, political polling, and social research. Since beginning of 2010, Rapid Asia has carried out multi country and large scale national studies across Asia and beyond, working with a number of high profile UN and other development agencies. Between 2002 and 2009, Daniel worked as a Director and later Regional Director for TNS Research International starting in Indonesia where he oversaw numerous large key accounts as well as being the Country Head of the Polling & Social Sector. In this capacity he developed and worked with a number of international Aid and Donor organizations. In 2007 he relocated to Bangkok to establish a regional hub for Social Research. During this time Daniel cultivated an extensive network of sub-contractors and clients, and carried out several large multi country projects for a variety of regional development agencies. Daniel is an occasional speaker and has written several feature articles for various publications.

SECTION 1: Introduction of Economic situation and growth in East Asia.

Many SEA countries are searching for new growth and development strategies that are more focused on domestic demand and better adapted to changing international market conditions. Policy makers in the region recognize the need to adapt their development strategies, and indeed have included several new elements in their medium-term development plans that reflect a shift towards a new growth model, such as human capital development, social and labor market policies, policies that promote greener economies and policies that address economic and social disparities. Government infrastructure spending is slated to be an important contributor to overall growth in a number of Southeast Asian countries.

The policy challenges facing each country depend to a large extent on their level of development. Several of the countries in this study face the challenge of building and upgrading infrastructure to bring the agriculture sector into the commercial mainstream. Productivity in agriculture and other sectors could still be the major concern on how the countries push forward their visions and development strategies, such as the reform of vocational and technical education and training systems. The result is a mismatch between economic need and a large unskilled labor force. Given these circumstances, this project sought to find out:

- Macro-economic growth's effect on small-scale farmers, women farmers and landless producers in LMB countries.
- Which key macroeconomic policies have positive impacts, and how to ensure that they have equal benefit from country growth and regional growth.

This research has been funded under a project call "Sustaining and Enhancing the Momentum of Innovation and Learning on Rice Intensification in Lower Mekong Basin countries". Its led by the Asian Institute of Technology along with its partners, including Oxfam and the United Nations Food and Agriculture Organization (FAO), the "Sustaining and Enhancing the Momentum for Innovation and Learning around the System of Rice Intensification in the Lower Mekong River Basin countries (SEMIL-SRI-LMB)" is a 60-month European Union-funded project implemented in the LMB countries. The project associates are the SRI-Rice Centre of the Cornell International Institute for Food, Agriculture and Development (CIIFAD) in the United States and the University of Queensland in Australia.

The project seeks to contribute to food security, income generation and the resilience of rain-fed small-scale farmers in LMB countries confronting climate change. The primary beneficiaries of the study are small-scale farmers, landless laborers and national policy makers. The growth of the Southeast Asian (SEA) region will average at about 5.5% between 2013 and 2017, highlighting the fact that some countries are at an earlier stage of development, while others are at a stage where rapid gains in productivity become more difficult to achieve. Nevertheless, in most countries, growth is projected to be quite rapid over the medium-term, from over 6% for Vietnam and ranging from 7% to 7.5% in Cambodia and Lao PDR.

The Southeast Asian Countries of Thailand, Vietnam, Cambodia and Lao PDR are part of the Lower Mekong Basin (LMB). While Cambodia and Lao PDR share their borders with the other three countries, Thailand and Vietnam each share borders with at least of two of the four aforementioned countries.

Out of these, Cambodia, Lao PDR, and Vietnam once made up French Indochina with Saigon (now known as Ho Chi Minh City) as the capital. Although Vietnam's official language, Vietnamese, uses Latin script, the official languages in the other three countries are based on Hindi script, enabling people of one country to understand the language of the other three without much effort.

All four countries are part of ASEAN, which entitles their citizens to freedom of movement within the region. In addition, all four countries' GDPs show a strong growth rate. Thailand and Vietnam have strong investments in Cambodia and Lao PDR, and all four countries attract investment from East Asian economic powerhouses, such as China, Japan and South Korea.

One of the most enduring similarities in these countries is the cultivation and consumption of rice, which constitutes the staple food for the people.

ECO-AGRI INPUT COMPARISON AMONG THE 4 COUNTRIES (TABLE-1)

Country	HDI	Classified	World Rank	GDP Growth (2014)	Agriculture Contribution (2015)	Agri GDP Increment (2014)	Agri-Employment
Thailand	0.726	High	93	3.7%	10%	0.90	32%
Vietnam	0.666	Medium	116	6.0%	17%	3.50	48%
Cambodia	0.555	Medium	143	7.0%	29%	(-) 1.40	49%
Lao PDR	0.575	Medium	141	7.5%	23%	7.50	73%

All four countries have tried to implement planned economies, but over time, have gravitated towards market-driven economies, which forced them to enact more proactive economic policies.

The above table indicates that the Human Development Index (HDI) is 'High' in Thailand, even though the country is experiencing relatively low GDP growth. The other three countries have a 'Medium'-level HDI, but are experiencing extremely high rates of economic growth.

At the same time, however, the contribution of agriculture to the GDP in all four countries is less than other sectors, such as Services, Tourism and Manufacturing. Still, in all four countries, the agriculture sector creates a significant number of jobs, (*see Tables 2 and 3*).

SECTOR-WISE EMPLOYMENT AND LABOUR IN EACH COUNTRY (TABLE-2)

Country	Sectors		
	Agriculture	Services	Trade & Industry
Thailand	32.2%	51.1%	16.7%
Vietnam	48.0%	31.0%	21.0%
Cambodia	48.7%	31.5%	19.9%
Lao PDR	73.1%	20.6%	6.1%

SECTOR-WISE CONTRIBUTION TO GDP & JOBS CREATION (TABLE-3)

Country	Sectors contributing to GDP and Employment					
	Agriculture		Services		Trade & Industry	
	To GDP	To Jobs	To GDP	To Jobs	To GDP	To Jobs
Thailand	10 %	32 %	52 %	51 %	38 %	17 %
Vietnam	17 %	48 %	44 %	31 %	39 %	21 %
Cambodia	29 %	49 %	44 %	31 %	28 %	20 %
Lao PDR	23 %	73 %	44 %	20 %	33 %	6 %

Job concentration in the agricultural sector could be due to a combination of factors such as technological lag, continuance of traditional practices, lack of capacity and lack of various resources necessary to adopt modern techniques.

Another trend, as detailed below, shows a steady decline in agriculture's contribution towards all four countries' GDPs. This could be an indication of diversification in the economies of the LMB countries. The services sector, and tourism and transport in particular continue to dominate the economies of all four countries.

TRENDS IN CONTRIBUTION OF AGRICULTURE TOWARDS GDP (TABLE-4)

Country	Agri-Contribution towards GDP			Remarks on Trend
	2013	2014	2015	
Thailand	12%	12%	10%	Declining
Vietnam	19%	18%	17%	Declining
Cambodia	34%	30%	29%	Declining
Lao PDR	25%	28%	23%	Declining

While half of Thailand's land is used for agriculture and approximately a quarter of the country's land of that land for cultivating rice, in the other three countries, between 33-43% of the land is used for agriculture. An interesting point is that in Thailand and Vietnam, only half of the agricultural land is used for rice cultivation; however, both countries are leaders in rice exports.

LAND UTILISATION FOR AGRICULTURE (TABLE-5)

Country	Arable Land % of Total Land	Total Agri-Land (Mn. Ha)	Used for Rice (Mn. Ha)	%	Crops per year	Used for Other Crops (Mn. Ha)	%
Thailand	43.3	20.400	10.000	49	1-2	10.400	51
Vietnam	35.1	(Estimate) 7.600	3.800	50	2-3	3.800	50
Cambodia	32.9	4.015	2.968	74	1-2	1.047	26
Lao PDR	10.1	(Estimate) 0.900	0.720	80	1-2	0.180	20

Throughout Asia, farms have generally been declining in size, but the number of small farms and their share in total cultivates area has been increasing over time in several Asian countries. Small-scale farmers' contribution to agricultural output in these countries cannot be ignored.

Small-scale farmers cannot apply huge capital due to their financial constraints, so they invest instead in larger time units, intensive and higher labor and other inputs through the assistance of family members. In many countries, women work on or own a majority of these farms.

SMALL SCALE FARMING – WOMEN FARMERS (TABLE-6)

Country	Small Scale Holding	Small Scale farms / farmers	Small scale rice farmers	Women farmers
Thailand	< 3.5 ha	90%	NA	41%
Vietnam	<1 ha	70% estimated	NA	72% ¹
Cambodia	< 2 ha	85%	73%	75%
Lao PDR	< 2 ha	50%	90%	54%

Small-scale farms or family farms play an important role in agriculture. They contribute to the production of about 50% of the world's food, which quells hunger in developing countries. Small farms cultivate produce which is

¹ Source: Women farmers and IPM farmer field schools in Vietnam - <http://www.agriculturesnetwork.org/magazines/global/fighting-back-with-ipm/women-farmers-and-ipm-farmer-field-schools-in>

considered more heterogeneous than the modern varieties and thus are more resilient to diseases, droughts, and pests.

This diversity allows small-scale farmers to achieve a relatively high index of diversification and output in their crops, and thus helps render an inverse relationship between farm size and productivity per hectare. In addition, these farms provide food for the world's growing population, and create and sustain jobs in rural areas, which helps control rural migration.

When land sizes and yields are not sufficient or when climatic conditions change and adversely affect farm yields, farmers are pushed to migrate in search of alternative livelihoods. There are internal migrations --rural to urban areas within the country, external migrations --migration to other countries to seek additional income, and inward migration -- migrants coming into the country and competing with local labour. One major challenge with migrations is that as men migrate to seek additional income, the women are left behind to fend for themselves, as well as care for their families and farms.

Almost all the women involved in small-scale subsistence agriculture are employed from production to processing, in addition to caring for their families and other domestic responsibilities. Less than half of them obtain any support from male relatives.

In addition to gender-related biases, small-scale farmers in all four countries also face challenges on several other fronts. In rural areas, involuntarily imposed landlessness is one of the main drivers of poverty. Rapid economic expansion has led to an increase in demand for agricultural land, creating land tenure insecurity for the small-scale farmers.

Other challenges include low agricultural productivity; the use of traditional farming practices coupled with an inability to take advantage of advances in technology; inadequate irrigation; climate change; issues with land titles, land user rights and land grabbing; access to quality seeds, fertilizer, and pesticides; difficulty to access to credit; lack of knowledge in storing, phytosanitary issues, and, most importantly, lack of access to supply chains / markets.

Rice cultivation is highly vulnerable to climatic changes, which has led to lower outputs and greater food insecurity for millions in Southeast Asia and in the four aforementioned countries in particular. Shifts in rainfall and water flow patterns can impede traditional agricultural production, resulting in irregular or frequent flooding or droughts, both of which imperil food security.

Increases in temperatures and changes in rainfall patterns also have negative effects on fisheries and livestock. Rising temperatures and increased flash floods, decrease seeds and stocks, and reliance on rice monocultures. Decreases in immunization, heat stress, and decreased availability of fodder all affect livestock and may accelerate starvation, malnutrition and the spread of disease.

Economic growth is also negatively affected, as key industrial sectors, such as Animal Husbandry, Farming, Fisheries and Forestry, Hydropower, Mining, and Wood Processing, depend on land and water. Because of this, the existing knowledge base on climate change as it relates to agricultural production, food security and vulnerability needs to be strengthened.

Farmers have been attempting to adapt to climate risks, but more often than not lack sufficient awareness and support. Most small-scale farmers are unable to adapt against future climatic risk due to a lack of climate-related agricultural knowledge and access to essential information and resources. For example, less wealthy small-scale Vietnamese farmers appear to have been less able to adjust climate changes than higher-income small-scale Vietnamese farmers, especially with regard to adjustments in planting techniques, diversifying migrating, buying insurance, and changing water use

However, all farmers in the subject countries must have the knowledge and capacity to adapt their livelihoods to climate change. Land grabbing, or the acquisition of large tracts land by individuals or corporate investors or government entities, is also a threat to small-scale farmers, and puts their food security at risk.

Land grabbing usually occurs due to farmers' lack of land titles and other instruments to demonstrate their legal rights to their farms. Land grabbing has different connotations in different countries. In the LMB countries, the term "land grabbing" generally refers to land acquired from small-scale farmers, which is then reallocated larger corporations either within or outside of the agriculture sector.

Though land titles or land Use Rights (LURs) have been issued, they generally do not serve their desired purpose. In most cases, land tenure security cannot be ascertained, particularly with regards to informal settlements, disputed areas, and indigenous and ethnic minority people. This affects production and growth.

The small-scale farmers, need better access to education, skills and technology training in order to ensure understanding about their land rights. They also need better mills for their paddies, and access to financial services so that they can increase their production and their income levels.

IRRIGATED LAND (TABLE-7)

Country	Irrigated land as a percentage of cultivated land
Thailand	24 %
Vietnam	89 %
Cambodia	43 %
Lao PDR	22 %

Cambodia's agricultural cultivation is largely concentrated around the water-rich Tonle Sap water system. Because of this, most of the cultivable lands in other parts of Cambodia face hardship due to lack of adequate irrigation. This study reveals that water in Thailand is considered 'abundant' for cultivation irrespective of the presence or lack of a larger irrigation network. But Lao PDR, which is a mountainous country with relatively minimal amounts of arable land, faces not only land shortages but also inadequate irrigation facilities.

The inverse relationship between output and resilience to agricultural fluctuations could become powerful reasons to improve irrigation and land reform policies, including land re-distribution, to improve efficiency, outputs, and gains.

However, small-scale farmers need increased access to stable markets and infrastructure suitable to their needs.

Tables 8 and 9 below detail the commodities produced in each of the four countries and their respective growth percentages. Although the data are indefinite, it can be safely assumed that a major portion of rice produced in these countries is on small-scale farms.

EVOLUTION OF SELECT COMMODITIES PRODUCED (TABLE-8)

Country	Evolution of Production Quantities for top 3 Commodities - 2011					
	Production in 1000 MTs and Annual Growth in percentage (%)					
	Cereals / Production Quantity	Growth	Rice / Production Quantity	Growth	Coarse Grains / Production Quantity	Growth
Thailand	41,473	4.19	36,128	4.04	5,188	4.64
Vietnam	47,236	3.53	42,398	3.41	4,838	4.64
Cambodia	9,496	7.41	8,779	6.98	717	13.72
Lao PDR	4,162	5.97	3,066	2.85	1,096	19.49

EVOLUTION OF SELECT COMMODITIES TRADED (TABLE-9)

Country	Evolution of Trade Quantities for 3 related Commodities - 2011					
	Production Quantity in 1000 MTs and Annual Growth in percentage (%)					
	Product / Trade Quantity	Growth	Product / Trade Quantity	Growth	Product / Trade Quantity	Growth
Thailand	Cereals / 11,138	7.46	Rice / 10,671	7.55	Meat / 729.70	10.33
Vietnam	Cereals / 7,113	8.90	Rice / 7,112	8.91	Coffee / 1,256	5.07
Cambodia	Rice / 174.00	101.79	Cereals / 180.30	36.53	Coarse Grains / 6.30	(-) 28.02
Lao PDR	Cereals / 202.90	9.82	Coarse Grains / 202.90	9.82	Coffee / 25.00	27.92

Yet, rice is not one of the top export commodities in either quantity or value. One of the major reasons for this could be that most farmers who cultivate rice do so for their own use or for domestic markets. Lao PDR and Thailand, see higher growth in other agricultural products, such as coffee and meat.

Lack of quality rice mills is also a challenge. With small, obsolete, and inadequate mills, much of the output is sub-standard, and it is difficult to export uniformly acceptable rice.

QUANTITY OF SOME OF THE TOP COMMODITIES EXPORTED (TABLE-10)

Country	Top 3 Commodities exported in terms of quantity (MTs)					
	First		Second		Third	
	Product	Quantity	Product	Quantity	Product	Quantity
Thailand	Sugar Raw	4,122,701	Cassava	3,735,209	Refined Sugar	2,397,970
Vietnam	Cassava	2,680,178	Coffee	1,256,400	Rubber	816,600
Cambodia	Rubber Dry	44,371	Sugar Raw	18,500	Palm Oil	17,495
Lao PDR	Maize	202,947	Coffee	25,008	Sesame Seeds	2,122

VALUE OF SOME OF THE TOP COMMODITIES EXPORTED (TABLE-11)

Country	Top 3 Commodities exported in terms of Values (Mn. US \$)					
	First		Second		Third	
	Product	Value	Product	Value	Product	Value
Thailand	Rubber Dry	10,634.72	Natl. Rubber	2,541.46	Sugar Raw	2,094.00
Vietnam	Coffee	2,752.42	Rubber	2,450.00	Cashew	1,473.14
Cambodia	Rubber Dry	193,243	Palm Oil	15.99	Sugar Raw	12.73
Lao PDR	Coffee	72.35	Maize	25.69	Fruit	1.62

SECTION 2: Conceptual Framework / Analytical Framework

The Project Team (Annex 1) was comprised of technical experts with diverse experience in Thailand and LMB countries, as well as regionally and globally. Team members have expertise in economics, livelihoods, and human

rights. Team members also possess experience in conducting both qualitative and quantitative research, and experience working with both donors and implementers.

The team employed a mixed-method evaluation design that was comprised of a desk review for Cambodia, Lao PDR and Vietnam, and qualitative interviews with key stakeholders and focus group discussions with beneficiaries in target communities in Thailand. Guides for collecting information were developed for each target group, covering specific program-related topics such as farmer profiling, landholding, labor deployed, farming methods, crops cultivated, crop utilization, supply chain conditions, policy atmosphere, supports and subsidies, issues, and trials and tribulations. To this end, the analytical framework follows a five-phase path.

Phase 1: desk review: The research team collated the data and conducted a document review to discover necessary information and better understand the study and its objectives vis-à-vis ground realities.

The document review helped the research team not only understand the project, but also clarify and comprehend the agro-economic landscape of the countries under study. Apart from the references mentioned in the report pages, the bibliography at the end of the report presents a list of documents reviewed during the course of study, clearly mentioning the sources and the dates the sources have been accessed.

Phase 2: analysis - From the initial document review and consultations the research team moved onto a three-step analysis of the data, as detailed below. Within the Phase 2 there were several steps that have been defined as below:

STEP 1- IDENTIFICATION AND CHARACTERIZATION OF SSFS

- Average landholding of SSF (national definition)
- Number and percentage of
- SSFs defined as poor by national criteria
- SSFs suffering from one or more periods of food shortage during a year
- SSFs suffering from malnutrition, including children
- Landless peasants
- Women carrying the main responsibility for agricultural activities
- Key livelihood strategies (likely to depend on market access and/or ethnicity)
- Rate of male and female short-term and long-term migration

STEP 2- IDENTIFICATION OF THE POLICY ATMOSPHERE THROUGH IDENTIFICATION AND ANALYSIS OF POLICIES FOR DIRECTIONS THAT ENABLE PROGRESS OR HINDER THE DEVELOPMENT OF SUSTAINABLE SMALL-SCALE AGRICULTURE, WITH A FOCUS ON IMPROVING FOOD SECURITY AND INCREASING INCOMES AND ENVIRONMENTAL SUSTAINABILITY. POLICIES NEED TO BE ANALYZED ON THE FACTORS OF:

- **Land** – Rule of law/s, planning, acquisition and use, consolidation and constraints
- **Agriculture** – Agriculture and trade, incentives, application of sanitation and phyto-sanitary (SPS) standards, irrigation, traditional, customary and organic production, research extension, formation of farmer groups and extension policies and practices
- **Rural Development** – Decentralization, industrialization, urbanization and migration, access to credit, eco-tourism

- **Trade and Commerce** – Import-export policies, trade agreements, ASEAN / GMS / GATT / WTO membership, contract farming, market for small-scale friendly crops, development of local agro-industries
- **Environment** – Agro-biodiversity, chemical and phyto-sanitary product promotion and regulation, adaptation and mitigation of climate change aspects
- Key policy actors and policy directions
- Influence of key actors on key policy directions
- Impacts on food security, SSF incomes, environmental sustainability, and sustainable livelihood options for SSFs
- What can be done at the regional and national levels?
- Contradictions between policies and practices
- Development of indicators for policy interventions, measured in terms of progress and impact
- Recommendation and prioritization of policy interventions for the project

STEP 3- IDENTIFICATION OF COMMONALITIES (SWOT) AND COMPARISON AMONG THE FOUR COUNTRIES

PHASE 3: KEY INFORMANT INTERVIEWS & FGDS

Conducting key informant interviews with stakeholders and focus group discussions with beneficiaries

Based on requirements of the ToR and in consultation with Oxfam, the selection of informant groups was reduced to two pools, specifically:

- (1) Stakeholders, such as relevant government agencies, institutions, associations and
- (2) SSFs in target communities

A total of six SSF focus groups were conducted in Uttaradit, Surin and Srisaket provinces, where the SEMIL-SRI-LMB project had been implemented. All discussions were conducted between 4th and 8th April 2016. FGD participants were mainly targeted SSFs whose lands were not more than 4.8 ha or 30 rai. Participants were divided into male and female groups. Table I presents a breakdown of FGD participants in each targeted province.

.SECTION 2: Regional Trends: Points of Convergence across LMB Countries

In a forthcoming report (Lamb et al *forthcoming a*), the authors have examined individual LMB countries with regard to land access. In this paper, we aim to identify trends across the four country studies' reviews of existing literature along with analysis of three case studies building on the framework and approach described at the outset of this paper. Across the different contexts and histories of land policy and land access that each country presents, our identification of trends will focus on the exclusion and access to natural resources, particularly land, of the land-poor and landless, and on the gender-land relationships that shape their situation. After consideration of these trends, we will discuss similarities in the mechanisms or 'powers of exclusion' which have contributed to these trends. Guides for collecting and collating information were developed for each target group, covering specific program-related topics including details of farmer profiles, landholding, labor deployed, farming methods, crops cultivated, intent of crop production, supply chain conditions, policy atmosphere, supports and subsidies, issues, and trials and tribulations. Furthermore, for each key informant interview and FGD conducted, the research team summarized responses provided by the participants into an analysis template, categorizing key themes, issues, and recommendations raised by the informants, as well as any key findings identified by the interviewers. Each

interviewer was responsible for providing data for the analysis template, referring back to notes and voice recordings to ensure key points were captured. Findings were linked back to the study.

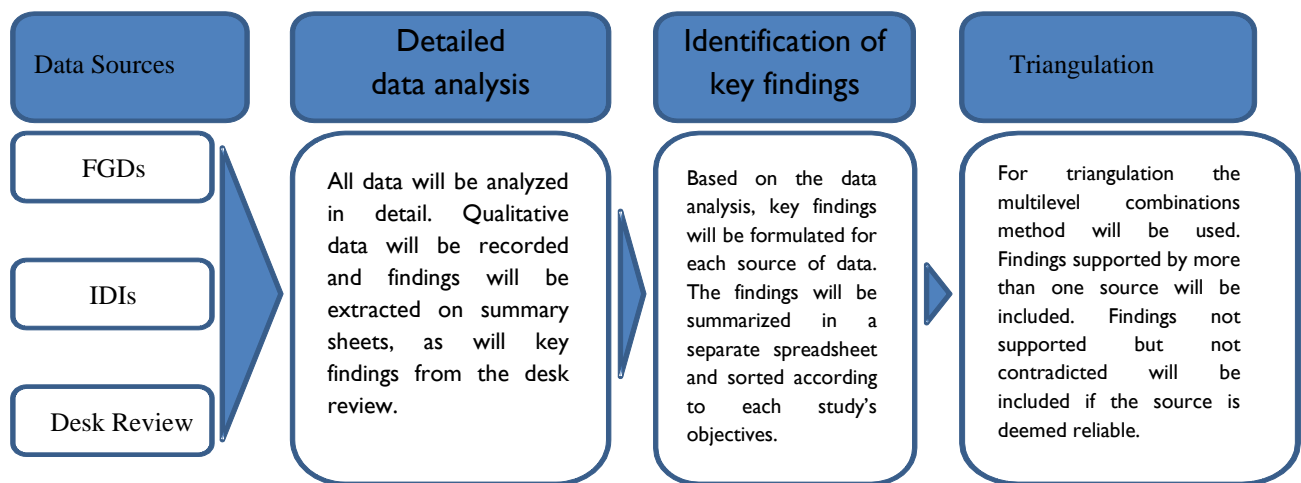
PHASE 4: TRIANGULATION

This involved triangulating and ratifying data sourced from desk reviews and verified through interviews. The Team used multilevel combinations to ensure the proper triangulation of data. First, data from the desk review, informant interviews, and FGDs were analyzed separately and key findings were identified and agreed upon within the team. Next, key findings were linked back to the evaluation issues. Finally, triangulation was accomplished by examining key findings across different information sources. When reconciling the data and selecting the most important findings, the Team applied the following logic:

TRIANGULATION LOGIC USED (TABLE-18)

Triangulation Logic	
Findings supported by one or more data sources	→ Prioritized and included
Findings not supported by other data sources but not contradicted	→ Included if the source was deemed reliable

FIGURE 1: DATA TRIANGULATION PROCESS



PHASE 5: CONCLUSION & RECOMMENDATIONS

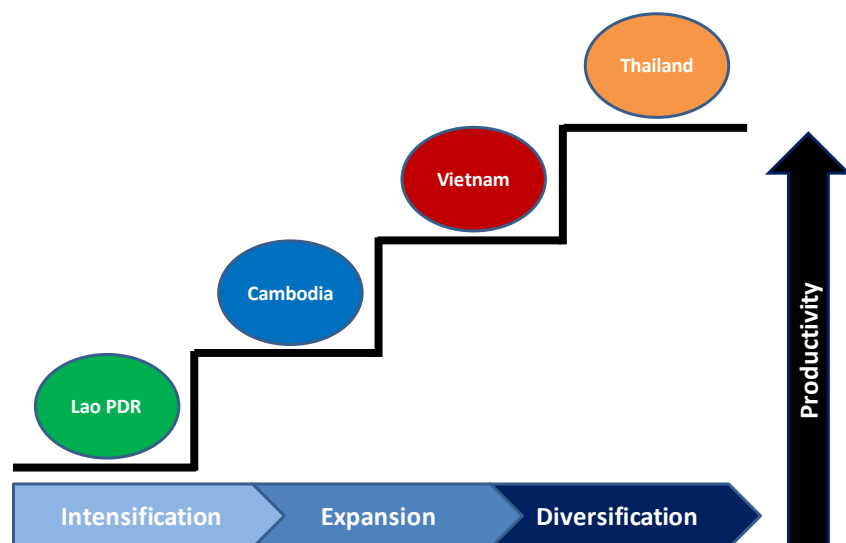
SECTION 3: LMB COUNTRY COMPARISONS USING SWOT

The small scale farmer development transition ladder, see figure below, provides a simple analytical framework for understanding the development and potential support needs for small scale farmers.

The macroeconomic situation in the four countries varies quite substantially and rice farming in particular can be seen to have reached different stages of development. This created a good opportunity for understanding the transition small scale farmers may go through as rice production develops. A conceptual framework was developed in the form of a ladder, the small scale farmer development transition ladder. The ladder is built around two dimensions looking at productivity and transition stages in respect to rice farming. At the start of the ladder, the

bottom left, the level of productivity is relatively low. At this stage intensification strategies can be applied to help small scale farmers become more self-sufficient. At some point scaling up and expansion strategies may become relevant and can help the farmers to expand and increase productivity further. Farmer groups and coops are commonly applied to help in this regard. As farming develops and the macroeconomic situation improves, some farmers may diversify into other industries, provided infrastructure and other support mechanisms are in place.

FIGURE 12: SSF DEVELOPMENT TRANSITION LADDER



Whilst certainly regional differences do exist, as highlighted in the case study on Thailand, the four countries can in general terms be positioned as shown in figure 12. Based on the development context and stage of transition, the countries could be ranked starting from Lao PDR, Cambodia, Vietnam and finally Thailand.

The stage of development in each country is further be highlighted in Table 33 below. The table summarizes results based on a SWOT analysis across the LMB countries, looking and strengths and weaknesses as well as opportunities and threats. For easy interpretation a color coded traffic light scheme is used where Green represents the country being relatively better off; Amber being neither better nor worse off; and Red means the country is relatively worse off. Hence, in the Strengths/Weakness section Green represents strengths and Red weaknesses; in the Opportunity section Green means good opportunity and Red means less of an opportunity; and regarding Threats Green means there is less of a threat and Red means the threat is more imminent.

COMPARING CONDITIONS BETWEEN THE LMB COUNTRIES (TABLE-57)

	Thailand	Vietnam	Cambodia	Laos
Strengths / Weaknesses				
Fast growing economy	Red	Amber	Amber	Amber
Diversified economy	Amber	Amber	Amber	Red
Economic growth in areas relevant for SSFs	Amber	Amber	Red	Amber
Agriculture a national Priority	Amber	Amber	Amber	Amber
Awareness of agricultural relevant issues	Amber	Amber	Amber	Red
Development of food production for export - not just for internal food security	Amber	Amber	Red	Red

	Thailand	Vietnam	Cambodia	Laos
Increasing Exports of Rice				
Developing favorable policies for SSFs				
Transparent and Non-conflicting Regulations				
Proper implementation of policies				
Improving poverty levels				
Development of Infrastructure				
Fair distribution of land				
Land ownership clearly defined				
No occurrence of land grabbing and related issues				
	Thailand	Vietnam	Cambodia	Laos
Strengths / Weaknesses				
Demographic shows low gentrification				
Availability of agricultural technologies				
Development of agricultural technologies				
Proper Income in agricultural sector				
Proper access to loans				
Irrigation systems				
Diversified agricultural products				
Effectiveness of contract farming				
Existence of relevant facilities such as rice mills				
Access to Domestic Markets				
Access to Exports				
Quality of rice (existing or rapid improving)				
Competitiveness				
Phytosanitary norms				
Strong quality controls				
Gender equality				
	Thailand	Vietnam	Cambodia	Laos
Strengths / Weaknesses				
Education				
Positive migration				
Availability of alternative livelihoods				
Good use of practices				
Positive development of international trading agreements				
Foreign investments				
Declining fiscal deficit / manageable country debt				
Financial governance strength				
Strong business environment				
Developing / developed private sector				
Efficient coordination of stakeholders				
Regional center of development				
Developed health sector				
Developed Tourism sector				
Political stability				
Irregularities / Corruption				

	Thailand	Vietnam	Cambodia	Laos
Opportunities				
Available water resources				
Productive soil				
Support from NGOs and other government agencies				
Traditional farming knowledge being augmented with modern techniques				
	Thailand	Vietnam	Cambodia	Laos
Threats				
Climactic vulnerability				
Occurrence of outbreaks				
Competition from neighbors				
Macro-economic vulnerabilities				
Existence of toxicological and other (ordnance) threats in the ground				
Food prices rising faster than inflation				
Fluctuation of prices rise insecurity amongst farmers, hinder investments				
Rising private debt				
Low productive land area				
Table Legend				
Country relatively better off				
Country not better nor worse off				
Country relatively worse off				

SUMMARY OF COMPARING THE CONDITIONS AMONG LMB COUNTRIES

Agriculture, in any form, is important to a country's growth, for food security, for trade and export. But the trends in all the four countries under the study show that agriculture is declining every year which could lead to importing food by those very countries which are today in a position to export and export better with a few more efforts. The assessment indicates that governments in the LMB countries are aware of this situation.

However, in the quest for improving and also developing the Gross Domestic Product (GDP), the four countries appear to be engaged more with those sectors which are presently contributing to the exponential growth of the GDP and agriculture is not one of them. Yet, the assessment reveals that most of the employment in the four countries is generated by agriculture and hence agriculture, indeed, plays a very important role.

As most agricultural outputs are generated by the SSFs, rice in particular, in almost all the LMB countries, and the agricultural sector is not as organized as it could be, there is an opportunity for the respective governments to concentrate in this direction and create policies to ensure that appropriate investment of resources are created and used.

Strengths & Weaknesses:

While Cambodia and Lao PDR need to work harder in relation to creating a diversified economy; stimulating economic growth in areas relevant to SSFs; creating awareness around relevant agricultural issues; developing food production beyond food and job security to include trade and exports; proper implementation of policies;

development of infrastructure; fair distribution of land and clarification around land ownership (including Vietnam), preventing land grabbing and related issues; developing and making good agricultural technologies; facilitating irrigation; providing better access to inputs like credit, seeds, fertilisers and pesticides, mills and markets; supporting trade & exports; building capacities to become competitive; abiding by the phyto-sanitation norms; promote gender equality; providing alternative livelihoods and skills; efficient coordination among stakeholders; good financial governance, and attention to irregularities and corrupt practices (including Vietnam). Thailand should focus on economic growth and working towards political stability. Other factors in the respective countries are performing relatively well and appear to be progressing.

Opportunities:

Except the issue of lower productive soil in Cambodia and Lao PDR, all four countries have several opportunities including taking advantage of existing water resources, building support from civil society, and augmenting traditional farming knowledge with modern farm technology.

Threats:

While Lao PDR is threatened by its low productive land area, food prices rising faster than inflation, existence of unexploded ordnances on cultivable lands, it is jointly threatened, along with Cambodia, by climate change and extreme weather patterns, outbreaks and competition from neighboring countries. Thailand faces price fluctuations and insecurity amongst farmers that hinders investment.

SECTION 4: Case Studies in Thailand

A. Agricultural

Land Holding

Land is a critical part of agriculture. However, it is evident that SSFs in all LMB countries face some difficulties in obtaining land ownership titles. For example, in Thailand, only 12% of agricultural lands are covered by title deeds. This is partially due to complicated land regulations adopted since 1955, which requested that all settlers and squatters have legal documents (so kho nung). Those who did not make a land claim through petitions saw their land taken by the government. A representative of the Thai Agriculturalist Association explained that some farmers did not realize that were illegally occupying government land, as they were paying annual land taxes and were given receipts, which they believed were their land ownership papers. Many farmers lack information about this issue because they are illiterate.

“Some farmers neither read nor write. They don’t know how to make a complaint when their land is taken. The difference between public land and private land is unclear to them.” -A representative of the Thai Agriculturalist Association

Farmers who lack of ownership of their land might lease land from others. FGDs revealed that some farmers who leased their land already had their own land but wanted to expand to be able to grow more crops. These farmers stated that they had leased land from neighbors in the village who could not work on their own land due to lack of money, migration or age constraints, which was consistent with the information from the lessors. Some of the lessors explained that they didn’t have enough laborers to work on their land, so they decided to lease their land to others. One of the lessors added that her children had migrated to Bangkok, and only she and her husband worked in the rice field.

Farmers’ perception of leasing is more akin to helping each other. When farmers don’t have the necessary capital to engage in farming, they lease their land to other people in their village. Technically, the practice is similar to mortgages, as the lessee works on the land until the lessor returns the money back to him or her. However, in some cases, the lessee allows the lessor to continue working on their land in return for rice and other crops at the cost of the lessee.

Some farmers want to expand their land, but there was no land available in their village. However, some farmers said that they didn't want to expand their land due to lack of labor, and high rental costs, and lack of capital.

Crop Type

Apart from rice production, farmers grew alternative crops after the harvest season to generate income and provide nourishment to the soil. The 'Sufficiency Economy' concept initiated by HM King Bhumibol Adulyadej provided guidance on the maximization of land usage by growing alternative crops and raising livestock on the land.

However, in recent years, government policies have changed the goals of alternative crop growing. The representative of the Rice Department explained that the National Committee on Rice Policy's current policy aimed to decrease rice production in the country due to drought. She added that rice supply is sufficient for internal consumption, which was partly a result of the rice pledging scheme during the administration of Prime Minister Yingluck Shinawatra². The government introduced alternative crops to reduce the amount of rice produced in the country. A domestic trade representative stated that the government is now focused more on improving the quality of rice production to increase Thai rice exporters' capacity to compete with rice exporters from other countries.

Information from the FGDs confirmed that most farmers grew alternative crops. For example, in Uttaradit Province, corn and tamarind were the main alternative crops, and some farmers also grew potatoes, while in Srisaket Province, farmers grew beans and potatoes. Some farmers also allocated part of their land for livestock. One of them mentioned that he followed the 'Sufficiency Economy' concept.

Farmers in Uttaradit and Srisaket Provinces grew alternate crops annually for sale. Some farmers who owned land close to the river could grow crops three times per year. However, most farmers in Surin Province didn't grow any alternative crops, due to drought and salty soil. Most farmers said that they tried to grow alternate crops after the harvest season, but had no success, as the weather was too dry.

"I tried to grow [alternative]crops like beans and peanuts but they always died because of drought. Only few farmers whose land was close to river can grow [these] crops."

Most farmers stated that they learned how to grow these crops from local officers. Some farmers in Uttaradit Province claimed that they also received assistance from their local extension office and agricultural co-op.

Some farmers accepted that newer farming techniques are quite complicated, and they preferred to stick to traditional practices. Some farmers in this village also had a chance to attend a training on economy sufficiency that was organized by the Agricultural Extension office. They claimed that this method worked really well, since they could obtain additional income, and would thus continue to practice this technique.

In Srisaket Province, most farmers are members of the small and micro community enterprises (SMCEs). SMCEs play a critical role in introducing new strains and finding markets for farmers. Farmers also sold their crops to the SMCE, which sometimes offer a better price than the market. In addition, the SMCE provides trainings to farmers on how to grow organic crops.

Productivity

Thailand is one of the world's top rice-exporting countries. Information from the desk review confirmed that Thailand has a higher productivity of rice production than Vietnam, Cambodia and Lao PDR, although during the past few years, some of the cultivation area has been set aside for other commercial crops, such as sugar cane. Thailand also tends to have better facilities, technology, and farming inputs than the other LMB countries.

Information from the interviews and FGDs highlighted many and barriers to increased productivity.

² The rice pledging scheme began in 2011. It was a government program in which farmers sell rice to the government at a particular price, with the right to reclaim the rice if the market price goes higher. The rice pledging scheme became one of the most controversial agricultural policy in Thailand. The government offered farmers 500 USD per ton of paddy which is much above the global market price, resulting in huge stockpile in government possession.

o Quality of rice seeds

A representative of Surin Rice Research Centre stated low seed quality as a key challenge for farmers. In Thailand, only rice seeds produced by the Rice Department were quality certified and legally usable for commercial production. However, due to limited capacity and seed growing areas, the Rice Department was unable to produce enough seeds to respond market demand, which led to a high price for seed production. Some middlemen produced their own seeds and sold to them the market for a cheaper price which could be up to one-third the cost of the seeds from the Rice Department. Because of this, some farmers chose to buy seeds from the market, even those these seeds were generally lower quality. As a result, the farmers has problems achieving greater productivity and selling their rice, which did not reach minimum quality standards. The representative from the Surin Rice Research Centre claimed that although there was a degree on Seed Production, the government tended to be lenient about this issue, due to a shortage in seed production.

“It is the middlemen who produce these illegal seeds for commercial purposes. These seeds were sold to the market, rice mills and directly to farmers. The rice department is in charge on this matter. The rice research centers in each province will send “rice staff” to check whether agents or local stores sell certified seeds. If not, the seeds will be confiscated.” The representative of Surin Rice Research Centre

Even though the rice research centers, which belong to the rice department, had their designated agents sell their seeds in many districts, some farmers admitted that they sometimes bought seeds from middlemen who came directly to their rice fields because it was cheaper and more convenient.

o Irrigation system

Lack of a good irrigation system was another challenge affecting productivity. According to information from the desk review, expansion of irrigation in Thailand has stagnated since the 6th economic and social development plan due to the high cost of investment and low rates of return. In addition, more than 80% of the rice growing area is under rain-fed conditions. However, as a result of climate change, these farmers cannot rely on unpredictable rainfalls. Hence, having access to a good irrigation system is crucial to maintaining productivity.

Nearly all of the stakeholders confirmed that most farmers don't have access to an irrigation system. A representative from the Agricultural Extension Department claimed that the agricultural extension offices and district offices provide assistance to farmers by building ponds in villages or near rice fields. She added that the department provided necessary equipment for underground water pumps.

Information gleaned from the FGDs demonstrated that farmers in Surin and Srisaket Provinces don't have good irrigation systems, as their cultivated areas are rain-fed. These farmers either hired or bought pumps to access underground water. They said that they had to pump water at least seven times a year, and paid around 300 baht per rai to do so. They also stated that this cost was a burden for them.

Some farmers in Uttaradit Province were in an irrigated area, and did not face water shortages. However, some farmers mentioned problems with insufficient water tanks or storage that were unable to store water after rainfalls.

“We don't have enough water tanks. When it was raining, we couldn't keep much water.”

Some farmers stated they received assistance from the government on irrigation, such as the building ponds in the village.

o Knowledge and techniques for growing rice

Improved knowledge and techniques for growing rice is another critical factor that helps farmers to increase productivity. The information from the desk review illustrated that the agricultural sector in Thailand is transitioning from a labor-intensive to an industrialized sector. This is consistent with information from the FGDs, where most farmers confirmed that they had gradually used machinery instead of labor on their farms to reduce costs and increase productivity.

“I used a seed dipping machine for drilling. This method is faster and cheaper. I used only 5-10 kilo of seeds per rai, compared to the paddy sown field method which uses around 30 kilo of seeds per rai.”

“Not only is this faster and cheaper, the quality of the rice production from the drilling method with the seed dipping machine is better than the rice production from the paddy sown field method, because the rice grows in equidistant rows. Rice plants and seeds are also bigger.”

The government provided some assistance to farmers to help them to improve productivity. The representative of Agricultural Extension Department stated that the agricultural extension offices were a mechanism for knowledge dissemination to farmers at the district level. The representative of Surin Rice Research Center claimed that the center provided trainings on rice growing techniques for their members from the process of land preparation to harvest. These techniques aimed to improve quality, increase yields, and reduce capital costs. Since 2015, the center has also promoted rice intensification programs, such as SRI, as part of their training programs.

Information from the FGDs showed that most farmers have received capacity-building trainings about improving productivity. Farmers in Srisaket Province said that they had been trained by the SMCE about growing organic rice and creating value-added rice and other crops. Some farmers in the province also claimed that they received assistance from private companies, such as Siam Kubota, a tractor and heavy equipment manufacturer that collaborated with the SMCE to provide trainings on growing organic rice and exploratory fields in the village for farmers to practice these techniques.

Some farmers stated that they received trainings on SRI conducted by AIT. Most of them have been practicing this method since 2015. They allocated between one and five rai to this method, while the rest of the land was used for traditional crops. This method worked well for these SSFs, and most of them were satisfied with quality and productivity of their rice product and wanted to expand this method to the rest of their land.

“My rice stalk was stronger and the size of the rice seed was bigger and more consistent compared to the rice product farmed using the traditional method.”

“I used to have some arguments with my husband because he didn’t agree with this method at first, as it was so different to what we had been doing. For example, there was too much distance between each rice hill and this organic growing method requires more labor more time to do weed control, so we have to pay more for labor costs. However, after seeing the results, my husband was happy about the quality of our rice product. We used less seeds but gained a higher yield.”

“I had better yields. I got 30 kilos of rice product per rai compared to 20 kilos per rai from the traditional paddy-sown field.”

o **R&D on agriculture**

At the macro level, Thailand invests in R&D on agriculture. The Rice Department is a center of R&D and rice knowledge. Jasmine rice is internationally recognized as a high quality rice strain produced in the country. Although Thailand seems to have a better position in R&D and knowledge on agriculture compared to Cambodia, Lao PDRs and Vietnam, the country struggles to maintain its comparative advantage in the global market. Information from the desk review showed that while the price of jasmine rice is always higher than other rice strains, it has a significantly lower yield rate than other types of rice. At the moment, none of the new strains developed by the Rice Department could replace Jasmine rice. The representative of the Thai Agriculturalist Association argued that the Rice Department focused on developing the new strains to be more resistant to climate change. However, these new strains didn’t respond to farmers’ needs because they were not well-promoted or recognized in the market, and farmers therefore did not have confidence in these new strains. The representative of the Rice Department accepted this, explaining that the department encountered some difficulties to development of expertise due to the organization’s limited workforce. Most rice researchers and specialists were hired on a per-project basis, and the department couldn’t hire more researchers and specialists due to budget constraints.

In addition, a lack of coordination between relevant departments was seen to be an obstacle. A representative of the Rice Department stated that the department was not the only agency that works on rice issues, and that there are several departments working on this issue, such as the Departments of Land, Irrigation, Agricultural Extension,

Cooperatives, and Domestic Trade. To further develop knowledge on rice, it is critical to have information collated from all of these departments. In reality, however those departments tend to work separately and it is therefore difficult to synchronize their work.

A. Social

Poverty

Poverty is a critical challenge facing farmers. Most farmers accept that that they don't gain enough income from rice farming to cover household expenses. Their average income is around 4,517 baht per month. Increased food cost is a major concern. Some younger farmers mentioned the cost of education for their children as a significant burden.

"Food is more expensive, while rice productivity and prices do not increase."

"We have three people in our family. I spend more than 100 baht per day on our expenses. Food costs are a major part of this."

"In some years, we get a very low income from rice farming due to low prices and productivity. We had to sell all of our rice products to the market, and couldn't keep them for household consumption."

Fertilizer, labor, equipment and rice seeds were mentioned as the biggest cost for farmers.

There are many factors contributing to farmers' poverty such as a lack of knowledge of financial management, decreases in productivity, and fluctuation in rice prices. According to a representative of the Department of Domestic Trade, rice prices have been decreasing because the new government doesn't control the market price, and allows the market to determine the price. Most farmers said that this year they sold rice product at 8-9 baht per kilo, a decrease from 15-18 baht per kilo in previous years.

In addition, most farmers lacked financial management skills, and debt was a problem for many. Some farmers stated that they struggled to pay back debt. Others explained that they had to take out loans from various sources at the same time in order to repay an older debts. Some said that sometimes they take out the loan for unintended purposes, such as taking out a loan from the BACC to cover household expenses, instead of investing in rice farming.

Most stakeholders agreed that debt is a major challenge for many farmers. The representative of Thai Agricultural Association said that nowadays it is very easy for farmers to obtain loans, and this is why the majority of farmers in Thailand are in debt. Most financial institutions provide credit to farmers but not knowledge about financial management, and most farmers struggle to pay back their debts.

Migration

Migration is a significant issue, since it involves farmers who use it as an adaptive strategy. Most farmers have experience with migration, especially males. Farmers spend around five to six months in the rice field per year, and seek alternative employment after the harvest season migrating to the city to seek job opportunities and coming back in time for the next season. Every male farmer in Uttaradit Province claimed that they had migrated to other countries as freelance laborers. Male farmers in the other two provinces said that they went to other provinces to work at construction sites, factories, restaurants, and in agriculture.

"Most of us had migrated to work in other countries, such as Saudi Arabia, Brunei, Oman, and Singapore a long time ago."

"I still migrate to Bangkok every year after harvest season. I used to do many jobs, such as construction site, cooking, and cleaning"

The key driver for migration is increased income. According to the desk review, migration generates positive economic impacts as it enables farmers to earn higher incomes and send remittances back home. Information showed that most farmers who had migration experience believed that income from these alternative jobs was better

than rice farming, as it provided them with daily income. They further explained that they had to seek other jobs due to the high cost of living and increased expenses. However, older farmers said they didn't have plans to migrate because they didn't need much money and did not have many expenses.

"I prefer to stay in our village during the off-season. My sons already graduated and are working. They send me some remittances every month."

The following case study shows an example of a farmer's migration experience.

Case Study

Mr. A is a farmer. He is 65 years old. He is divorced. In the past, he had to cover tuitions fee for her three children, and thus needed a stable income. He decided to lease his land to his neighbors and migrated to another province in order to search for better job opportunities. Mr. A got a job as a cleaner at a golf club in Pattaya., where has worked for 11 years. He accepted that he could earn more income from working at the golf club because he had a monthly salary and also received tips from customers. His income from rice farming was not consistent as there was always the risk of natural disasters or adverse weather conditions. Mr. A was satisfied with the income from his job in Pattaya. However, she claimed that although she could earn more income this way, she always preferred to come back home. After his son graduated, he was able to come back home and continue to do rice farming.

In addition, migration creates social impacts on farmers' livelihoods. Only male farmers tend to migrate, and their families are left behind. Their wives become the heads of household and are responsible for the farming. Information from the FGDs demonstrated that most female farmers had never migrated for work. They tended to stay in their village and supplemented their incomes by producing traditional fabrics, and selling cooked food. Only some women claimed that they migrated to other provinces for work.

Most women claimed that their responsibilities at home and in the rice field were heavy burdens, especially if their husband had migrated for work. They also said that they had some difficulties in completing tasks which were normally done by their husbands, such as heavy labour.

"I have things to do all day both on the farm and at the house. At home I have to clean and take care of our kids. Sometimes I am so tired I can't work on the rice farm." One women farmer said.

"I faced some difficulties when my husband was not here. Last year he came back only during the harvest season. He was working at a restaurant in Bangkok and he couldn't take leave to come back and help me during the cultivating season. I had to ask for assistance from our neighbors, and also hired workers to do some heavy work, such as preparing the land for cultivation."

"I had to learn to do some tasks by myself, such as collecting firewood and fixing housewares. It was quite difficult, but I had to do it."

Although most women claimed that although they encountered some challenges to do all of their work alone, they saw it as part of their role and didn't think of it as a burden.

"I think it is fair. My husband works for our family. He sends money to us every month."

"I am used to this. I don't see any problem. My husband also works hard."

Gender

Men are often more involved in hard labor, while women are typically involved in lighter work. However, the role of female farmers tends to be unrecognized. Female farmers are more likely to be vulnerable due to the fact that most of them are not the heads of household and therefore have less ability to control resources and make decisions. They are also responsible for domestic work on top of the work they do as farmers.

Information from the FGDs showed that nearly all women believed that they do more work in rice farming than men.

"Men prepare the land for cultivation. It is a hard work which women cannot do. However, women are involved in almost all of the other processes, such as transplanting paddy sprouts, pulling out weeds, and applying fertilizer. Men and women work together again during the harvest, and at the end, men move all of the rice production to the barn, while women take part in selling."

Women play a critical role in negotiation, such as, selling rice product to middlemen, finding markets, and contacting financial institutions for loan. They are also more active in social and community based work, such as attending trainings, committees, and community groups

"I don't know much about the selling process because my wife took care of it. She contacted middlemen and negotiated the price with them."

"I don't know how the size of our BACC loan. My wife took care of it."

Some stakeholders recognized the important role of female farmers. The representative of Agricultural Extension Department claimed that although men were involved in more labor-intensive farming tasks, their role has declined due to increased mechanization. The role of women had increased, especially in strengthening farmer groups, as they had more understanding and learning capacity. A representative from the Thai Agriculturalist Association added that women took part in association committees in most provinces. From his experience, women played important advocacy roles. They were fast learners and had more skill in negotiation and finding markets.

B. Economic

Price

Rice prices vary according to global supply and demand. The representative from Thai Rice Exporter Association explained that rice prices are hard to predict because of market scheme and internal policies. He referred to "populist schemes", such as rice subsidy schemes, the rice pledging scheme, and farmer income insurance programs, which aimed to encourage farmers to grow more rice. Once rice supply was higher than demand, the price of rice products decreased.

Farmers faced challenges when prices were low. All farmers accepted that the market price during the last two years had rapidly decreased. The representative of Domestic Trade Department explained that this was a result of the rice pledging scheme during former-Prime Minister Yingluck Shinawatra's rule. The government still occupied a great amount of rice product in their stock. Due to a failure of this scheme, the new government refused to intervene in the rice market, instead letting the market determine the price. The representative of Thai Agriculturalist Association added that although the new government tried to reduce the amount of rice produced in the country, the rice price did not increase substantially. He suggested that the government should have policies to assist farmers in this regard.

Most farmers sold their rice product to middlemen. Only few farmers sold rice directly to rice mills, agricultural cooperatives, and the BACC. Most farmers claimed that they preferred to sell their rice to middlemen due to convenience, as middlemen came directly to their villages to buy rice. Although most farmers knew that the price offered by middlemen was often lower than that offered by agricultural cooperatives and rice mills, they were willing to sell rice to middlemen because the process is was quicker and easier than other channels.

In addition, farmers didn't have to pay transportation costs. Farmers said that sometimes they are forced to sell their product to middlemen, as they urgently need money to pay off debts. However, they admitted that the profit margin between selling to middlemen and in the market is quite high.

"I prefer to sell my rice to middlemen because I don't want to pay for transportation cost, which are around 300 baht per ton."

"The price difference is only 20 to 50 stang per kilo. I think there is not much difference if farmers don't have more than 10 tons of rice."

Few farmers argued that they got a better price from middlemen. The middlemen were not strict about the quality of the product, while agricultural cooperatives and rice mills had to check the quality of the crop, and prices varied based on quality.

Marketing

Marketing is another critical issue, and most farmers lacked knowledge about marketing. They were more likely to follow the practices from previous generations. Most farmers claimed that they knew the standard price of rice product from television and from other farmers. However, they still wanted to sell their rice to the same channel as they did before because it was convenient and they were already familiar with the process.

Most stakeholders agreed that Thai farmers have limited knowledge about marketing their products. A representative from the Thai Agriculturalist Association added that most farmers didn't know how to make profitable businesses, didn't know how to reduce capital costs to obtain higher profits.

"Farmers must understand the market. For example, if the market price is 8,000 baht per ton, farmers have to know how to earn more profit by reducing capital costs and knowing how much they should spend on farming inputs. However, most farmers lack knowledge on these issues. For instance, they don't know how to improve the soil to increase productivity. Hence, it is difficult for them to turn a profit."

A representative from the Thai Rice Exporter Association held a similar view. He stated that farmers tend to do things by instinct or by following others. For example, if the price of sticky rice was higher last year, most farmers would grow sticky rice this year. This led to an oversupply, and the price of this product eventually decreased.

Some assistance to support farmers with marketing does exist. For example, the Domestic Trade Department, in collaboration with the Provincial offices, began an initiative which aimed to help farmers find markets by connecting them to rice mills where farmers could meet directly with several mills from other provinces. This initiative is mostly implemented in the Northeast due to a lack of available rice mills. In addition, the government has a new initiative called "Large Agricultural Plot" or "Kaset Prang Yai," aims to bring SSFs together to produce rice. This empowers SSFs in negotiations with buyers, and also reduces and increases economies of scale.

Some stakeholders suggested that the government should do more to provide knowledge about marketing to farmers. This could be done through existing channels, such as agricultural extension offices, rice community centers, and the SMCE.

Loan

There are several sources for agricultural loans in Thailand, such as the BAAC, agricultural cooperatives, and village funds. Some informal loan sources, such as entrepreneurs, neighbors, and relatives were also mentioned.

"More than 10 years ago, farmers took loan from capitalists. In the past, it was difficult to access the BAAC because it was located in the city, far from our village."

Information from the desk review found that poor access to credit is one of challenges facing SSFs. However, information from interviews and FGDs demonstrated that formal loans are quite accessible for farmers in Thailand. A title deed and guarantors are the only requirements for requesting a loan from the BACC or from agricultural

cooperatives. Farmers who had more land had higher loan limits, and only those who had already paid back debt could take out a new loan.

A representative of the Cooperative Promotion Department explained that the requirements for taking out loans were more flexible because the government was trying to boost the economy. The representative of the Thai Agriculturalist Association also shared this view, stating that nowadays, it is easier for farmers to access loans. However, the representative of Rice Department argued that although the loan requirements were more flexible, in some cases farmers were required to provide collateral or be a member of a group. Hence, SSFs who did not belong to any group would have difficulties in obtaining a loan.

Nearly all of the farmers had taken out a loan and were still in debt, and noted that the debt was a significant burden. They were worried about paying back their debt, since they had many other expenses and income from agriculture during the past few year was not consistent. Some farmers could not take loans this year because they didn't pay back previous debt.

"I keep paying interest, but I am not done yet. Hence, I cannot take out a new loan." One farmer said.

Some farmers accepted that they had to borrow money from other sources to pay back their debt, while other farmers said that sometimes they used loans to cover household expenses instead of investing in agriculture.

"Last year we had a difficult time. We had to pay tuition for our kids and some other bills, and we had to use loans to cover these expenses. We hope we can get enough money from selling crops this year to be able to pay back debt."

Some farmers who took loan from entrepreneurs stated that they would have to work for the loaner if they couldn't pay back their debt.

"I borrowed money from a potato farm owner and compensated by working in his farm."

Nearly all stakeholders agreed that the lack of capacity to pay back debt is a critical challenge for farmers. Even though there were some incentives in place to encourage farmers to pay back their debt on time, such as lower interest rates on their next loan³, most farmers still struggled to pay back their debt due to lack of knowledge about financial management. Therefore, training on financial management should be provided to ensure that farmers are able to pay off their debt.

"The government focused only on giving loans to farmers and forgot to provide knowledge on financial management." A representative of Thai Agricultural Association said.

Contract Farming

Contract farming has been widely promoted in Thailand since the 6th Economic and Social Development Plan. It is an effective strategy, especially for SSFs, to increase access to technology and ensure sales.

However, information from stakeholders shows that the contract farming system is not prevalent in the rice sector. A representative of the Surin Rice Research Centre explained that farmers for most major agro-industrial companies, such as Charoen Pokphand Foods, did contract farming for other types of crops. Investment on rice products through contract farming require a high capital costs and are extremely time-consuming. Also, these new rice seeds may not correspond with market needs. The representative of the Rice Department shared the same view. She added that most farmers worked independently, so they might not want to be controlled by large corporations.

Information from farmers confirmed the views of the stakeholder. All farmers stated that there was no contract farming in their village. Some farmers in Uttaradit Province claimed that they heard that in the past some private companies offered contract farming to farmers in the village, but this was not successful because farmers preferred

3 In the BAAC, punctuality on deadline classified grades of borrowers. For instance, farmers who paid back on time would get grade 3A, whereas those paid back late or didn't pay back at all got grade B, C respectively. Farmers who had good profile (3A+) would easily get loan next time and also be offered lower interest rate.

to work independently and didn't want the companies to control them. Farmers in Surin and Uttaradit Provinces thought that companies would not be interested investing in their villages because of drought.

"Farmers in the village didn't like the way the capitalists controlled them, and expressed that they wanted to farm independently. After that, no companies came to this area again."

Agricultural Cooperatives

Agricultural cooperatives are important mechanisms for empowering farmers, as they enable farmers to engaging in business and help one another in times of crisis by increasing negotiation power. It also helps them gain a better livelihood and quality of life. Most stakeholders perceived cooperatives to be beneficial, by helping members to save, selling affordable farming inputs, and giving members more opportunities to financial support or loans.

According to the representative of Cooperative Promotion Department, there are around 7,500 cooperatives⁴ in Thailand. Of these, around 3,000 are agricultural cooperatives. The representative of the Cooperative Promotion Department explained the process of membership registration. Technically, farmers could either apply directly with the cooperative or contact the village head, who facilitated the registration process by collecting application forms and necessary documents, which were sent to the cooperative. However, farmers were eligible to apply for membership with only cooperative that has responsible area in their agricultural land. Farmers didn't have to pay a registration fee, but they did have to pay a maintenance fee at the end of the year.

Farmers claimed that the cooperatives' membership registration process is quite similar to that of the BAAC. However, some farmers were not members of cooperatives because their agricultural land was not covered in the cooperative's area, and they had to go to another district if they wanted to become a cooperative member. Only a few farmers took out loans from agricultural cooperatives, and some farmers purchased agricultural inputs from the cooperative. Most farmers claimed that receiving dividends from being a shareholder of the cooperative is a key benefit.

Some challenges associated with agricultural cooperatives were mentioned by stakeholders. The representative of the Cooperative Promotion Department acknowledged that some agricultural cooperatives, especially small ones, encountered challenges in terms of management. Small cooperatives tend have management problems due to having limited staff. In addition, small cooperatives have less support from both the government and private sectors, as they tend to have less credibility compared to bigger ones that have more members. The Representative of Thai Agriculturalist Association also added that some cooperatives were used for political interest and did not have concrete activities nor real membership.

C. Organizational support and future support needs

Most farmers received government or NGO support in terms of capacity building on agricultural and alternative work like weaving, and raising livestock.

"I heard that our village sent five farmers to attend a training about growing organic crops in the Agricultural District Offices. "

"Last year I attended trainings organized by the Land Development Department and Rice Department. These two departments provided important knowledge and support for seed production and inputs for farmers in our village."

However, some farmers thought that they should not wait for external assistance. One farmer who was also a village committee members explained that some assistance was not sustainable. The government sent officers to support farmers in the village, but these officers would leave soon after they finished their projects. He gave an example of the farmer group in his village in Srisaket Province. This farmer group was proven to be successful. He explained that farmers in his village initially formed an informal group. With assistance from the agricultural extension office, the head of the farmer group wrote proposals to seek for government funding. The group then used this funding to organize activities, such as agricultural trainings. The group became stronger as it acquired more members and

4 There are seven types of cooperatives in Thailand, namely Agricultural Cooperatives, Fisheries Cooperatives, Land-Settlement Cooperatives, Consumer Cooperatives, Thrift & Credit Cooperatives Service Cooperatives and Credit Union.

organized more activities. Some organizations, including government and private companies, were interested in providing support to the group. The group later became formally established as an SMCE supported by the Agricultural Extension Department. Most farmers indicated that they would like to have a better irrigation systems and increased prices for their rice products. Some farmers wished they had received support on their rice products during the last two years, and some farmers wanted to secure alternate employment after the harvest season.

Section 5: Recommendation and Conclusion

Agriculture, in any form, is important to a country's growth, for food security, for trade and export. But the trends in all the four countries under the study show that agriculture is declining every year which could lead to importing food by those very countries which are today in a position to export and export better with a few more efforts. The assessment indicates that governments in the LMB countries are aware of this situation.

However, in the quest for improving and also developing the Gross Domestic Product (GDP), the four countries appear to be engaged more with those sectors which are presently contributing to the exponential growth of the GDP and agriculture is not one of them. Yet, the assessment reveals that most of the employment in the four countries is generated by agriculture and hence agriculture, indeed, plays a very important role.

As most of the agricultural output is generated by the SSFs, rice in particular, in almost all the LMB countries, and the agricultural sector is not as organized as it could be, there is an opportunity for the respective governments to concentrate in this direction and create policies to ensure that appropriate investment of resources are created and used.

l) Implication of the situation and current practice of macro-economic growth on SSFs, including women farmers and landless producers:

Conclusions from the study:

- a) With varying degrees, the LMB countries are on the whole experiencing strong macro-economic growth, except for Thailand where the growth at 0.90% (2014) showed an annual decrease.
- b) With exception of Lao PDR the LMB country economies are well diversified.
- c) The contribution of agriculture to the GDP growth of all LMB countries is steadily declining (Ref: Table-4).
- d) Most of the agriculture, in these countries, is in the hands of the SSFs and collectively they contribute to a large percentage of employment in the respective LMB countries (Ref: Tables - 2 & 3).
- e) The overall contribution of SSFs towards food security and employment cannot be ignored even though their contribution to the GDP appears to be seen as less significant, exports in particular (increasing in all countries except for Thailand), in comparison to other sectors.
- f) This is most likely due the majority of produce by SSFs is for subsistence for their own use, and surplus for export remains limited, both in terms of quality and quantity.

Recommendations:

- a) For positive impact on macro-economic growth, agriculture should be made a national priority in all LMB countries following the example of Lao PDR and Vietnam.
- b) SSFs should be viewed as essential participants when it comes to sustenance and economic growth in the LMB countries.
- c) In line with this, the respective LMB governments should develop policies and ensure appropriate implementation to enable SSFs to play a significant part of the macro-economic scenario of each country.
- d) The LMB countries should incentivize SSF to increase production, not merely in cash or in kind but also through better facilitation so that the agricultural can make a larger contributor to export and GDP growth.

- e) Countries like Lao PDR and Cambodia should make efforts to build awareness and capacity around technological developments that can benefit SSFs, especially for improving yields.

II) Key macro-economic policy developments that can have impact and enjoy support from country growth as well as regional growth:

Developing SSFs is not an isolated challenge but is interconnected with other issues including landlessness, insufficient land, land rights, access to resources, and lack of capacity and so on.

Conclusions from the study:

- a) It is recognized that governments in the LMB countries are striving to make efforts to support SSFs through various policies and regulations, especially towards development of indigenous agricultural efforts.
- b) There is evidence that all the countries have evolved policies on land issues, irrigation, phytosanitary aspects, supply chains etc.
- c) However, the implementation and enablement of the policies do not seem to have achieved significant implicit on SSFs, except in the case of Vietnam to a large extent and Thailand to some extent.
- d) Land rights issues remain unsettled in many areas and irrigation projects continue to be insufficient or inadequate.
- e) Many indigenous people and ethnic minorities remain displaced due to some of these issues.
- f) SSFs do not appear to be participating fully in the supply chain system, at least not in an effective manner.

Recommendations:

- a) An integrated policy with regulations, which could address all the above issues as one could be a key macro-economic policy. However, by nature of governance through different departments, this may prove challenging and may take time.
- b) Under such circumstances, the onus is on the agricultural ministry of the respective governments who can coordinate with other departments and develop a vision for a practical policy.
- a) The key to these issues, however, goes beyond policy and regulation development. There is a need for stricter implementation of policy decisions and regulations, which currently happens to varying degrees in each of the LMB countries.

III) Opportunity costs associated with investing in Small-scale agriculture needs to be better understood in the LMB region:

Conclusions from the study:

- a) Excepting in Vietnam, SSFs in other countries do not seem to be recognized and supported to the extent that it is required.
- b) Development of infrastructure such as introducing modern technologies, in place of traditional farming methods that typically use inefficient tools, would provide better farm inputs and empower SSFs to become part of the supply chains. This is an especially critical issue for SSFs in Lao PDR and Cambodia.
- c) Land issues such as low productivity land, lands mired with ordnance (i.e. Lao PDR) land titling, land user rights, and Land grabs have become critical issues that need urgent solutions.
- d) In addition there are impediments such as climatic vulnerabilities, crop infection outbreaks, increasing competition from neighboring countries (e.g. Myanmar), and inflationary that ultimately can have strong negative impact on SSFs.
- e) Finding ways to mitigate and lessen the impact of these issues should help to make investment opportunities in small-scale farming more attractive.

Recommendations:

- a) Apart from improving investment opportunities and enabling SSFs to contribute more to economic growth, all LMB countries should realize the importance of self-sufficiency and how this contributes to

better food security, an aspect that could be endangered if the agricultural sector, dominated by SSFs in all LMB countries (Ref: Table-6), is not supported. Doing this within the near future appears to represent good timing.

- b) Governments should also recognize the level of job security that small-scale farming brings, to rural areas in particular.
- c) The governments should consider engaging in dialogue with SSFs and this could potentially be done through relevant NGOs working in the sector. Many NGOs would have good capacity to provide the correct support that can help mitigate and minimise impediments faced by the SSFs. In addition, NGOs could support on matters such as gender issues and migration.
- d) The LMB governments should clear the path for a more comprehensive supply chain system, complete with relevant inputs like infrastructure, access to credit, access to domestic and export markets, quality maintenance, phytosanitation issue mitigation, and more reliable contract farming systems.

IV) Current practice of economic growth that pertains to SSF in LMB countries:

Conclusions from the study:

- a) In almost all LMB countries, SSFs remain poor with many having an annual income of around USD 200. Following the standards of the Millennium Development Goals (MDGs) most SSFs would be considered to be Below Poverty Line (BPL).
- b) This suggests that SSFs, irrespective of gender, do not benefit from economic growth.
- c) Most of them have limited access to local markets and a few may have access to larger markets and exports except in the case of Thailand and Vietnam.
- d) However, rice intensification programmes have helped SSFs to increase yields and thus improved their incomes with available resources.
- e) Vietnamese SSFs have taken up two types of agri-intensification programs including the System of Rice Intensification (SRI) and Vvuon, Ao, Chuong (VAC) and the Vietnamese government has lent strong support to these programs.

Recommendations:

- a) Governments in LMB should encourage and facilitate SSFs to access modern technologies while striking a balance between expansive cultivation and intensive cultivation so that SSFs can produce optimum quantities with good quality to help them improve their sales and make a bigger contribution towards economic growth.
- b) Governments should consider collaborating with established NGOs that have experience and who are already working towards this goal.

V) Key challenges for inclusive economic growth which can bring more benefit to SSFs in terms of existing investment, policies and their implementation:

Conclusions from the study:

- a) The key challenges to ensure an inclusive economic growth for SSFs in all LMB countries are; adequate place, product and price. Adequate land to cultivate crops, adequate yield both in terms of quantity and quality, and appropriate access to markets and with the ability to sell the produce at a reasonable price.
- b) This is easier said than done as SSFs face several incumbent barriers such as land titles, land rights, access to credit, irrigation and other farm inputs, access to mills, and direct links to markets.

Recommendations:

- a) The above challenges needs to be handled and resolved taking into account the specific situation in each LMB country. Regional aspects to consider would include: available water resources, soil productivity, available support from government agencies and NGOs, traditional farming knowledge augmented with modern techniques and so on.
- b) Group Farming and Contract Farming are possible solutions to consider. But to be effective, and to protect the interests of SSF, good supervision together with guidance from extension offices / NGOs needs to be in place.

- c) LMB governments need to play an active and facilitating role, with regular monitoring, periodical reviews and timely interventions when necessary.

VI) Extent to which challenges affect the decisions and choices of SSFs in attaining food security, sustainable livelihoods and well-being.

Conclusions from the study:

- a) All the identified challenges can affect the choices of SSFs at every stage of farming and the decisions taken by them would very likely be influenced by the problems and challenges they face.
- b) In the absence of irrigation facilities and quality seeds the investment of time and labour will be less effective and the agricultural lands can become dry over time.
- c) On the contrary, if SSFs over work the agricultural lands, soil fertility can be negatively affected resulting in a reduction in yields.
- d) If the SSFs have excess loans and are and find themselves trapped in debt bondage, they potentially become vulnerable to middle men who use the situation to command a reduce price for their produce or the SSF will not be able to save up capital for future farm investments.
- e) Many SSFs end up paying too much for farm inputs such as fertilizer, and means an unnecessarily large share of their earnings is absorbed by inefficient intermediaries.
- f) These challenges result in adverse impacts on livelihoods, well-being, and socio-economic conditions of SSFs.

Recommendations:

- a) Agricultural agencies of the respective LMB governments such as Extensive Offices should provide the necessary farm inputs.
- b) Improve knowledge and access for SSFs with respect to quality inputs, machinery and tools, affordable credit, and risk mitigating methodologies.
- c) Resource conservation and various methods of insurance (crop, cattle and weather) represent areas in which more education and knowledge building is needed for SSFs.
- d) LMB governments could collaborate with local NGOs to combine their efforts to educate SSFs.

VII) Pro-poor and gender sensitive economic development strategy and policy:

Conclusions from the study:

- a) Each LMB country has its own thoughts and policies on pro-poor and gender sensitive economic strategies. However, there is evidence to suggest that current policies and strategies, though introduced with the best of intentions, may not have achieved the desired results.
- b) For instance, the land titling programmes undertaken in Cambodia and Thailand could not fully mitigate the issue. In countries like Lao PDR and Vietnam where only land User Rights can be obtained, displacement of ethnic minorities and SSFs remains a critical issue.
- c) Similarly, women Small-scale farmers, even if the law supports them in inheriting land from ancestral property, need to jointly operate the farm along with a man of the house, who is considered to be the head of the household.

Recommendation:

- a) Strategies and policies need to be more pragmatic and simple to enable SSFs to really make use of them in their growth path.

VIII) Minimising the (potential) negative impact of current policies and practices on food security, sustainable livelihood and wellbeing of SSFs:

First, it needs to be ascertained that not all policies may result in negative impacts. Worldwide, it is acknowledged when striving for growth and prosperity, several economic experiments are undertaken and sometimes they can

be quite imbalanced. While internal policies on various aspects of agriculture in each country could be similar or vary, it is inevitable that some policies can result in negative impact.

Conclusions from the study:

- a) More specifically this relates to the issues of 'land grabbing' and 'cost subsidising' in almost all the LMB countries.
- b) In the case of 'land grabbing', in their enthusiasm to augment GDP growth, governments encourage corporate farming and infrastructure developments that directly or indirectly harm SSFs.
- c) For example, in Cambodia, despite recognition of land rights by national laws, over 770,000 ordinary citizens (almost 6% of the total population) have been negatively affected by land grabs. It has been estimated that more than 2.2 million ha of land were transferred to corporations and rich individuals from villagers under the Economic Land Concession (ELCs) – a program that was envisaged by the government to help poor people. Consequently, the government ended up provisionally suspending ELCs.
- d) In the case of 'cost subsidies', governments try to support the farming community with subsidies - either in cash or in kind. When cash subsidies are given, agricultural sustenance is affected. When subsidies are given in kind like seeds or fertilisers, the material is often substandard and rendered less useful. They may also not be given at the appropriate time.

Recommendations:

The most prudent way of minimising the negative impacts of strategies and policies would be regular and periodical monitoring and evaluation the efficacy of policies, guidelines and regulations by;

- a) Involving people and people's representatives like NGOs to periodically monitor and determine the appropriateness of policies and strategies;
- b) And taking corrective recourse to ensure that the policies and strategies intended for the well-being of the people truly are directed in that way.

IX) Pro-poor policy formulation and implementation to assure food security, sustainable livelihood and choices for attaining wellbeing of SSFs:

Working towards creating a pro-poor atmosphere, leading to sustainable livelihoods and ultimately to food security, LMB governments should recognize the importance of agriculture and the contribution of SSFs and create a conducive environment for the development of this sector.

Conclusions from the study:

- a) Each country has formulated policies to develop agriculture for food security, sustenance of livelihoods.
- b) Cambodia's "Cambodia Macro-Economic Framework 2000-2011" and "National Strategic Development Plan 2014-2018"; Lao PDR's "Macro Economic Model", "Gender Concerns in Migration in Lao PDR", and "Agricultural Master Plan 2011-2015", Vietnam's Decrees 37 and 38 issued in 2012 and 2014 and Thailand's "Land and Agricultural Development Policies" are examples of some of the enabling policies formulated by the LMB countries

Recommendations:

- Though agriculture is not supporting GDP growth as much as other sectors, support to agriculture would be needed to be continued keeping in mind its two main contributions– food security and job security for the rural population dependent on farm labour. If prosperous, it can also help to minimize migratory trends and keeping labor within the country.
- Efficiency gains can be won by continuing to liberalize agricultural land use and permitting the emergence of a more competitive and decentralized land market.
- There is urgent need to improve education programs and job-relevant skills building.
- Focus on further modernization and capacity building to raise productivity and farmer incomes.

- Striking a balance between crop diversion, expansion and crop intensification like SRI methodologies.
- In the absence of adequate land, intensification of rice programs such as 'SRI' and 'VAC' have been helping SSFs to improve and such programs should be continued and scaled up where appropriate. While focusing on increasing yields it would do well to improve on quality as well.
- Introducing modernized agricultural techniques and building knowledge of SSFs on how to participate and take advantage of Supply chain systems to command a higher price for their produce.
- Creating agricultural land zones (like mountainous, plains but arid or semi-arid, flood prone etc.) and designing a strategy for each zone as is required would be more realistic and appropriate compared to a blanket strategy.
- Creation of exclusive agricultural market zones with facilities for SSFs.
- Providing efficient, real-time market information through a channel designed to reach a large proportion of SSFs (e.g. smart phone application or radio).
- Contract farming, agribusiness development and farm subsidies could help to build better income security for SSFs.
- Supporting prices for agricultural produce especially for different rice varieties.
- Inducing behavioural change among leaders, government officials and the general public by enhancing the capacities of SSFs and Extension Officers
- Continue to improve public services and infrastructure.
- Since all LMB countries are members of ASEAN and WTO they need to be wary of trade conditions especially in relation to phyto-sanitary requirements, which need to be percolated to SSFs at the bottom of the value chain to ensure quality in production and storage.
- Ensure qualitative products that are in line with global demand to improve exports and thus growth of the country.
- Place stricter controls and regulations on factors that lead to environmental issues to minimise environmental and climatic change vulnerability of SSFs.
- Causing continuous studies and research as also to ensure documentation for archiving for posterity is advised.

POINT OF CONVERGENCE ACROSS LMB COUNTRIES:

• Developing SSFs is not an isolated challenge but is interconnected with other issues including landlessness, insufficient land, land rights, access to resources, and lack of capacity and so on. It is recognized that the government in the LMB countries are striving to make effort to support SSFs through various policies and regulation and there is a evidence that the country have evolved policy on land issues, irrigation and supply chains to address the issue of production. **However, the implementation and enablement of the policies do not seem to have achieved significant implicit on SSFs, except in the case of Vietnam to a large extent and Thailand to some extent. Land rights issues remain unsettled in many areas and irrigation projects continue to be insufficient or inadequate. Many indigenous people and ethnic minorities remain displaced due to some of these issues.**

• One of the major points of convergence across the four LMB countries pertains to land and natural resource access and exclusion. **Land and livelihood security depend not only on obtaining land title, but on having access to infrastructure, water resources, agricultural extension services, and political and social justice.** While agriculture remains central to rural households' livelihoods, remittances also contribute significantly. Further research is needed across all LMB countries on the links between migration, livelihood change (especially as related to de-agrarianization and land consolidation), and gender.

• With regard to land access and gender, much of the existing research has pointed to the commonly understood notion that women-headed households are generally more likely to be land poor or landless. A cultural bias against women in general often disadvantages women in decision-making processes and in accessing resources. Moreover, when examining the relationships between women, men and land, **it is clear that land dispossession through land concessions affects men and women differently, and in many ways places a**

greater burden on women. Briefly, while state policies and institutions have assumed women to be both “integral for the success” and “left out” of land tenure programs, what we have found instead is a dearth of research and data available on this area of concern (except for recent attention to Cambodia). For instance, in some cases (Thailand, Vietnam) data is not available on women-headed households. **But more worrying is that across all countries, serious, in- depth studies of gender and its changing relationships to land access and land tenure are inadequate**

- The key challenges to ensure an inclusive economic growth for SSFs in all LMB countries are; **adequate place, product and price. Adequate land to cultivate crops, adequate yield both in terms of quantity and quality,** and appropriate access to markets and with the ability to sell the produce at a reasonable price. This is easier said than done as SSFs face several incumbent barriers such as agriculture technique which suitable for small-holder and women, land rights, access to credit, irrigation and other farm inputs, , and direct links to markets.

- Each LMB country has its own thoughts and policies on pro-poor and gender sensitive economic strategies. However, there is evidence to suggest that current policies and strategies, though introduced with the best of intentions, may not have achieved the desired results. For instance, the **land titling programmes undertaken in Cambodia and Thailand could not fully mitigate the issue. In countries like Lao PDR and Vietnam where only land User Rights can be obtained, displacement of ethnic minorities and SSFs remains a critical issue. Similarly, women Small-scale farmers, even if the law supports them in inheriting land from ancestral property, need to jointly operate the farm along with a man of the house, who is considered to be the head of the household.**

- Moreover, LMB states have legislated and **supported the creation of large economic land concessions, often excluding smallholder farmers from land.** These concessions have been employed across all 4 LMB countries, but less so in the case of Thailand.

REFERENCES

Guido Van Huylenbroeck, Valerie Vandermeulen, Evy Mettepenningen and Ann Verspecht, “Multifunctionality of Agriculture: A Review of Definitions, Evidence and Instruments”, Living Rev. Landscape Res., 1, (2007), 3.
[Online Article]: cited [18th December, 2015], <http://www.livingreviews.org/lrlr-2007-3> & <http://lrlr.landscapeonline.de/Articles/lrlr-2007-3/> Accessed on 18th December, 2015

Somporn Isvilanonda “Food Security in Thailand: Status, Rural Poor Vulnerability, and Some Policy Options1”
Department of Agricultural and Resource Economics, Kasetsart University, 2011-07-14 –
<http://www.agnet.org/library.php?func=view&id=20110726102632> Accessed on 19th December, 2015

Nguyen Quang Tuyen “Land Holding Changes and Kinh and Khmer Farmers’ Livelihoods in Thoi Thuan B Hamlet, Thoi Lai Town, Co Do District, Can Tho City, Vietnam” Vol. 6 No. 1, January 2010, Asian Social Science
https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwja4beB4ZzLAhWMcY4KHSK7BR0QFggbMAA&url=http%3A%2F%2Fwww.ccsenet.org%2Fjournal%2Findex.php%2Fass%2Farticle%2Fdownload%2F4799%2F4039&usg=AFQjCNHVi_LzPg1ePn9XohTaP20jq7erhg&sig2=3hLIC2FXZ4igx-JL2dqGGA&bvm=bv.115339255.d.c2E Accessed on 19th December, 2015

Norman Uphoff, CIIFAD “SRI’s Potential for Food Security in Cambodia: Fact or Fallacy?” March 21, 2005 (PPT) <http://www.slideshare.net/SRI.CORNELL/0502-the-system-of-rice-intensifications-potential-for-food-security-in-cambodia-fact-or-fallacy> Accessed on 6th February, 2016

Yang Saing Koma, CEDAC “Experiences with SRI in Cambodia 2000-2007” April 2007 (PPT) <http://www.slideshare.net/SRI.CORNELL/0701-experiences-with-sri-in-cambodia-20002007> Accessed on 6th February, 2016

Pin Vannaro “Survey of SRI and other Rice Management Practices on Acid Soils in Prey Veng provinces” (PPT) <http://www.slideshare.net/SRI.CORNELL/0703-survey-of-sri-and-other-rice-management-practices-on-acid-soils-in-prey-veng-provinces> Accessed on 6th February, 2016

Chou Cheythyrieth “Overview of System of Rice Intensification in Cambodia” (PPT) <http://www.slideshare.net/SRI.CORNELL/0741-overview-of-system-of-rice-intensification-in-cambodia> Accessed on 6th February, 2016

Ngin Chhay, Director of the Department of Rice Crop, MAFF “Overview of SRI application and adoption in Cambodia” (Workshop on Consolidation of SRI experiences, lessons and networking, Hanoi, Vietnam), 21-22 January 2010 (PPT) <http://www.slideshare.net/SRI.CORNELL/overview-of-sri-application-and-adoption-in-cambodia> Accessed on 6th February, 2016

Vansay Sayasouk “SRI (System of Rice Intensification) Experience under DOI Projects in Lao PDR” 22-23 June 2009, Department of Irrigation, Ministry of Agriculture and Forestry, Lao PDR (PPT) <http://www.slideshare.net/SRI.CORNELL/0933-system-of-rice-intensification-sri-experience-under-doi-projects-in-lao-pdr> Accessed on 6th February, 2016

Dang Bao Nguyet, Le Nguyet Minh “The Evolution of the System of Rice Intensification: What Have We Learnt?” (1990-2014) OXFAM (Note) <http://www.slideshare.net/SRI.CORNELL/1141-evolution-of-sri-what-have-we-learnt> Accessed on 6th February, 2016

“Study on Adoption of the System of Rice Intensification in Northern Provinces of Vietnam” *Ha Noi, 1-2010*, OXFAM America (PPT) <http://www.slideshare.net/SRI.CORNELL/1034-study-on-adoption-of-the-system-of-rice-intensification-in-northern-provinces-of-vietnam> Accessed on 6th February, 2016

Norman Uphoff “Current Developments with SRI - Other Methods, Other Crops, Mechanization, etc. in Global Perspective” National Workshop on Consolidation of SRI Experiences in Vietnam, January 21, 2010 (PPT) <http://www.slideshare.net/SRI.CORNELL/1017-current-developments-with-sri-other-methods-other-crops-mechanization-etc-in-global-perspective> Accessed on 6th February, 2016

“SRD and System of Rice Intensification (SRI) in Phu Tho and Thai Nguyen” Center for Sustainable Rural Development (PPT) <http://www.slideshare.net/SRI.CORNELL/0930-center-for-sustainable-and-rural-development-and-the-system-of-rice-intensification-in-phu-tho-and-thai-nguyen> Accessed on 6th February, 2016

Le Nguyet Minh “SRI – based livelihood Initiative in the Mekong” Hai Duong, 11 July 2007, OXFAM America (PPT) <http://www.slideshare.net/SRI.CORNELL/0705-sri-based-livelihood-initiative-in-the-mekong> Accessed on 6th February, 2016

“SRI – System of Rice Intensification” <http://www.slideshare.net/SRI.CORNELL/tag/cambodia> Accessed on 6th February, 2016

“Cambodia’s 2015 Macroeconomic Development and Prospect” http://www.nbc.org.kh/download_files/research_papers/english/9577Cambodias-2015-Macroeconomic-Development-and-Prospect.pdf Accessed on 18th February, 2016

Food and Agriculture Policy Decision Analysis (FAPDA) “Country Fact Sheet on Food and Agriculture Policy Trends” April 2014 <http://www.fao.org/docrep/field/009/i3761e/i3761e.pdf> Accessed on 18th February, 2016

Global Edge “Cambodia- Memo” <http://globaledge.msu.edu/countries/cambodia/memo> Accessed on 18th February, 2016

Asian Development Bank & Cambodia FACT SHEET <http://www.adb.org/publications/cambodia-fact-sheet> Accessed on 18th February, 2016

“Cambodia – Overview” <http://www.worldbank.org/en/country/cambodia/overview> Accessed on 18th February, 2016

“Cambodia – Economy” <http://www.adb.org/countries/cambodia/economy> Accessed on 18th February, 2016

“Cambodia’s 2015 Macroeconomic Development and Prospect”
http://www.nbc.org.kh/download_files/research_papers/english/9577Cambodias-2015-Macroeconomic-Development-and-Prospect.pdf Accessed on 18th February, 2016

“Dr. Chhiv S. Thet: Macroeconomic and Financial Development in Cambodia”

https://www.academia.edu/5177894/Dr._Chhiv_S._Thet_Macroeconomic_and_Financial_Development_in_Cambodia Accessed on 18th February, 2016

“II ECONOMIC OVERVIEW OF CAMBODIA”

<http://www.cambodiainvestment.gov.kh/content/uploads/2011/09/Chapter2.pdf> Accessed on 18th February, 2016

“Cambodia GDP - composition by sector”

http://www.indexmundi.com/cambodia/gdp_composition_by_sector.html Accessed on 18th February, 2016

“Socio-economic context and role of agriculture” <http://www.fao.org/docrep/field/009/i3761e/i3761e.pdf> Accessed on 18th February, 2016

“The World Fact book” <https://www.cia.gov/library/publications/the-world-factbook/fields/2012.html> Accessed on 18th February, 2016

“Asian Development Bank-Cambodia Fact Sheet” <http://www.adb.org/publications/cambodia-fact-sheet> Accessed on 18th February, 2016

“Cambodia-Global Edge” <http://globaledge.msu.edu/countries/cambodia/memo> Accessed on 18th February, 2016

“Country Partnership Strategy: Cambodia, 2014–2018 1 GENDER ANALYSIS (SUMMARY)”

<http://www.adb.org/sites/default/files/linked-documents/cps-cam-2014-2018-ga.pdf> Accessed on 18th February, 2016

“PROMOTING WOMEN’S ECONOMIC EMPOWERMENT IN CAMBODIA”

<http://www.adb.org/sites/default/files/publication/156499/promoting-womens-economic-empowerment.pdf> Accessed on 18th February, 2016

“CLIMATE CHANGE AND AGRICULTURE”

http://hdr.undp.org/sites/default/files/cambodia_2011_nhdr_thematic_highlight_agriculture_eng.pdf Accessed on 18th February, 2016

“Agriculture, Markets and Poverty – A Comparative Analysis of Lao and Cambodia”

<http://www.socialsciences.manchester.ac.uk/medialibrary/economics/discussionpapers/EDP-1227.pdf> Accessed on 19th February, 2016

“Cambodia Macro-Economic Framework-2000-2011”

https://www.mef.gov.kh/documents/mustsee/cambodia_macro-economic_framework_2000-2011.pdf Accessed on 19th February, 2016

“Investing in rural people in Cambodia” <http://www.ifad.org/operations/projects/regions/pi/factsheets/kh.pdf>

Accessed on 19th February, 2016

“Cambodia’s Agricultural Strategy: Future Development Options for the Rice Sector A Policy Discussion Paper”

<http://www.cdri.org.kh/webdata/download/sr/agriStrategy9e.pdf> Accessed on 19th February, 2016

“AGRICULTURE, IRRIGATION AND POVERTY REDUCTION IN CAMBODIA: POLICY NARRATIVES AND GROUND REALITIES COMPARED” <http://publications.iwmi.org/pdf/H046294.pdf> Accessed on 19th February, 2016

“Lao Development Report 2014” http://www.worldbank.org/content/dam/Worldbank/document/EAP/lao-pdr/LDR_2014_Eng.pdf Accessed on 19th February, 2016

“STRUCTURAL POLICY COUNTRY NOTES Lao PDR” <http://www.oecd.org/site/seao/Lao%20PDR.pdf>

Accessed on 19th February, 2016

“Lao PDR’s Macroeconomic Model The Technical Background Paper 2nd Edition”

http://www.neri.gov.la/download/3_technical_background_final_-_eng_v2.pdf Accessed on 19th February, 2016

“Smallholder Farming in Asia and the Pacific: Challenges and Opportunities”

<http://www.ifad.org/events/agriculture/doc/papers/ganesh.pdf> Accessed on 19th February, 2016

“Markets Access” <https://ideuk.wordpress.com/tag/market-access-for-small-holder-farmers/> Accessed on 19th

February, 2016

“Feed the future” <http://www.feedthefuture.gov/country/cambodia> Accessed on 19th February, 2016

“Lao PDR Development Report 2014: Expanding Productive Employment for Broad-Based Growth”

<http://www.worldbank.org/en/country/lao/publication/lao-pdr-development-report-2014> Accessed on 19th February, 2016

“Macroeconomic Perspectives for Thailand-PPT PDF” <http://www.oecd.org/countries/thailand/42709645.pdf>

Accessed on 19th February, 2016

“What are Thailand’s macroeconomic data? ... and Where are they?”

https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwjugsj6xIPLAhVIGKYKHfEWBpsQFgg6MAM&url=http%3A%2F%2Fpioneer.netserver.chula.ac.th%2F~msompraw%2FWhat%2520are%2520Thailands%2520macroeconomic%2520data_EBA.ppt&usq=AFQjCNGZJWSXzF3WI6rpSYCapX_AkesXMA&bvm=bv.114733917,d.dGY Accessed on 19th February, 2016

“Economic Growth in Thailand: The Macroeconomic Context”

http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1089943634036/475256-1151398840534/Oct26_Thailand_TFP_Barry.pdf Accessed on 19th February, 2016

“Thailand” <http://www.worldbank.org/en/country/thailand> Accessed on 19th February, 2016

Bingxin Yu, Ph.D. Post-Doctoral Fellow & Xinshen Diao, Ph.D. Senior Research Fellow International Food Policy Research Institute, Washington, D.C. - “Cambodia’s Agricultural Strategy: Future Development Options for the Rice Sector” - A Policy Discussion Paper <http://www.cdri.org.kh/webdata/download/sr/agriStrategy9e.pdf> Accessed on 19th February, 2016

Ganesh Thapa and Raghav Gaiha “Small-scale Farming in Asia and the Pacific: Challenges and Opportunities” Conference on New Directions for Small-scale Agriculture, 24-25 January 2011, Rome, IFAD HQ <http://www.ifad.org/events/agriculture/doc/papers/ganesh.pdf> Accessed on 19th February, 2016

Sanjiv de Silva, Robyn Johnston and Sonali Senaratna Sellamuttu “Agriculture, Irrigation and Poverty Reduction in Cambodia: Policy Narratives and Ground Realities Compared” November 2013 <http://publications.iwmi.org/pdf/H046294.pdf> Accessed on 19th February, 2016

IFAD “Investing in Rural People in Cambodia” <http://www.ifad.org/operations/projects/regions/pi/factsheets/kh.pdf> Accessed on 19th February, 2016

IFAD “Agriculture – Pathways to Prosperity in Asia and the Pacific” ASIA AND THE PACIFIC DIVISION, March 2011 <http://www.ifad.org/pub/apr/pathways.pdf> Accessed on 19th February, 2016

Raghav Gaiha, Md Shafiul Azam, Samuel Annim and Katsushi S. Imai “Agriculture, Markets and Poverty – A Comparative Analysis of Lao and Cambodia” Economics Discussion Paper Series EDP-1227, The University of Manchester <http://www.socialsciences.manchester.ac.uk/medialibrary/economics/discussionpapers/EDP-1227.pdf> Accessed on 19th February, 2016

Sompawin Manprasert, Ph.D., “What are Thailand’s macroeconomic data? ... and Where are they?” (1994-2004) Chulalongkorn University (PPT) https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwjugsj6xIPLAhVIGKYKHfEWBpsQFgg6MAM&url=http%3A%2F%2Fpioneer.netserv.chula.ac.th%2F~msompraw%2FWhat%2520are%2520Thailands%2520macroeconomic%2520data_EBA.ppt&usq=AfQjCNGZJWSXzF3WI6rpSYCapX_AkesXMA&bvm=bv.114733917,d.dGY Accessed on 19th February, 2016

“Lao Development Report 2014 – Expanding Productive Growth for Broad-Based Growth”, World Bank Group Report No. ACS9577, October 2014 http://www.worldbank.org/content/dam/Worldbank/document/EAP/lao-pdr/LDR_2014_Eng.pdf Accessed on 19th February, 2016

“Lao PDR’s Macroeconomic Model - The Technical Background Paper” *2nd Edition* February 2014 National Economic Research Institute, Ministry of Planning and Investment, Lao PDR http://www.neri.gov.la/download/3_technical_background_final_eng_v2.pdf Accessed on 19th February, 2016

“Cambodia Macroeconomic Framework 2000-2011” by Economic and Public Finance Policy Department, Ministry of Economy and Finance March 2010 https://www.mef.gov.kh/documents/mustsee/cambodia_macro_economic_framework_2000-2011.pdf Accessed on 19th February, 2016

Muhammed Muqtada and Luyna Ung “Cambodia: Designing macroeconomic policies for an employment - friendly growth strategy” October 2013 ILO Asia-Pacific Working Paper Series http://apirnet.ilo.org/resources/cambodia-designing-macroeconomic-policies-for-an-employment-friendly-growth-strategy/at_download/file1 Accessed on 19th February, 2016

Dr. Narayan G. Hegde “Small-scale farmers and Role of NGOs in Improving their Livelihood”
https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwj7hMv51JzLAhWUSo4KHTBzCuMQFggbMAA&url=http%3A%2F%2Fwww.baif.org.in%2Fdoc%2Fagri_Horti_Forestry%2Fsmall%2520farmers%2520and%2520Role%2520of%2520NGOs%2520in%2520Improving%2520their%2520Livelihood.doc&usq=AFQjCNEOuH5g5UuF6TfMvycH_yz3usHBA&sig2=1S20u4uqAk4N1L4xFaPpYQ&bv m=bv.115339255.d.c2E Accessed on 19th February, 2016

Dr. Rita Sharma “Strengthening Agricultural Support Services for Small Farmers” ©Asian Productivity Organization, 2004 <http://www.apo-tokyo.org/publications/wp-content/uploads/sites/5/pjrep-sem-28-01.pdf> Accessed on 19th February, 2016

Dr. Apichart Pongsrihadulchai “Use of Farmers’ Registration for Agricultural Policy Implementation in Thailand” Expert Consultation on Statistics in Support of Policies to Empower Small Farmers Bangkok, Thailand, 8 -11 September 2009 USE OF STAT-EMPOWER-11
September 2009
http://www.fao.org/fileadmin/templates/ess/documents/meetings_and_workshops/RAP2009/STAT-EMPOWER-11.pdf Accessed on 19th February, 2016

“The Report of Land and Human Development in Cambodia” Supreme National Economic Council 2007
<http://www.un.org/esa/agenda21/natlinfo/countr/cambodia/land.pdf> Accessed on 20th February, 2016

USAID Country Profile “Property Rights and Resource Governance” Cambodia
http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Cambodia_Profile.pdf Accessed on 20th February, 2016

APCAS/10/28 April 2010 “Characterisation of small farmers in Asia and the Pacific” Asia and Pacific Commission on Agricultural Statistics, Twenty-third Session, Siem Reap, Cambodia, 26-30 April 2010
http://www.fao.org/fileadmin/templates/ess/documents/meetings_and_workshops/APCAS23/documents_OCT10/APCAS-10-28_Small_farmers.pdf Accessed on 20th February, 2016

Dr. Chhiv S. Thet “Macroeconomic and Financial Development in Cambodia” Phnom Penh, November, 2013
https://www.academia.edu/5177894/Dr._Chhiv_S._Thet_Macroeconomic_and_Financial_Development_in_Cambodia Accessed on 20th February, 2016

Sokbunthoeun SO “Land Rights in Cambodia: An Unfinished Reform” Analysis from the East-West Center No. 97 August 2010 Asia Pacific Issues
<http://www.eastwestcenter.org/fileadmin/stored/pdfs/api097.pdf> Accessed on 20th February, 2016

Global Edge “Lao - Memo” <http://globaledge.msu.edu/countries/Lao/memo> Accessed on 20th February, 2016

“CHARACTERISATION OF SMALL FARMERS IN ASIA AND THE PACIFIC”
http://www.fao.org/fileadmin/templates/ess/documents/meetings_and_workshops/APCAS23/documents_OCT10/APCAS-10-28_Small_farmers.pdf Accessed on 20th February, 2016

“World Development Indicators” <http://wdi.worldbank.org/table/3.2> Accessed on 20th February, 2016

“Agricultural Land (% of land area)” <http://data.worldbank.org/indicator/AG.LND.AGRI.ZS> Accessed on 20th February, 2016

“Land Rights in Cambodia – An Unfinished Reform”
<http://www.eastwestcenter.org/fileadmin/stored/pdfs/api097.pdf> Accessed on 20th February, 2016

“PROPERTY RIGHTS AND RESOURCE GOVERNANCE – CAMBODIA”

http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Cambodia_Profile.pdf Accessed on 20th February, 2016

“The Report of Land and Human Development in Cambodia”

<http://www.un.org/esa/agenda21/natinfo/countr/cambodia/land.pdf> Accessed on 20th February, 2016

“Gender and Agricultural Labourers in Sustainable Agriculture Intensification-Training Guide-Oxfam and AIT, Thailand” http://www.sri-lmb.ait.asia/country/doc/TH_%20Gender%20&%20Labourers%20Training%20Guide.pdf

Amara Pongsapich “Land and Agricultural Development Policies Impacting on Human Rights in Thailand” National Human Rights Commission of Thailand http://www.nhrc.or.th/en/file/Articles/article_amara05.pdf Accessed on 21st February, 2016

Chakriya Bowman “Thailand Land Titling Project”, *A case study from Reducing Poverty, Sustaining Growth - What Works, What Doesn't, and Why - A Global Exchange for Scaling Up Success. Scaling Up Poverty Reduction: A Global Learning Process and Conference*

Shanghai, May 25.27, 2004, AusAID

http://web.worldbank.org/archive/website00819C/WEB/PDF/THAI_LAN.PDF Accessed on 21st February, 2016

“Thailand: Problems Farmers are Facing”

<https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwii7uyE4jzLAhVBbY4KHfT7AH0QFggbMAA&url=http%3A%2F%2Fwww.jamescapps.deedo.biz%2Ffiles%2Fthailand.doc&usq=AFOjCNFSJtgU6-nnhTF2yVilk93XRufC3A&sig2=99UCIrQxJNePXlysf4LSxw&bvm=bv.115339255.d.c2E> Accessed on 21st February, 2016

“Land and Agricultural Development Policies Impacting on Human Rights in Thailand” http://www.nhrc.or.th/en/file/Articles/article_amara05.pdf Accessed on 21st February, 2016

“Thailand Land Titling Project”

http://web.worldbank.org/archive/website00819C/WEB/PDF/THAI_LAN.PDF Accessed on 21st February, 2016

“Challenges and new opportunities for Vietnam’s agriculture in the international integration process”

http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id=2246:challenges-and-new-opportunities-for-vietnams-agriculture-in-the-international-integration-process&catid=270:vietnam-industry-news&Itemid=363 Accessed on 21st February, 2016

“Thailand Economic Outlook” <http://www.focus-economics.com/countries/thailand> Accessed on 21st February, 2016

“Vietnam must find funding for farmers” Vientiane Times (Newspaper) dated 23rd February, 2016 Accessed on 23rd February, 2016

“Sam Sang in practice: early lessons from pilot implementation” Lao-Australia Development Learning Facility (LADLF), December 2015 http://ladlf.org/images/publications/141215_ladlf_samsang_study.pdf Accessed on 23rd February, 2016

“Climate Change and Agriculture – 2011”

http://hdr.undp.org/sites/default/files/cambodia_2011_nhdr_thematic_highlight_agriculture_eng.pdf Accessed on 25th February, 2016

“National Strategic Development Plan 2014-2018” (NSDP) Translation - Royal Government of Cambodia

http://www.cdc-crdb.gov.kh/cdc/documents/NSDP_2014-2018.pdf Accessed on 25th February, 2016

Sum Sreymom and Khiev Pirom “Contract Farming in Cambodia: Different Models, Policy and Practice” Working Paper Series No. 104, August 2015, A CDRI Publication <http://www.cdri.org.kh/webdata/download/wp/wp104e.pdf> Accessed on 25th February, 2016

Khamphay Manivong and Phouthone Sopthathilath “Land Use Planning and Land Allocation in the Upland of Northern Lao: Process Evaluation and Impacts” Economy and Environment Program for Southeast Asia (EEPSEA), October 2009 http://www.eepsea.org/pub/tr/12628443311Manivong_and_Sopthathilath_-_Land_Use_Planning.pdf Accessed on 26th February, 2016

“Agricultural Master Plan 2011-2015” Program Approach, Roadmap, Agriculture and Forestry for Sustainable Development, Food and Income Security, Ministry of Agriculture and Forestry, Lao PDR

<http://theredddesk.org/sites/default/files/agricultural-master-plan-2011-2015.pdf> Accessed on 26th February, 2016

Souksavanh INTHARACK “Result of Analysis on Lao Agricultural Census 2010/11” - 25th Session of the Asia and Pacific Commission on Agricultural Statistics (APCAS 25), 18-21 February, 2014, Lao PDR,

http://www.fao.org/fileadmin/templates/ess/documents/apcas25/APCAS_14-5.3_Lao_Agricultural_Census_APCAS.pdf Accessed on 26th February, 2016

“Lao PDR-Agriculture Census” Asia Pacific Commission on Agricultural Statistics, Twenty-fourth Session, Da Lat, Viet Nam, 8-12 October, 2012

http://www.fao.org/fileadmin/templates/ess/ess_test_folder/Workshops_Events/APCAS_24/Paper_after/APCAS-12-11_-_Lao_PDR_Census_01.pdf Accessed on 26th February, 2016

Lowder, S.K., Scoet, J. and Singh, S. 2014. “What do we really know about the number and distribution of farms and family farms worldwide?” *Background paper for The State of Food and Agriculture 2014*, ESA Working Paper No. 14-02, Rome, FAO

<http://www.fao.org/docrep/019/i3729e/i3729e.pdf> Accessed on 26th February, 2016

Dr Heiner Lehr & Gwynne Foster “Supporting Small-scale Farmers – Part-I” Electronic Traceability and Market Access for Agricultural Trade Facilitation

<http://www.unescap.org/sites/default/files/Lao%2003%20Trace05part1%20-%20Supporting%20Small-scale%20farmers%20V140815.pdf> Accessed on 26th February, 2016

Philip Hirsch and Natalia Scurrah “The Political Economy of Land Governance in Lao PDR” Mekong Region Land Governance (MRLG),