

CHAPTER I

INTRODUCTION

1.1 Background of study

Agriculture is the most important sector in the Cambodian economy. It plays an important role in improving the economy, reducing poverty and building social sustainability. In 2017, the whole agriculture department contributed to 26.7% of the Gross Domestic Product (GDP), which includes crops production of 15.8% (MAFF, 2017). Besides rice, which is the major food production in Cambodia, the farmers, the local and international traders, and industries are attracted to cassava production. Indeed, China's dominance of the global cassava trade is driven, in part by the domestic policy that places a priority on bio-fuel production. As a result, cassava growing areas have risen remarkably. For the last 5 years, cassava production areas in Cambodia expanded exponentially from less than 515 thousand hectares in 2014 to a peak of more than 650 thousand hectares in 2018. And Cambodia produced 13,817,262 tons in 2017 (MAFF, 2017).

Cassava is the 21st century crop and 2nd main crop in the world. Between 1980 and 2011, the global harvested area of cassava expanded by 44 percent, from 13.6 million to 19.6 million hectares (FAO, 2013). Cassava has a kind of root crop that is convenient to grow; it is tolerant to drought, and resistant to insects and illness (FAO, 2007). As mentioned above, biofuel is an important new area of cassava usage in Asia. One ton of dried chips yield about 300 liters of 96% pure ethanol (CIAT, 2015). As countries seek to reduce both dependence on imported oil and greenhouse gas emissions, companies in China, Japan and the Republic of Korea are obtaining concessions for large-scale cassava plantations, mainly in Cambodia, Indonesia, Lao PDR and the Philippines, as a source of dried chips for ethanol production (MAFF, 2015).

In conclusion, cassava production will continue to be developed, especially its value chain such as technical production and marketing. As technical

production improves, it will extend to all farming areas. As for marketing, it will be promoted both in local and international levels. As a result, the living standard of the farmers will improve and they will become prosperous from the cassava production.

1.2 Research rationales

Cassava, an agro-industry crop, is used in Asia as feedstock for the production of biofuel. Besides rice, which is the major food production in Cambodia, the farmers are attracted to cassava production. Cassava has now become an important cash crop for resource-poor farmers in Cambodia (Sopheap et al., 2008). Millions of Cambodian smallholder farmers depend on cassava production for their livelihoods. In 2017 Cambodia produced 13,817,262 tons (MAFF, 2017). Recently, China has become a big market for cassava production in Cambodia. However, Cambodian cassava industry is almost exclusively dependent on the border markets of Thailand and Vietnam which act as cassava trade-brokers between Cambodian and International and/or Chinese markets. Therefore, the nature of the product on the one hand and the lack of organized market system on the other hand have resulted in low price for the producer. Besides, there are challenges associated with cassava production and marketing, mainly about the knowledge of grading, market information, excessive intermediaries, price seasonality, and limited number of buyers. Despite the importance of cassava in the livelihood of many farmers and income generating in the study area, it has not been given due attention. Cassava value chain and its characteristics have not yet been studied in this area. Hence, this study attempts to fill in these gaps.

1.3 Significant of the study

Good knowledge of each step of the value chain for cassava is a very important aspect of promoting value added in cassava. This study might then measure and unveiling causal the cassava yield variations to improve technologies and optimal management practices will help in reaching that narrowing of yield gap in cassava production. In addition, the transformation of cassava to dried chips, the value added,

the break-even point, and the return on investment is shown. These are important factors to find out what kind of management could increase cassava production and its profitability and guidance for interventions. It should be a tool for them to use in solving problems and would improve efficiency in a specific area. Therefore, the information generated from this study will also help a number of organizations, research and development organizations, traders, producers, policymakers, extension service providers, NGOs, to reach their activities and redesign their mode of operation. Ultimately, it will influence the design and implementation of policies and strategies. It can also help the actors to find and analyze new ways of stimulating the value chain upgrading strategies. Furthermore, this study could be used as material for further study.

1.4 Research questions

1. What are the opportunities and constraints faced by each actor in the chain?
2. Why the yield gap is a very substantial variation in cassava farming?
3. What are advantage and challenge in the cassava value chain?
4. Which actor will achieve the highest profit in cassava value chain?

1.5 Objectives of the research

1. To identify benefits and challenges in the cassava value chain
2. To recommend improvements income generation in the cassava production and distribution at the Cambodia-Thailand border

ลิขสิทธิ์ของมหาวิทยาลัยราชภัฏรำไพพรรณี

1.6 Research conceptual framework

- What are the main constraints for Cambodian smallholders and which promotional instruments are most suitable for improving the situation of smallholders in the given Cambodian context?
- The main constraints for Cambodian smallholders in the value chain are also determined. And lastly, the value chain upgrading strategies provided benefits to all actors involved.

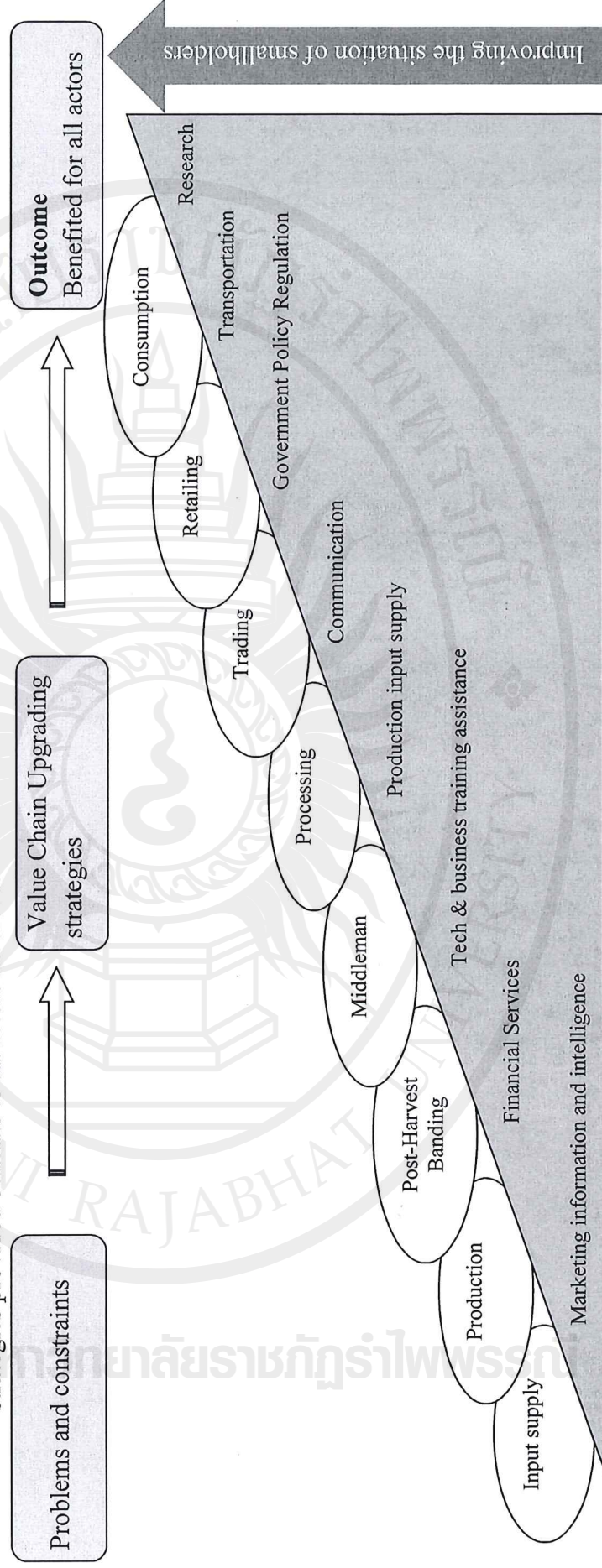


Figure 1.1 The main constraints for Cambodian smallholders in the value chain

1.7 Research benefits

The research will try to find out an appropriate technical model to improve the net revenue. It will also emphasize the lack of economic power of the target beneficiaries compared with more powerful firms. These firms set the rules of the game in the value chain and it show how the beneficiaries have limited choices. The research will be useful for decision makers and other stakeholders. It will give them the opportunity to take more actions and introduce new techniques to help rural people livelihood. It will help to decrease poverty and increase food security at community level.

1.8 Scope and limitations of the research

The study is conducted in two borders provinces named Battambang and Pailin. The survey had determined that those which are part of an agro-ecological zoning, have many silos for storage and they export their cassava mainly to Thailand where people produce cassava as the main occupation and are involved in the cassava value chain. The study focuses on the input supplier, the cassava farmers, the cassava collectors, and storage of cassava. The questionnaires will be applied to 109 farmers who have been on cassava farming, also 6 input suppliers, 6 Collectors/Transporters 6 silo managers and 3 groups discussion across 3 districts and 2 provinces who be interviewed. The study is to show all agro-practices and the aspects of the economy in the cultivation of cassava. The first was conducted between February and March 2019 in Battambang province and the second from June to July 2019 in Pailin province. The non-experiment data will contribute to the key finding quantitative data.