



Workshop on “Research Methods for Value Chain Analysis”

Proceedings

**16th March 2022
Department of Agricultural and Resource Economics,
Faculty of Economics, Kasetsart University**

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Proceeding Recording Link

Link: <https://drive.google.com/file/d/1-mXtQwWayNn2sOr82Fko9tOcirgMwQgL/view>

Agenda

Time	Activity	Presenter/ Moderator
08:30 – 08:40	Welcome Remarks	Asst. Prof. Dr. Kulapa Kuldilok, Department of Agricultural and Resource Economics, Faculty of Economics, Kasetsart University
		Dr. Suresh Babu, Senior Research Fellow / Head of Capacity Strengthening, IFPRI
08:30 – 09:00	KU Presentation	Snakehead Fish Value Chain Asst. Prof. Dr. Kulapa Kuldilok, Associate Dean for Administrative Affairs and Organization Development, Department of Agricultural and Resource Economics, Faculty of Economics, Kasetsart University
09:00 – 09:50	Keynote Presentation	Research Methods for Value Chain Analysis Dr. Ben Belton, Associate Professor at AFRE, Michigan State University Rural Sociologist and Deputy Chief of Party at USAID, Feed the Future Innovation Lab for Food Security Policy: Burma
- Break -		
10:00 – 11:00	Group Exercise and Discussion	Research Methods for Value Chain Analysis Workshop
11:00 – 11:15	Group Presentation and Q&A Session	Dr. Ben Belton, Michigan State University Asst. Prof. Dr. Pasakorn Thamachote, Kasetsart University
11:15 – 11:30	Closing Remarks	

Welcome Remarks by Asst. Prof. Dr. Kulapa Kuldilok

Good morning everyone, on behalf of the Faculty of Economics, Kasetsart University, it is my pleasure to welcome all participants from the PRCI, students and other audiences. Today is a good opportunity to learn some methods of research such as the value chain analysis. I think it would be helpful and beneficial to the students and the researchers today. Moreover, we can share some research experience and discuss together. I hope all of you will have a great time today. Thank you.

Welcome Remarks by Dr. Suresh Babu

Thank you Dr. Kulapa for inviting us to this workshop webinar and I also want to thank Dr. Pasakorn for organizing this on behalf of the PRCI. PRCI is actually a program called, Feed the Future Innovation Lab for Food Security Policy Research, Capacity and Influence (PRCI). This program is funded by the USAID (US Agency for International Development) and it is operating in six countries in the Asia region – three countries in South Asia and three countries in Southeast Asia. In South Asia, we have India, Sri Lanka and Nepal, and the three countries in Southeast Asia are Thailand, Laos and Cambodia. We are a network of countries coming together in the context of how we can learn from the modern and latest technologies and methods of analyzing policy problems, at the same time, how we can do our own analysis on priority research areas in our countries and help in terms of setting policy rights in those areas by presenting it to policy makers. In that process, we are also strengthening the capacity of individuals and groups to do the kind of research that we will be talking about today.

These research topics are identified by the countries themselves as priorities. In the last round we were doing trade flow analysis as the major research topic and all the six countries did the trade flow analysis and they developed the papers; they published these papers internally as well and they will present it to the policy makers. Now, in the second year, the countries have decided to work on specific value chains. In the Southeast Asia context, they are looking at the cassava value chain in all the three countries. In the South Asian context, Sri Lanka is looking at the organic farming fiasco; they went through how the fertilizer value chain can be studied and what is the impact of fertilizer ban, the chemical fertilizer ban on the food security and productivity of crops. Nepal is looking at the value chains, particularly, vegetable value chains that are connecting India and Nepal, because vegetables are mostly imported from India, but then, they are looking at how to develop the vegetable value chains. India is also looking at broader fruits and vegetable value chains, in the context of how they can work in a harmonious way in the region in South Asia.

All these things boil down to understanding how the value chain analysis needs to be done and in the particular commodity and so on. This particular presentation webinar that we are having today is a follow up to the broader value chain concept introduction webinar that we had a month ago – which is available online on the PRCI website, you can see that if you were not able to be there last time. In this workshop, we are looking at research methodology per se, and looking carefully at what are the requirements in terms of organizing the field work, what kind of methodologies are applied, and we have both, Dr. Kulapa and Dr. Ben Belton, who will be talking about that in a minute.

We will be moving onto other topics in this series of studying value chains this year. The next topic we are thinking about is, how do we bring in the gender dimension to the value chain analysis. One of the research gaps is what do the women do in value chains, how do we have to integrate them in the value chains, and when we don't integrate them or we don't study their contributions properly, how we lose out in the long run, right? So, those issues will be brought out in the next webinar that we will be organizing in May or sometime in April, I suppose. So, Dr. Pasakorn will get in touch with you again as to when we will organize this, and we will be working with new research persons on that and we will come back to you.

With that brief introduction, thank you for this opportunity to be with you and I am also learning as we go along, it's a wonderful opportunity to also learn for those who have done this work. The research methods change all the time and new innovations are made in research applications, so I am eager to learn from this webinar as well. Thank you so much.

KU Presentation by Asst. Prof. Dr. Kulapa Kuldilok

Title: *Snakehead Value Chain Analysis*

Outline:

1. Introduction to the snakehead fish
2. Snakehead fish resources
3. Analysis framework for the supply chain of the snakehead fish
4. Value chain actors and the calculation of their marketing margin
5. Study areas involved in the research analysis
6. Issues in the snakehead fish supply chain
7. Recommendations to develop the snakehead fish industry

Being one of the high value fish species for food and income for farmers in Thailand and its neighboring countries, snakehead fish is consumed in both fresh and processed forms in the country. Ten years ago, snakehead fish aquaculture was not possible and procuring them could only be done through manual methods by catching these fish in rivers and ponds near paddle fields.

The Department of Fisheries (DOF) in Thailand built farms and successfully started breeding this species in 2013. According to the DOF statistics on snakehead fish quantity during 2013-2018, the resources for the snakehead fish in Thailand, come from captured, cultured and aquaculture fisheries. By 2016, the country increasingly relied on imports of the snakehead fish from other countries such as Vietnam and the aquaculture reserve saw continuous decrease.

The study was focused on the supply of the snakehead fish in Thailand for all stakeholders in all the channels upstream, midstream and downstream, as well as the demands relative to consumer behavior. More than 100 stakeholders, 20 consumption stakeholders as the focus group and 472 consumers were interviewed for collecting the research data. The framework integrated different analysis tools in mapping the value chain in order to identify the important chain actors and their activities, the distribution of benefits among the channels involved and the process flow that connects each actor in the chain.

Focusing on the market located in the central part of Thailand, the main issue in the supply chain is identified to be in the grow-out farmers, who gained the least profit of \$0.07/kg due to higher costs in growing and maintaining snakehead fish farms and the increase in imports which drove their selling price to the wholesale market to also decrease.

On the consumers' side, it was determined that the main factors that consumers mainly consider are regarding the food safety, nutritional benefits and the price of the snakehead fish. Consumers also have different preferences as to how the snakehead fish for retail are prepared and processed.

Key findings:

The study identified that the quality of fish seeds in hatchery farms were not consistent, leading to the low profit margin for farmers. Implementing further training to hatchery farmers in order to improve the quality of fish seeds could lead to higher survival rate of the fish species when being distributed to the grow-out farmers for the continuity of snakehead fish farming.

The country bears higher costs but lower production rates when compared to its main import source. Higher supply of snakehead fish from imports leads to the decrease in the standard wholesale price rate in the market and this significantly affects the farmers in Thailand.

Due to the low profit and high cost of production, and the large volume of the fish imports from Vietnam, several grow-out farmers quit. The water quality and irrigation systems in farms are found to not be optimal conditions for fish farming. Consumers also expect more from the processed fish products.

In order to develop the value chain and the overall performance of fisheries, in this case, the snakehead fish, appropriate plans must be prepared in association with better management and protection of the resources that the country has.

Recommendations:

1. Increasing the production efficiency of hatchery farmers and grow-out farmers is evidently needed. For hatchery farms, the focus should be in improving the quality of broods and fish seeds. For grow-out farms, adapting better farm management methods and upgrading the irrigation systems should be implemented in order to decrease the cost of production.
2. Good Agricultural Practices (GAP) standards should be set and followed, and marketing strategies such as product differentiation should be introduced, this will allow consumers to be able to identify locally produced snakehead fish from imports.
3. There is a need for a new approach when importing products. For example, instead of importing fresh or live fish from other countries, import only processed fish and focus on patronage of the country's own fresh products in place.
4. Increasing the level of production standards on imported fresh fish could also help cater to Thai farmers.
5. Preparation of the processed forms of snakehead fish should be improved according to consumer demands. Spreading awareness to consumers by promoting and putting geographical indication tags on Thai snakehead fish brands could be beneficial and sustainable to support Thai farmers.

Presentation by Dr. Ben Belton

Title: *Research Methods for Value Chain Analysis*

Outline:

1. Value chain research objectives
2. Value chain actor behaviors
3. Social dimensions
4. Qualitative scoping research
5. Quantitative data collection
6. Survey implementation
7. Data analysis and interpretation

Key Messages:

Value chain research is conducted in order to generate policy-relevant information vital in a decision-making process. Value chain analysis gives way for users to understand and formulate better and evidence-based actions that are necessary to reflect a certain situation.

In analyzing value chains, it is important to be well-informed of the structure of the chain consisting of the types of actors in its different segments, from the upstream, midstream and downstream, as well as the economic behavior or conduct of individual actors and the overall performance of each value chain segment or the chain as a whole.

For every value chain segment, each actor is doing a similar set of functions to produce an output, this could be in terms of either a product or service. In order to do so, actors require inputs which could be in the form of assets or labor, and the entire flow of the chain is linked by logistics (i.e., acquisitions, transportation and storage).

It is important to take note of the social dimensions (e.g. age, gender, ethnicity, place of origin, worker/owner etc.) of the individuals or groups of people who are involved in the value chain and to take into account the changes that took place over time.

Value chains can be in a simple form or it could also be complex with different or many more segments. Value chains can be mapped and analyzed using value chain analysis which can include qualitative and/or quantitative research tools.

There are no fixed rules on which approach should be undertaken in order to formulate a comprehensive market map as the scoping research can be wide with many different perspectives.

An intensive qualitative research ideally involves interviewing a wide range of informants in different locations until a ‘saturation’ of all the information gathered is reached. A quantitative or structured survey on the other hand, represents and statistically analyzes a population of actors.

If a scoping research is able to provide a detailed qualitative understanding of how a value chain is organized and structured, in some cases, there is no need to do additional work. However, when an opportunity arises to conduct quantitative study, there are strong grounds to recommend having qualitative understanding initially before doing so. The combination of qualitative and quantitative research complements each other and provides a much stronger foundation when interpreting data than having one or the other on its own.

For effective data collection, rigorous pre-testing before implementing surveys is essential. To ensure quality data, it is also imperative to deploy enumerators that will provide constant supervision throughout a field survey. Another significant step in data analysis is that it is important to identify the relationship between the different sets of variables obtained. Descriptive statistics refine the analysis where connections are seen, and this helps to strengthen data interpretation.

In addition to this, it is necessary to bear in mind the wider context in which the value chain is embedded in terms of what it has access to and its environment. Infrastructure and policies can impact a value chain in part or as a whole. Various institutions from the public and private sectors can also influence the environment in which a value chain operates.

Group Exercise and Presentation

For this part of the program, the attendees were grouped into two groups, Group 1 consisted of attendees from Southeast Asian countries, i.e., Thailand and Laos, and Group 2 consisted of attendees from South Asian countries, i.e., Nepal and Sri Lanka. They were put into breakout rooms and were then given 45 minutes to discuss and prepare for the presentation task at hand. Attendees were instructed to choose a commodity and analyze its value chain and apply the information they have obtained from the presentation discussed by Dr. Ben Belton. Both groups decided on analyzing a rice value chain and each group’s chosen representative presented their work.

Although having chosen the same commodity, both groups were able to contribute different ideas and deliver comprehensive presentations for their respective value chains. Dr. Ben Belton shared his thoughts and comments on each group’s presentation afterwards.

Q&A Session

Comment: *It is very interesting to see that the profit made by the middle-stream is lower than the farmers or the downstream supply chain actors. In many Southeast Asian countries, what happens is quite the opposite of that, where the farmers and the other actors are being exploited by the middle-stream actors.*

Answer: (By Dr. Kulapa Kuldilok) I understand what you mean, however, in the presentation, the comparison is by kilogram. We see that for the merchants, they get only a small portion of the profit, but they buy in bulk, so in the final part, they will get a high amount of profit. When they buy the fish from the farmers, they only get around 5-10% of the price. In Thai baht, that is just around 5 Baht, according to the people I interviewed. When we compare per kilogram, it might seem very low, however, if they buy a lot, they will get higher profit.

Question: *Does level of competition differentiated in each stakeholder affect profit differentiation of each stakeholder in the value chain?*

Answer: (By Dr. Ben Belton) Yes, typically, if say one particular sector or segment of the value chain is very concentrated. Let's say, there are a few but very big traders for instance, who control a lot of the market and then, there are also a lot of smaller traders or individual traders, all of which are only trading in very small quantities. Under those conditions, maybe the very large traders can effectively set the prices, and so, that is not a very competitive situation. That high degree of concentration means that the individual or smaller traders are making lower profits and the very large traders are making higher profits because they are able to buy cheaply from the smaller traders and sell on.

But also, it might be that you have a very competitive market, where there are lots and lots of farmers for instance, all producing the same crop of a similar quality; the fact that it is very competitive doesn't necessarily mean that all those farmers are all going to get a high price unless there are a lot of demand. It kind of depends on the situation, and it is quite difficult to give a general answer to that question.

Question: *Sometimes individual farmers are also members of rice cooperatives, will that be an issue, perhaps, double counting of records?*

Answer: In Thailand, for instance, it is somewhat looser or in other places maybe, in China, it is almost taking the form of a company. It really depends on the specific case.

Closing Remarks by Dr. Pasakorn Thammachote

First of all, on behalf of the Department of Agricultural and Resource Economics, I would like to thank Ben Belton for giving us fruitful insights about the value chain analysis. We have had Ben now for a second lecture. I think this is a good start and hopefully, I am looking forward to seeing the outcome after we go through the value chain analysis training by the end of this year. We expect to see some more research coming up from our PRCI network, especially from Laos and Cambodia. Today, I would also like to thank the participants from South Asia who have been very active in participating in this workshop, including participants from Thailand, many lecturers from Kasetsart University, and also we have a new group of participants from Prince Songkla University, which is in the South of Thailand. This is their first time joining our workshop and hopefully, we could continue that momentum. For the presentation, I will send it through email after the workshop, including the Zoom meeting recording, just in case, that you would like to review and check back on it.

Thank you everyone. There will also be upcoming workshops in April, May and June, so I will keep you all informed. I hope to see you all soon.

List of registered participants

Dissemination Workshop “Research Methods of Value Chain Analysis”

16 March 2022
via Zoom Meetings, Thailand

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