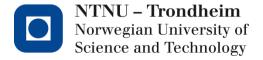
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Livelihood Strategies of Migrants in the *Transmigrasi* Location in Indonesia



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Abstract

This study is about the livelihood strategies of migrant households who are resettled from Wonogiri Regency in Central Java Province to West Sumatera Province, Indonesia, through transmigrasi program called Bedol Desa. The study is conducted in the transmigrasi location in Sitiung I where the migrants migrated in 1976 due to a dam construction in Wonogiri. The thesis aims to explore the changes of strategies applied by migrant households to pursue sustainable livelihoods since they came to the transmigrasi location. The historical background of transmigrasi processes is examined in order to understand the various factors affecting the decision of migrant households to move. It is further sought to identify the availability of livelihood assets for the migrant households to sustain their livelihoods. Following the qualitative research methodology, the study drew on interviews, observation as well as informal conversation to gather the livelihood experiences of twenty six migrant households which were selected by using purposive sampling. Structuration theory and the sustainable livelihoods approach were employed as theoretical frameworks to address the research problem. The presence of structure and agency played important roles to shape the lives of migrant households especially to determine the access to livelihood assets and livelihood strategies of migrant households. The sustainable livelihood approach has been adopted to analyze how the migrant households change the assets and livelihood strategies for making a living.

This study found the main motivation of migrants to involve in the transmigrasi program was the ownership opportunity for two hectares of land from the Government which divided into one hectare for paddy cultivation, three-quarters hectare for plantation and one-fourth hectare of land for home plot including a house. Their decision to move was also caused by the economic background of the migrants in which most of them came from poor family and were landless so the Bedol Desa program gave them a possibility to improve their livelihoods. The better vision for their children's education and the social ties as a Wonogiri community, were also affecting the decision to involve in the transmigrasi program.

The livelihoods of migrant households have positively changed since they came to the transmigrasi location in 1976. The availability of natural capital of paddy land, the availability of irrigation system, and livestock are the most important assets for the farmer migrants. The training activities provided by local government aimed to improve the human capital of the migrants in agricultural sector. The farmer groups provide the opportunity to receive support from the government especially financial support or agricultural tools for cultivation. The study found that a range of livelihood strategies have been applied by migrant household to cope with the vulnerability of their livelihoods. They could not generate income from paddy field due to inadequate irrigation system and soil problems. Conflict with local people has made the migrant household losing the plantation land thus they were not able to sustain their livelihoods in agriculture. The livelihood activities of poor households are more diverse. They worked as wage laborers on the paddy lands owned by other migrants and involved in the construction projects providing by the Government. After the sufficient irrigation system was built, the livelihoods pattern of migrant households has changed. They started to cultivate the paddy lands intensively and they could generate income from the rice harvest. This study confirms that the livelihoods of migrant households may increase after getting involved in the transmigrasi program.

DEDICATION

This Master Thesis is dedicated to my lovely family; Papa, Mama, Hanes, and Ici. I have come this far because of your pray, loves, cares and supports. Thank you for accompanying me during the most important stage in my life.

I also dedicate this thesis for Migrants in Sitiung I Dharmasraya.

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1 INTRODUCTION

1.1 General Background

Population transfers between islands in Indonesia have been part of the population policy of the Indonesian Government through the *transmigrasi* program. This program was influenced by the Dutch colonization scheme when the first population transfer took place in the early nineteenth century. Under the Ethical Policy in 1905 of the Dutch colonial administration, the resettlement project was aimed at decreasing the population pressure on Java Island by opening up the new areas for production outside Java (Singarimbun 1968).

The resettlement of the population program has continued by the Government of Indonesia. A massive population has been transferred from sending to receiving areas. Most of sending areas were located on the islands of Java, Madura, Bali and Lombok which were characterized by overpopulated areas. Around 490,000 families or 2.3 million people were moved from overcrowded areas to the less densely populated regions (Outer Islands) of Sumatera, Kalimantan, Sulawesi and Irian Jaya (Papua) between 1950 and 1986, but the majority of these in the 1980s (Gondowarsito1990). The *transmigrasi* program of Indonesia became one of the largest voluntary land settlement programs in the world during the 1970s (Arndt 1984).

Initially, the *transmigrasi* program focused on alleviating poverty and population pressure on the overpopulated areas. However, the perspective of the *transmigrasi* has shifted in line with the changing government regimes in Indonesia. The *transmigrasi* program is now seen as having a welfare objective, to raise the living standards of the migrants and a strategy for regional economic development on the Outer Islands. During the First Five-Years Development Plan (Repelita I, 1969/70-1974/75), the Government of Indonesia created several categories of *transmigrasi*, which were general *transmigrasi* (*transmigrasi umum*) and spontaneous *transmigrasi* (*transmigrasi spontan*). Both of these *transmigrasi* were registered and received incentives from the Government including land, house, agriculture tools and rations for twelve months. The migrants were also transported by the government free of charge but for migrants who registered in the latter categories had to arrange and pay for their own transport (Suratman and Guiness 1977). Another particular category of *transmigrasi* was called as *Bedol Desa* program. According to this program, the government has been resettling people from some areas because of the environmental problems. The migrants who

participated in this program also received the same kind and amount of incentives as the migrants in general *transmigrasi* but some criteria might be waived.

Sumatera Island was one of the main destination areas for the *transmigrasi* program. West Sumatera Province has contributed as a receiving area for *Bedol Desa* program. Approximately 8,000 people from 2,000 migrant households were moved from Wonogiri (Central Java Province) to West Sumatera Province in the end of 1976 (Gondowarsito 1990). Particularly, the Government were resettled the migrants to the *transmigrasi* location in Sitiung I which is located in Dharmasraya Regency. The Government decided to build a dam in Wonogiri because this location has deteriorated due to the environmental problems. Therefore, people were forced to migrate from their place of birth but they had options of either resettling locally or voluntarily joining the *Bedol Desa* program to Sumatera. The program were fully sponsored and organized by the Government and they received compensation for the lands and properties that were affected by the dam construction.

It was a difficult decision for the Wonogiri community to leave their original place. Even though they also struggled to obtain their livelihoods in Wonogiri, the choices to move had to be decided by them. The *Bedol Desa* program might provide a possibility to change their livelihoods although many problems were encountered by them in the processes to build their livelihoods in the new place. Therefore, this research is primarily designed to analyze the livelihood strategies of migrant households from Wonogiri who have been resettled since December 1976.

1.2 Statement of the Problem

The main objectives of the *transmigrasi* program were to improve the welfare of migrant communities, developing the potential of natural resources, reducing unemployment by providing job opportunities, and stimulate economic growth for regional development. The Government of Indonesia has provided two until five hectares of land for each migrant household for agricultural cultivation. In addition, the Government also built the house and provided social services for the migrants in the new settlement.

Transmigrasi is seen as an ambitious program to spread equitable development in all regions in Indonesia especially on the Outer Islands. Many problems have emerged during the implementation of this program. In contrast to the objectives of the *transmigrasi* program, the migrants at the *transmigrasi* location found the difficulties to build their livelihoods during the

first few years. Many studies of the *transmigrasi* in Indonesia have shown various problems faced by the migrants in the *transmigrasi* area. Most of the *transmigrasi* areas are isolated and unreachable by transportation infrastructure. Based on the program, each migrant household will receive two until five hectares of land, but in practice the migrants often received less than two hectares. The differences of cultures between Javanese migrants with local communities, such as languages, customs and farming patterns have encountered in the *transmigrasi* area (Hardjono 1977 in Arndt and Sundrum 1977).

Land degradation associated with attempts to establish permanent food crop cultivation on fragile forest soils has made agrarian livelihoods precarious, with many locations blighted by soil fertility decline, pest invasions and crop failure, were happened in many *transmigrasi* areas (World Bank 1988; Sage 1996 in Elmhirst 2002). Non-farm work has to be included for survival strategy of the migrant households because they found some difficulties to secure their livelihood merely on the farm activities (Leinbach *et al.* 1992). Based on these experiences, the migrant households have encountered a various problems to sustain their livelihoods in the *transmigrasi* area.

According to the historical background of the *Bedol Desa* program, this type of migration was categorized as forced migration. The development of the dam in Wonogiri has caused the displacement of Wonogiri community. In general, they were from the poor family backgrounds. Many empirical evidence showed that the forcibly displaced population, often already poor, end up worse off for a long period (Cernea 1997). The development-caused involuntary population resettlement has led the impoverishment of displaced people. The many problems mentioned above, were also encountered by the migrant households who resettled from Wonogiri to Sitiung I. During the first few years, for example, crop failure emerged because of the unavailability of irrigation system and the degradation of agriculture land. The farmer migrants were not able to generate incomes to sustain their livelihood. Therefore, the migrants needed to diversify the livelihood income activities as part of their livelihood strategies both on-farm and non-farm activities. The availability of assets is the important element of livelihoods which can be utilized for achieving the well-being of the migrant households. As a counter condition from the past, the Wonogiri migrants in Sitiung I have a better life as the result of the ability of them to accumulate assets and change their livelihoods. In order to get better understanding of the changing livelihoods of migrants, this research will focus on the livelihood strategies which have been applied by migrant households in order to sustain and develop their livelihoods.

1.3 Research Objectives

The main objective of this study is to examine the livelihood strategies of migrant households in the *transmigrasi* location in Sitiung I. Focus on time is an important consideration to understand the changes of livelihood strategies and livelihood assets of the migrants since they moved to Sitiung I to the present. I will address the following specific objectives:

- To examine the causes of migration of migrant households from Wonogiri
- To analyze the availability of assets that can be used by migrant households to support their livelihoods
- To analyze the changes of strategies adopted by migrant households to pursue their livelihoods in the *transmigrasi* location in Sitiung I since they came in 1976

1.4 Research Questions

Based on the research objective, my research questions are focused on:

- Why do the migrants from Wonogiri move to Sitiung I?
- What are the assets available for migrants to pursue their livelihoods in the *transmigrasi* location?
- How the livelihood strategies of migrants changed over time since the resettlement program in 1976?

1.5 Significance of the Study

Many studies have been carried out on the *transmigrasi* program since few years after the program was implemented. Most of the studies focus on the policy evaluation of the *transmigrasi* program. The results of the studies concluded that the *transmigrasi* program does not provide positive impacts on the economy of migrants. One of the reasons behind these negative results is caused by the time gap between the implementation of the *transmigrasi* program and the evaluation was relatively short. Most of these studies discussed the various problems faced by migrants after a few years of moving to the *transmigrasi* location so the results only described the negative impacts of the *transmigrasi* program. Many studies on cases are situated in the discourse on development induced displacement, in which the *transmigrasi Bedol Desa* Woogiri-Sitiung I program is part of it. By using the

impoverishment framework (Cernea 1997), the studies also found that forced migration has resulted in impoverishment for people affected by the development program.

According to my research, the results obtained may differ from early studies. It is very important to understand the impact of migration to the migrant livelihoods based on the migrant perspectives and over a long term perspective. This research will hopefully enable to provide a source of knowledge about the changing livelihoods of migrant households since they started the new life on the *transmigrasi* location until this research was conducted in 2013. It also informs the ability of migrant households to cope with the vulnerability context by applying a range of livelihood strategies. It also attempts to identify the availability of assets which can be used by migrants to pursue their livelihoods.

1.6 Structure of the Thesis

This thesis is organized in eight chapters closely linked to the objectives of the study.

Chapter one presents the introduction to the whole thesis. It gives an overview of the background of the study, the statement of the research problem, objectives, and research questions.

Chapter two provides the contextual background of the study area with a brief geographical and socio economic description of Indonesia and then the specific study area. This chapter also presents a brief description about *transmigration* program in Indonesia.

Chapters three discusses the theoretical perspectives that are relevant to the research problem. It begins with the concept of structuration theory and then presents the livelihood approach and its relevance to the problem of migrant livelihoods.

Chapter four presents the research methodology. It discusses the methods used in the collection and analysis of the data. The fieldwork experiences, the problems encountered during the fieldwork and the techniques of data analysis are also included in this chapter. It also reflects the issue of reflexivity and ethical consideration of this study.

Chapter five presents one of the specific objectives of the study which covers the reasons of migrant households moved from their place of origin in Java Island into *transmigrasi* location. The migration processes and the experiences of migrants during these processes are also captured in this chapter.

Chapter six presents the livelihood assets of migrants before and after they migrated to the transmigrasi location in Sitiung I and the changes of livelihood assets since the initial time when they came to Sitiung I in 1976.

Chapter seven focuses on the range of livelihood strategies employed by migrant households. One section of this chapter explains the livelihoods of migrants before migration. The next section deals with the livelihoods of migrants after they moved to the *transmigrasi* location in Sitiung I. The problems encountered of the migrants in the *transmigrasi* location and the explanation of the livelihood strategies of migrants are discussed in this chapter.

Finally, chapter eight presents conclusion of the thesis.

2 CONTEXTUAL BACKGROUND

2.1 Introduction

This chapter is designed to provide background information about the study area. In the first section, a brief introduction of Indonesia is presented including information about geographical area of Indonesia, demography, and economic condition in Indonesia. This part also gives a brief description about the *transmigrasi* program in Indonesia which conducted by the Government of Indonesia. The next section introduces general information about Dharmasraya Regency in which fieldwork has been conducted specifically in the *transmigrasi* location in Sitiung I. This section presents the geographical condition of the study area. Furthermore, it looks at socio economic context of Dharmasraya Regency and the *transmigrasi* program in this location.

2.2 Country Profile of Indonesia

2.2.1 Geography

Indonesia or well-known as Republic of Indonesia (RI), is a country in Southeast Asia which is located on the equator and situated between the Asian and Australian continents and between the Pacific and Indian Oceans. Jakarta is the capital city of Indonesia. Total land area of Indonesia is 1.9 square kilometers and total sea area is about 7.9 million square kilometers, including an exclusive economic zone (Statistics Indonesia 2013). Indonesia is the largest archipelagic nation in the world. This country encompasses 17,508 islands and it has 33 provinces spreading over five main islands, which include Sumatera, Java, Borneo, Sulawesi and Papua Island (Figure 2.1). Indonesia shares borders with other nations: Malaysia and Brunei on Kalimantan – also known as Borneo Island; with Papua New Guinea on Papua Island, and with East Timor on Timor Island. Other neighboring countries include Singapore, the Philippines, Australia, and the union territory of the Andaman and Nicobar Islands in India.

Indonesia is identical with tropical climate in almost entirely archipelago because it traversed by the equator. Temperatures average 28° C on the coastal plains, 26° C in inland and mountain areas, and 23° C in the higher mountain regions. The average annual rainfall for

Indonesia is around 3,175 millimeters but due to the wind patterns and local topographic conditions, the rainfall varies throughout the archipelago.

The most important natural resources in Indonesia are petroleum, natural gas and minerals such as copper, gold, iron, and timber. Generally, petroleum production is located on central Sumatera Java and Kalimantan Island.

2.2.2 Demography

According to the population census conducted by Central Bureau of Statistics (*Badan Pusat Statistik-BPS*), Indonesia's population was 237,641,326 in 2010, with a 1.49 percent annual population growth rate from 2000 to 2010 (Statistics Indonesia 2010). This marked an increase of 32.5 million since 2000. Java is one of the most densely populated areas with more than 120 million people or approximately 3,276 persons per square kilometer and Jakarta as the largest city, is the highest population density with 14,469 persons per square kilometer in 2010.

The percentage of population based on gender was more equal. In 2010, the number of males was 0.87 percent more than females and sex ratio between men and women was 101.4. Fertility rates for women, based on births per woman, increased slightly, from 2.27 in 2000 to 2.41 in 2010, and the infant mortality rate improved from 40.9 deaths per 1,000 live births in 2000 to 26 deaths per 1,000 in 2010.

Indonesia consists of various ethnic, linguistic and religious diversities. The Javanese are the largest ethnic group and, politically, the most dominant and it occupied of 41 percent of the total population. Sundanese make up 15.0 percent, followed by Malays (3.4 percent) and Madurese (3.3 percent). More than 14 percent of the population consists of numerous small ethnic groups or minorities such as Toraja, Dayak, Asmat and Chinese (Frederik, Worden and Library of Congress 2011). The official national language is *Bahasa Indonesia* (or Indonesian Language), a modified form of Malay. Additionally, Indonesia has 725 other traditional languages and dialects. There are six religions that admitted by the Indonesian Government which are Islam, Roman Catholicism and Protestantism, Hinduism, Buddhism and Khong Hu Chu. Indonesia has the largest Islamic population of any nation and more than 207 million of populations are Muslims (Statistics Indonesia 2010).

2.2.3 Economy

Indonesia has experienced economic prosperity during the New Order regime of President Suharto from 1966 to 1998. Rapid growth of Indonesia's GDP endured over a long period of time and significantly improving the standard of living for Indonesia society. The Indonesian government gave crucial impact in the shaping of economic development since the 1960s. The main themes of economic policy during the latter part of the Suharto period were liberalization and deregulation, which in the 1980s and 1990s changed the economic pattern of Indonesia. The worst economic crisis in 1998 has also contributed to the economic policy in Indonesia.

Three trends characterize the changes that have occurred in the Indonesian economy since the late 1960s: increasing integration with the world economy, profound structural change, and intense diversification (Frederick et al. 2011). These trends are highlighted in discussions about major aspects of the Indonesian economy, such as international trade, aid, and payments; employment and income development; and the main sectors of economic activity. The economy has experienced a fundamental reorientation from agriculture to industry, and within the industrial sector itself, from oil and gas production to other branches of manufacturing, both labor-intensive (for example, textiles and food processing) and capital-intensive (for example, chemicals and electrical and electronic goods). The services sector and the transportation and communication infrastructures gave a greater contribution to economic growth due to modernization.

Indonesia is highly integrated into the global economy, and export activities are vital to its economic development. The traditional terms of exports, mostly consisting natural resources especially oil, natural gas, and other primary products, but it has broadened to include manufactured goods. The need to shift to manufactured exports became especially urgent because the Government has realized that reliance on the country's rich natural resources made the economy vulnerable to the vicissitudes of changing world prices for these products. Although manufactured exports have come to dominate the economy, Indonesia has remained on labor-intensive production. Access to local raw materials and cheap labor are the main sources of competitiveness for Indonesian manufactured exports in world markets.

Indonesia was a late starter in industrialization, lagging behind regional neighbors such as Malaysia and Thailand by at least a decade. In 2011, manufacturing industries contributed 26 percent of GDP and there were three leading industries outside the oil and gas sector: food

(including beverages and tobacco), basic metals, and electrical machinery and equipment (Statistics Indonesia 2013). Industrial development has been unevenly distributed across the archipelago. Significant oil and LNG production occurs mainly in the Special Region of Aceh and in the provinces of South Sumatera, Riau, Central of Java, East Kalimantan, and West Papua. In western part of Java, manufacturing outside the oil and gas sector centers on Jabodetabek, and in and around Surabaya, Indonesia's second-largest city, in East Java Province.

Indonesia is the leading producer of petroleum in Southeast Asia and has the world's tenth-largest proven natural gas reserves, 70 percent of which are offshore. It exported 16 percent of the world's total volume of LNG in 2005. It also has significant reserves of other valuable minerals, such as bauxite, coal, copper, gold, nickel, and tin. Most mineral production is exported to industrial nations, especially Japan. Some of Indonesia's own mineral-intensive industries, notably, steel and aluminum, rely on imports of raw materials. On balance, however, Indonesia is a net exporter of minerals, in large part because of large-scale exports of LNG.

2.2.4 Transmigrasi Program

As one of the core region in Indonesia, Java Island has demonstrated a significantly increased the number of population. Before the independence in 1945, the population on Java Island has increased three times from an estimated 12.5 million in 1860 to 40.9 million in 1930. The number of population has continued to grow after the independence at least 2.3 percent per year (Singarimbun 1968). Population explosion has resulted in a new problem of land availability to accommodate a variety of society activities. Therefore, there was an idea that the Outer Islands of Sumatera, Kalimantan, Sulawesi and Papua could absorb the population from Java Island called *Transmigrasi* Program.

Transmigrasi is the Indonesian term for internal migration because the population resettlement took place between islands. Historically, the *transmigrasi* program was originally organized by the Dutch colonial authorities in the colonial period as agricultural colonization in the early nineteenth century. Since the Dutch colonial administration, the *transmigrasi* program has been part of government policy under Ethical Policy. The aim of this program was to reduce the overcrowded conditions in core regions of Java, Bali and Lombok and to provide a workforce for plantations by shifting landless agricultural people to less densely populated agriculture-based settlements in the Outer Islands (Arndt and Sundrum 1977).

At least there are three factors that contributed to population movements in the colonial period that are mentioned in most discussion on internal migration in Indonesia (Lottum and Marks 2012). First, the increased Dutch plantations program in the Outer Islands and thus recruited people from Java because the labor was scarce in these islands. Second, a program was introduced by the Dutch government to resettle people from Java to the Outer Islands because of the consideration of overpopulation in Java Island. The Dutch government gave some incentives such as migration premiums and a credit towards migrant families. Third, due to the concentration of colonial activity on Java have emerged the new urban centers thus it has generated movement of people because of the employment opportunities.

After the colonial period, the government of Indonesia has adopted the *transmigrasi* program and it has remained to be an important phenomenon. The changes of the Indonesian government system demonstrated the dynamics of the transmigrasi management programs and the transmigrasi objectives itself. At the beginning after the colonial period, transmigrasi was the only official response to the population problem and tended to be based upon purely demographic considerations (Hardjono 1977). Afterwards, the context of the transmigrasi became much wider and related to regional development. The transmigrasi has played an important role in rural change (Leinbach, Watkins, and Bowen 1992). Transmigrasi is seen as a rural development program in which the aim is to utilize the agricultural potential of less populated areas by providing the labors needed for agricultural expansion (Hardjono 1977). Increasing mobility of labor was also supported by the investment in labor-intensive activities, from international organizations such as the World Bank, the Asian Development Bank and bilateral financial assistance (Lottum and Marks 2012). Therefore, the transmigrasi program has expanded not only for redistribution of population, but also to alleviate poverty by providing land and new opportunities of employment. Generally, it will stimulate economic growth in the areas outside Java.

Transmigrasi aims to improve the welfare of community, reducing unemployment by creating new jobs, developing the potential of natural resources and regional development. Migrant households who registered in the *transmigrasi* programs will receive support from government during the initial five years of settlement for housing, transport, land, and social services. The government has provided two to five hectares of land for each migrant household which sufficient for subsistence cultivation and financial support until they become independent.

Even though the Indonesian Government is strongly committed to the *transmigasi* program, much criticism has been raised due to the implementation of this program. The problems have emerged in several aspects including environmental aspect, demographic and social, and financial aspect.

Environmental Impacts

Transmigrasi program has contributed to the environmental degradation particularly the emerging of deforestation problems. Obviously, the establishment of transmigration location involves clearing forest by the government. Due to the land right claims by indigenous people of the region, the *transmigrasi* projects have been placed in forested areas (World Bank 1981 in Fearnside 1997). For example, the Indonesian Ministry of Forestry and FAO 1991 estimated 300,000 ha/yr for (official) the *transmigrasi* and 537,000 ha/yr for re-clearing of secondary succession for shifting cultivation, logging and for crop development have contributed to the deforestation problems in Indonesia (Fearnside 1997). In contrast, the increased concern towards conservation and rational exploitation of Indonesia's forest resources and improving control of forest land by the government forestry agencies were the limitation factors of land availability for the *transmigrasi* sites (Arndt 1983).

Social Impacts

As a clearly stated by the Minister of Transmigration in 1985, one of the government objectives of the *transmigrasi* program was to integrate all the ethnic groups into one Indonesian nation. As the effect of the *transmigrasi* program, most of Outer Islands in Indonesia are inhabited by the millions of Indonesian especially from Javanese and Balinese. In historical background, the Dutch policy concentrated the Javanese migrants in compact resettlement thus they tended to become enclaves. Therefore, there has been little genuine assimilation and acculturation between local people and migrants in terms of intermarriage, partly because migrants recruited from among the poorest in Java have not usually enjoyed sufficient social standing in Minangkabau, Buginese or Batak communities (Hardjono 1977 and Arndt 1983). In addition, indigenous people have not welcomed settlement of Javanese migrants among them, particularly if the Javanese migrants became a majority and caused a threat for local people.

Counter Flow of Migration

Displacement of people from densely populated area especially from Java, Bali and Madura Island to Outer Islands as the main objective of the *transmigrasi* program gave insignificant effect to the population redistribution. It was proved by the reverse population flow of migrants and their descendants returning to Java. One of the pull factor caused by the availability of employment opportunities on Java has made the decreasing of number of people to move to the Outer Islands since the 1980s and the number of people moving from the outer islands to Java was about four times higher than during the late 1970s.

Agricultural Impacts

Normally, through the *transmigrasi* program government has provided two hectares of land which divided into three types of land; 0.25 ha house lot and home garden, 1.0 ha of potential *sawah* area (paddy field) and 0.75 ha of *ladang* or upland farming area. In some cases in Jambi and South Sumatera Province, government has added three hectares of land for planting rubber but the migrants had to clear this land by themselves (Suratman and Guiness 1977).

Agronomic problems such as poor soil, insects, plant diseases, and weed invasion, especially by *alang-alang* (*Imperata cylindrica*) grass are faced by the migrants. Inadequate of irrigation facilities made them unable to produce enough food. Lack of skill and knowledge on agriculture especially for the migrants who came from urban areas can hardly be expected to be successful farmers. Suratman and Guiness (1977) showed that one third to one half of the migrants had never owned or managed land before, and 16 percent had never farmed at all. Migrants also suffered from low market prices for crops, high prices for agricultural inputs, poor transportation to markets, and had difficulty in finding time to clear the upland land farming.

Financial Problems

The *transmigrasi* program is the the costly efforts to improve conditions for migrants. Government has provided incentives during the preparation and implementation of this program such as transport, adequate preparation of sites, clearing and planting of larger holdings, provision of housing, food rations and other inputs, irrigation and roads, education, health and other facilities and including an expensive consultant services, which hugely increased the cost per migrant family.

Transmigrasi is seen as an ambitious program to spread equitable development in all regions in Indonesia especially on the Outer Islands. Besides the positive impacts to increase the welfare of migrants, many problems have emerged as the consequences of this program.

2.3 An Overview of Dharmasraya Regency

Dharmasraya is one of the regencies in West Sumatera province that has capital city called Pulau Punjung. This regency borders the Sijunjung, Jambi, Riau and Solok Province (Figure 2.2) and it is located in the intersection of Trans Sumatera road linking between Padang, Pekanbaru up to Jambi province.

The total area of the regency is 2,961.13 square kilometers and the number of districts has increased from 4 districts to 11 districts. Government structures are divided into several levels. The government structure which is one level under district called *Nagari* and further below the *Nagari* is called *Jorong*. Dharmasraya regency has 52 *Nagari* and 260 *Jorong* till now and it was a part of Sawahlunto Sijunjung Regency before it becomes an autonomy region in 2004 (Dharmasraya in Figures 2013).

2.3.1 Physical Condition

Dharmasraya regency is located in the area that consists of hills and mountains. The altitude of Dharmasraya is 100 meters above sea level in the area towards the eastern part until 1,500 meters above sea level in the western part and topography of Dharmasraya generally consists of flat land.

This regency is located in the sub of Batanghari Hulu watershed, which is part of Batanghari watershed. The regency is endowed with numerous streams and Batanghari is one of the most important streams of the hydrological system in West Sumatera and Jambi Province.

Dharmasraya Regency has a rainy climate with the average rainfall amount is more than 200 mm/month in some areas. The temperature ranges from 26° C to 33° C while the average humidity is between 70 percent and 80 percent.

More than fifty percent of the land in Dharmasraya regency is covered by forest which consists of forest with the primary vegetation and the secondary vegetation. The latter is usually mixed with the plantations that owned by society. Following the forest, land for agricultural activities is the second largest in Dharmasraya Regency; it is about 99,314

hectares or 33.52 percent from the whole area (Spatial Planning of Dharmasraya Regency 2011-2031). Plantation lands and paddy fields are the most important land resources for the society in this area because they are using these lands for their main economic activity, especially for palm and rubber plant. For the settlement area, is more developed to the east and southeast part of Dharmasraya regency covering Koto Salak district, Koto Besar, Tiumang, Timpeh, Koto Baru, Sitiung and Padang Laweh district. The development of *transmigrasi* area in 1970s was one of the driving factors for the establishment of settlement areas in this regency.

2.3.2 Demography

According to the statistical data in 2012, the population in Dharmasraya was 202,601 with an estimated growth rate of 3.09 percent per year (Dharmasraya in Figures 2013). The largest population is located in Pulau Punjung and Koto Baru district with the number 38,079 people (18.8 percent) and 8,796 (15 percent) for each district. Meanwhile, the small number of residents is in Padang Laweh district by 2.83percent from the total of population. Differently, the highest density of population is concentrated in Sungai Rumbai and Sitiung district. The district of IX Koto has the lowest density of residents in which 17 people/km² reside in this district.

In general, the population structure of Dharmasraya regency showed that people on the productive age group (between 15-64 years) are more than non-productive age and total population distribution by sex is higher for males than females. Sex ratio in 2012 was 107.16 indicates that there was 107 men for every 100 women. The phenomenon in Dharmasraya is different from the conditions that generally occur in the province of West Sumatera where the sex ratio of West Sumatera province is less than 100. This is due to the migration culture especially for men when they have grown up. The contrast situation in Dharmasraya regency indicates that there is an availability of job opportunities for men especially in agricultural sectors so that men no longer need to go migrate.

From 2011 to 2012 there was an increase of labor force participation from 68.93 percent to 72.01 percent so that the unemployment rate decreased from 6.65 percent in 2011 to 6.21 percent in 2012. Men's participation in the workforce is higher than women's participation. The agricultural sector dominates the labor market in Dharmasraya regency and it followed by services sector such as trade, hotels, and restaurants.

The level of education is a basic need that must be met in order to achieve a prosperous society. Education is also an important element in improving the development of human resource. Children aged 7-12 years old have the highest school enrollment rate than the children's participation in junior and senior high school. On one side, it shows that the Indonesian government has been successfully implementing the compulsory education program for 6 years especially for elementary school. Low level of participation of children in secondary education including junior and senior high school indicates the low level of education of society in Dharmasraya regency.

More than 90 percent of people in Dharmasraya embrace Islam as their faith. Dharmasraya regency has ethnic diversity despite local ethnic called Minangkabau (63 percent of the population in this regency in 2012) is still a majority ethnic in this area (Dharmasraya in Figures 2013). The other ethnic groups are Sundanese (2 percent), Batak (1 percent), Malay (1 percent), Javanese (32 percent) and others (1 percent).

2.3.3 Economy

The GDP of Dharmasraya Regency showed an increase from 2010 to 2012 as much as 0.11 percent in which GDP in 2010 was 6.51 percent to 6.62 percent in 2012 (Dharmasraya in Figures 2013). The main economic activity in the community Dharmasraya Regency engaged in the agricultural sector, particularly subsistence food crops, fisheries, livestock and plantations of rubber and palm. Another economic activity, such as household industries also scattered mostly in every village. These small industries produce some food products made from soybean such as tofu (soybean curd) and tempeh (fermented soybean).

Agricultural sector provides a substantial contribution in the development of Gross Domestic Product (GDP) of Dharmasraya Regency. This sector also contributes to provide employment opportunities especially for labor absorption in the plantation crops and followed by food crops and horticultural sector. This sector has employed 64 percent of the labor force in 2012. Paddy cultivation is the main activity in agricultural sector. Productivity of paddy has increased in the last 5 years (2006 - 2010). The increasing of paddy production is highly influenced by the availability of irrigation system.

For plantation crops, there are three primary commodities which are palm oil, rubber and cocoa. Palm oil is managed by the large companies (core) and community plantation (*Perkebunan Inti Rakyat-PIR*), as well as by the society. Rubber plantations managed by

community that is built through Smallholder Development Project in West Sumatera (*Proyek Pengembangan Perkebunan Rakyat Sumatera Barat-*P3RSB), and Tree Crop Smallholder Development Project (TCSDP), while cocoa cultivated by many people in their yards.

2.3.4 The *Transmigrasi* Program in Dharmasraya Regency

West Sumatera is one of the most important receiving provinces in the history of the *transmigrasi* effort in Indonesia. As one of the destination locations of the *transmigrasi*, Dharmasraya Regency was received the mobility of Javanese migrants from Wonogiri since 1976. The migrants were resettled from their home area in Wonogiri through the *transmigrasi* program called *Bedol Desa* because the environmental problems. Their place of origin, Wonogiri, became prone to extreme drought and excessive flooding and thus it was decided to build a dam in this area (Gondowarsito 1990). Therefore, the Government of Indonesia was resettled people collectively from seven districts in Wonogiri which affected by the dam construction. Due to the *Bedol Desa* scheme, no one remained in the villages. Paddy fields and home plot have been compensated by the government. The resettlement of migrants from Wonogiri to Dharmasraya began on December 1976 and ended by April 1977. Specifically, the Government of Indonesia provided a *transmigrasi* location called Sitiung I in Dharmasraya for the migrants from Wonogiri. Some 2,000 families (households) which consist of 8,819 people placed at this location.

2.4 Conclusion

This chapter has given a brief description about the study area including the information about geography, demography, social and economic condition of Indonesia and Dharmasraya Regency. It also explained the overview of the *transmigrasi* program in Indonesia since the Dutch colonial period until the Independence of Indonesia. Initially, under the Government of Indonesia, the *transmigrasi* program was used to resolve the population problem in Java Island, which is the overpopulated island in Indonesia. Furthermore, the objective has changed into a wider context as a regional development program. Even though, the *transmigrasi* program is aimed to improve the welfare of community but practically many problems have emerged, including environmental problems, financial and problems in the social context.

One of the *transmigrasi* program called *Bedol Desa* Wonogiri-Sitiung I has established by the Govenrment of Indonesia to resettle the community in Wonogiri to *transmigrasi* location in Sitiung I in Dharmasraya Regency. It caused by the environmental problems in their home

area so that the Government of Indonesia constructed a dam in Wonogiri. The Wonogiri communities who were affected by the dam construction have resettled to the new place in Sitiung I since the end of 1976.



Figure 2.1 Country of Indonesia

Source: http://www.pesada.org/

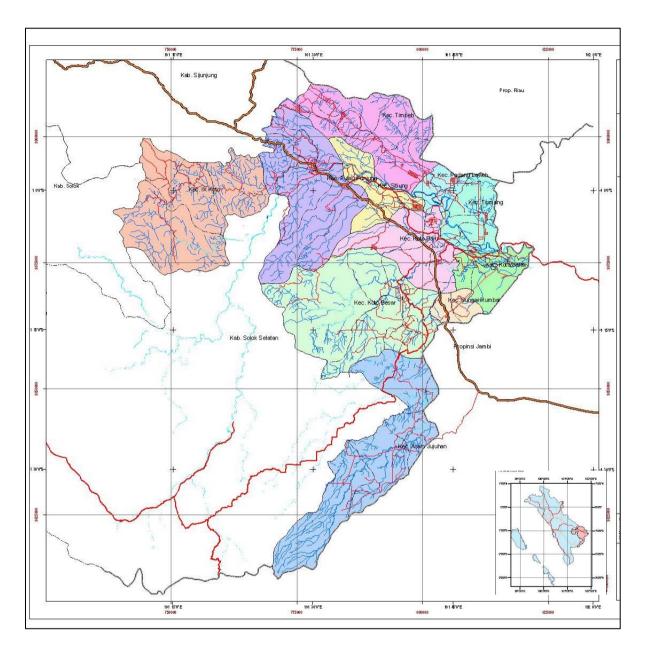


Figure 2.2 Dharmasraya Regency

Source: Spatial Planning of Dharmasraya Regency 2011-2031

3 THEORETICAL AND ANALYTICAL APPROACH

3.1 Introduction

In this chapter relevant theories and analytical framework concerning issues of livelihoods of migrants will be discussed. The complexity of the migrants' livelihoods makes it impossible to be explained by the single theory or approach. Therefore, multidisciplinary analysis of theories and concepts will be used for illuminating the research questions and the data analysis.

Structuration theory and the livelihood framework will be used to address the research problem. The chapter will be divided into four parts. The first part defines the key concepts that have been used for analysis. The second section explains the structuration theory focusing on the importance of structure and agency. The next section will focused on theoretical framework of Sustainable Livelihood, emphasizing on the description of various elements included in this framework such as assets, livelihood strategies, and diversification of livelihood activities. The relevance of structuration theory and sustainable livelihood framework to the research problem will be discussed at the last section.

3.2 Defining the Key Concepts

Household

The term 'household' has a varied of definitions and it has become a basic unit of survey and analysis in social sciences on the Global South. It usually contains some keywords associating to residency requirements, common food consumption and common intermingling of income or production decisions (Beaman and Dillon 2009). Russell (1993 in Rigg 2007) explained that household is a single welfare decision-making unit and the members of household contribute as labor on household fields for household consumption itself. United Nation through United Nations Principles and Recommendations for Population and Housing Censuses in 1998 has determined the concept of household as the arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living. Therefore, a household can be divided into two categories: "(1) a one-person household, a person who makes provision for his or her food or other essentials for living without combining with any other person to form part of a multi-person household; or 2) a

multi-person household, a group of two or more persons living together who make common provision for food or other essentials for living" (United Nations 2004). While, in fact, each society has different definition of household or it might be the same in some sense, "but the one thing can be sure that households are collections of individuals" (Crehan 1997 in Rigg 2007:44).

In Indonesia, the definition of household refers to the economic term. A household is defined as an individual or group of people living in a physical building unit or part of it and usually commit on a common provision for food or other essentials for living (Statistics Indonesia 2013). A household is identical with the acknowledgement of a common household head who responds for the members of the household and usually the male is occupied this position. Most of my research participants were males or the head of households.

In my study, head of household is an individual who part of household members. Extract an individual from the household and treating the household as a single might produce a bias of for the study. The Livelihood experiences of household will not be only produced by a single person and it might not capture the whole experiences of the entire members of household. In order to reduce the bias for the livelihood experiences of migrants, I also encouraged the female or wife to produce their own story during interviews.

Livelihood

Livelihood is the way in which a living is obtained. Livelihood is more than just the net results of income or consumption, but it depends on the capabilities, assets and activities (Chambers & Conway 1992 in Ellis 2000). A livelihood comprises the assets, the activities and the access to these (mediated by institution and social relations) that together determine the living gained by the individual or household (Ellis 2000). The important feature livelihood is to direct attention to the links between assets and the options people possess in practice to pursue alternative activities that can generate the income level required for survival.

Development-Induced Displacement

The infrastructural development programs especially for the programs involved huge capital investments, such as dam construction, have resulted in the displacement of a large number of people. Involuntary resettlement due to development projects generally produces social and economic problems and often long-term economic impoverishment (Cernea 1997). Most of the population who affected by the dam construction are displaced from their home territory

and have limited access to the centers of state power (Turton 2002). According to the risk and construction model by Cernea (1997), there are eight components which can be a potential risks of impoverishment for people who are forced to move, which are landlessness, joblessness, homelessness, marginalization, food insecurity, loss of access to common property resources, increased morbidity, and community disarticulation.

Based on my research on the *transmigrasi* location, the livelihoods model can be used to see the changing livelihoods of migrant households after 37 years they have been resettled on the *transmigrasi* location. By using empirical evidence of the migrants' experiences on their livelihoods, the results will provide the conclusion whether the forced migration of community from Wonogiri will produce the better livelihoods for them or it creates impoverishment.

Migration

Hammar et al. (1997) defines migration as a spatial phenomenon where people move from one geographical area to another. Migration involves physical movement of people from one place to another to achieve a better change of life. Migration means that one or more family member leave the resident household for varying periods of time, and in so doing is able to make new and different contributions to its welfare (Ellis 2000). For this study, I have used migration as permanent movement of people from high density area to low density location through the *transmigrasi* program.

Livelihood Assets

Assets are the basic factor that owned, controlled, claimed or accessed by the household to implement production, involved in labor market and to interact with other households. Assets can be defined as stock of capital or resources that can be utilized directly or indirectly to generate the means of survival of the household or to sustain its material well-being at differing levels above survival (Ellis 2000). In terms of sustainable livelihood, assets can increase the flow of output and generate a surplus between production and consumption, and thus create an investment to the future productive capacity. Assets can be identified as five different types of capital: human, physical, natural, financial, and social capital. Regarding to the research purpose, those assets will be explained in the analysis.

Livelihood Strategies

Livelihood strategies consist of activities in all categories that represent potential contributions to the survival of households. A livelihood strategy can be defined as a strategic or deliberate choice of combination of activities by households and their individual members to maintain, secure, and improve their livelihoods (de Haan and Zoomers 2005). Livelihoods are cumulative actions of individuals or households and the strategies are influenced by their assets, perceptions of opportunities, as well as aspirations of actors.

3.3 Structuration Theory

The structure and agency dichotomy or more traditionally called individual-society binary have long been discussed in the social sciences. It became the main topic in sociological problem especially the relationship between the individual and society because it derives from the essential of society. In geography, structural and agency approaches was influenced by environmental determinism. The debates about the interdependence and connection between structure and agency still remained.

One of the greatest influences to reconcile structure and agency in human geography is the structuration theory by Giddens (1984). Structuration theory attempts to bridge individuals' actions, social structures, time and space (Kellerman 1987). According to this theory, structure and agency have mutual relations than seeing them as competing explanations. This theory provides a critic for structural determinism which emphasized the choice of individuals actions are constrained and determined by the structural factors (Rigg 2007). As a counter view from previous determinism, structuration theory explains the cyclical relationship between human action and social structure. Therefore, the analysis of structures and agency, or individuals and societies cannot be separated because both of them are embedded into each other.

Agent or actors in structuration theory have ability to change structures, to challenge the status quo, to resist patriarchal systems, and to rework and redefine their inherited structures of living. Structures can be seen as norms which provide a real, powerful and at times suffocating framework within which people must live (Rigg 2007). Therefore, social structures can limit, constrain, and enable for human to do their actions. Actors have possibilities to create structure and actors cannot act without norms. Action is regarded as a continued process and involves routine activities of daily life. These interrelationships

between human actions and social structures called duality of structure where social structures, or rules and institutions, are simultaneously mediums and outcomes of daily human activity, or human agency (Kellerman 1987).

The integration process between human actions and social structures has to be linked to the context of space and time which more popular as locality in geography. It provides understanding between human and physical context for everyday living (de Haan and Zoomers 2005). The local context can be defined as a place to generate knowledge and experiences, the locus for decision-making, and the site for human agency to do their actions. As active dimensions in the structuration process, time and spaces are continuous changes because they are used by individuals and society to interact.

3.4 The Livelihood Approach

Livelihoods approach or well-known as Sustainable Livelihoods Framework (SLF) views the world from the point of view of the individuals, households and social groups who are trying to make a living in volatile conditions and with limited assets. The concept of livelihood emerged in the 1990s as a new approach to poverty alleviation especially in rural context in terms of poverty and rural development. It was introduced by Chambers and Conway in 1992. As mentioned above, a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

By using the definition of Chambers and Conway, Ellis (2000) emphasized the notion of 'access' in which the impact of social relations and institutions can determine the ability of individuals or households to access the resources. Social relations can be recognized as gender, family, kin, class, caste, ethnicity, belief systems and so forth. In addition, institutions described as the rules that have been used in society. Both social relations and institutions affect the interaction among people in society and determine the access of people to achieve the livelihoods.

The sustainable livelihoods approach puts people at the center of development and provides a framework for understanding the opportunities and assets available to poor people and the

sources of their vulnerability, as well as the impact upon them of external organizations, processes and policies (Scoones 1998 in Ellis 2000).

3.4.1 The Sustainable Livelihood Framework

The livelihoods framework (Figure 3.1) is a tool to understand the livelihoods, especially the livelihoods of low-income groups. It presents the main factors that affect livelihoods of people and relationships between these factors. According to this framework, people are positioned on the center of analysis. The construction of livelihoods has to be seen as ongoing process so this framework does not work in a linear manner. Livelihoods are shaped by a multitude of different forces and factors that are themselves constantly shifting thus it cannot be assumed that the elements remain the same in particular time.

The framework shed lights on five interacting elements: contexts; livelihood platform; access; strategies; and outcomes. Households and individuals within households pursue certain livelihood outcomes through livelihood strategies. Households might not apply a single livelihood strategy where it depends on their particular assets and access status. The strategies of households are powerfully constrained by political and institutional structures and draw on a pentagon of livelihood assets which are associated with five types of capital—human, natural, physical, social and financial. These are influenced by the vulnerability context, which refers to the sources of insecurity to which poor people and their assets are vulnerable. Relevant in this study how the assets affect the livelihood strategies of households.

3.4.2 Transforming Structures and Processes

Within the framework, structures and processes determine the access to livelihood assets. It refers to the institutions, organizations, policies and legislation that influence livelihoods. It is applicable at all levels, from the household to the international arena, and in all spheres, from the most private to the most public (DFID 1999). It has direct impact upon whether people are able to achieve a sense of well-being.

Structures or institutions, both private and public, set and implement policy, deliver services, purchase, trade, legislation and perform all manner that affect livelihoods. Structures can be seen as norms which provide a real, powerful and at times suffocating framework within which people must live (Rigg 2007). An absence of appropriate structures can be a major constraint to obtaining viable and sustainable livelihoods. The structures and processes can be constraints as well as resources for households to access the assets.

They are constraints when the laws, policies, cultural practices, power relations between the institutions and the people, serve as barriers to the people's access to assets. Structure and process could provide access for migrant household to obtain natural capital such as agriculture land through the *trasmigrasi* policy.

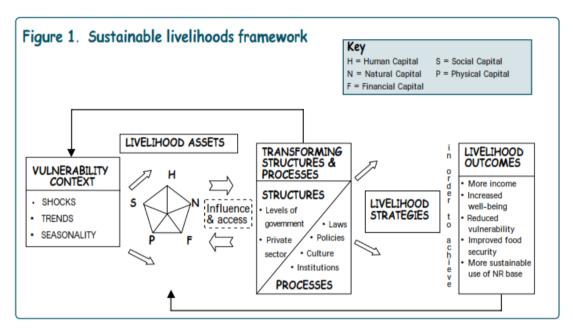


Figure 3.1 Sustainable Livelihoods Framework

Source: DFID 1999

3.4.3 Livelihood Assets

The livelihoods approach is focused on the ability of people to produce livelihood outcomes based on their strengths. People need a range of assets in order to achieve positive livelihood outcomes because there is no single category of assets sufficient to yield all the many and varied livelihood outcomes that people seek (DFID 1999). In the case of poor people, they tend to have very limited access to assets. Therefore, they need to combine assets that they have to ensure survival.

There are many categories of assets identified by different researchers. For example, Swift (1989) divides assets into three broad categories of investments, stores, and claims. Maxwell and Smith (1992) divide assets into productive capital, non-productive capital, human capital, income and claims in the context of food security. The differences categorizing has produced some common elements. Carney (1998) defined assets to include both material and social resource stocks and as such defined assets as capital. Five different types of capitals (social, natural, financial, physical and human) are identified in the livelihood framework in the form

of a pentagon. The asset pentagon lies at the center of the livelihoods framework and it shows the inter-relationships between the various assets.

It is very important to note that one type of capital or asset can generate multiple benefits for livelihoods. For example, migrants who have agricultural land such as paddy field may generate financial capital from the rice production. In addition, the availability of physical capital such as irrigation canals may give a significant impact to the rice production. Furthermore, the migrants may be use the financial capital to educate their children in order to improve human resources.

Natural capital

Natural capital comprises the natural resource stock from which resource flows useful to livelihoods are derived (Carney 1998 in Ellis 2000). It contains a wide variation in the resources, from intangible public goods such as the atmosphere and biodiversity to divisible assets used directly for production (trees, the land, water, etc.) that are utilized by people to generate means of survival. Natural capital is very important to those who derive all or part of their livelihoods from resource-based activities such as farming, fishing, gathering in forests, and so on. Within the sustainable livelihoods framework, natural capital relates to the vulnerability context. Many of the shocks that happened as natural processes has destroyed natural capital and it devastates the livelihoods of the poor, such as fires that destroy forests, floods and earthquakes that destroy agricultural land.

In rural communities, the natural capital becomes one of the most significant capitals to households especially in the Global South where many households are highly depending on natural resources. Specifically in this study, most of the migrants in *transmigrasi* location are farmers and they may be highly dependent on the agricultural land for their livelihoods.

Physical capital

This asset comprises capital that is created by economic production processes such as infrastructures and producer goods in order to create outputs into the future (Ellis 2000). For example, buildings, irrigation canals, roads, machines, and so on. As a public good, infrastructure can be used without direct payment but the usage of some other infrastructure needs a cost to be accessed, such as energy supplies for electricity. Unproductive physical assets such as the change of use of house becomes a source to generate income flows can be categorized under physical capital. In particular circumstances, physical asset can substitute

natural asset because the support of technological advance. Producer goods may be owned on an individual or group basis or accessed through rental or fee for service markets, such as rice milling.

For my study purpose, the physical assets may include irrigation systems, roads, agricultural equipment that can be used by migrants to cultivate their paddy fields, houses of farmers especially to keep the production of farming. All the types of these physical assets may useful for migrants especially to generate livelihood income from natural based activities.

Human capital

Human capital refers to the skills, knowledge, ability to labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives (DFID 1999). At a household level human capital is a factor of the amount and quality of labor available. The composition of human capital among households is constantly changing due to the internal and external factors, such as births, deaths, marriage, migration, divorce, household size, skill levels, leadership potential, health status and so forth. Human capital is increased by investment in education and training, as well as by the skills acquired through pursuing one or more occupations (Ellis 2000). It is applied in the *transmigrasi* location where the local government gives training activities in agricultural sector to educate migrant communities.

Financial capital

Financial capital refers to stocks of financial resources that can be accessed by households to achieve their livelihood objectives. There are two main sources of financial capital: available stocks and regular inflows of money (DFID 1999). The former refers to savings as the preferred type of financial capital. It includes cash, bank deposits or liquid assets such as livestock and jewellery. Financial resources can also be obtained through credit-providing institutions. Pensions or other transfers from the state, and remittances are the most common types of inflows. Neither money saving nor loans are directly productive in the forms of capital; they owe their role in the asset portfolio of households to their convertibility into other forms of capital or into consumption (Ellis 2000).

The migrant households may use different sources of financial capital to pursue their livelihoods. Compensations from the government, wages from on-farm and non-farm

activities and availability of livestock can be used by migrant households in order to support their livelihoods.

Social capital

Social capital is defined as 'the rules, norms, obligations, reciprocity and trust embedded in social relations, social structures, and society's institutional arrangements, which enables its members to achieve their individual and community objectives (Narayan 1997 in Rakodi 2002). Social capital tries to capture the relationship between households and communities based on trust deriving from social ties (Moser 1998 in Ellis 2000). It also relates to personal or family networks that offer spatially diverse potential means of support when past favors are reclaimed. Swift (1998 in Ellis 2000) also focuses to the relationships between individuals and authority, called as vertical relation, individuals and associations or organization as horizontal relation. Putnam *et al.* (1993 in Ellis 2000) explained that social capital much stronger in horizontal relation where some individuals who have a common interest are involving in the same social groups, such as associations, clubs, and voluntary agencies.

Furthermore, some scholars have categorized social capital into two themes which are bonding and bridging social capital. Bonding social capital is based on closed networks that link family, kin and ethnic groups and leads to an inward-looking, exclusive and, therefore, excluding set of associations. It emphasizes the horizontal links between similar groups of people. Bridging social capital is open in its network form and makes bridges between (different) groups. It is based on bonds of trust and reciprocity with other ties that are external to the group normally between socially heterogeneous groups. A third form is linking social capital which emphasizes the links that can be made between individuals across different social classes and income groups for mutual benefit (Rigg 2007).

In the *transmigrasi* location, famer migrants bond to the farmer associations which may get positive impacts from the groups. They may receive many incentives from the government through a series of activities such as training for the capacity building on farming activities and financial support which affect their livelihood that probably individually they would not have access to it. Therefore, the social capital among the migrants will be investigated in order to analyze its impacts to their livelihoods.

3.4.4 Livelihood Strategies

Livelihood strategies are composed of activities that generate the means of survival which is highly influenced by the availability of assets. Livelihood strategies are dynamic activities; they respond to the changing pressures and opportunities and they adapt accordingly. According to Scoones (1998), a household located in a particular context and economy may choose between (or be constrained from choosing) three main clusters of livelihood options, there are agricultural intensification, income diversification and migration. All of these activities contribute to the survival portfolio, especially for the rural households to generate income as material welfare for their livelihoods.

Agricultural intensification activities are highly dependent on natural resources, especially the availability of land. It can be applied by intensifying resource use in combination with a given land area, or bringing new land into cultivation or grazing. In the context of rural households, they are highly dependent on the natural environment especially from crop cultivation to gain the income as a primary strategy. However, many studies in rural areas explain that rural livelihoods are characterized by participation in work away from the farm (Hetler 1989; Hugo 1992; Rigg 1998; Elmhirst 2002). Households may diversify their livelihoods on-farm, off-farm and non-farm activities, including migration as part of the diversification strategy. According to my study objective, I will focus on two important factors that affect livelihood strategies of migrant households which are migration and livelihood diversification. The migrant households are engaged in these two aspects as their livelihood strategies. Migration through the *transmigrasi* program as a survival strategy of migrant households and livelihood diversification through the series of income resources provided opportunities to overcome the vulnerabilities and uncertainty of the migrant livelihoods in the new place to life.

Migration

Migration is a one of the risk strategies of households to achieve their livelihoods. In order to minimize risk to their livelihoods, migration can be perceived as a way of household response to income risk (de Haas 2010). The choice of household to migrate is often more than a short-term survival strategy by rural households. In my case, migration through the *transmigrasi* program of *Bedol Desa* was the long-term strategy of the migrants because they moved permanently to the new place. *Transmigrasi* can be seen as the gate to continue their future livelihoods in the different place.

Livelihood diversification

Diversification means that achieving livelihood of many different income sources. It is more often invoked in the rural context to imply diversification away from farming as the primary means of rural survival (Ellis 2000). In the context of rural livelihood, diversification can be defined as the process of rural households to survive and improve their standard of living by constructing the diversity of household's portfolio and assets.

The reasons that households or individuals pursue diversification as a livelihood strategy are often divided into two overarching considerations, which are necessity or choice. Necessity refers to involuntary and distress reasons for diversifying. Choice, by contrast, refers to voluntary or proactive reasons for diversifying. According to the *transmigrasi* case, the mobility of people to the *transmigrasi* location was highly dependent on necessity reason because environmental problem in their places of origin but after they settle in the new location they have opportunities to diversify their livelihoods.

The diversification of rural livelihood can be defined into three activities which are farmactivities, off-farm and non-farm activities (Ellis 2000).

• Farm activities

These activities can generate income from own-account farming, whether on owner-occupied land, or on land accessed through cash or share tenancy. It is including livestock, crop income and comprises both consumption-in-kind of own-farm output and the cash income acquired from output sold.

Off-farm activities

It refers to wage or exchange labor on other farms but within agriculture. It involves labor payments in kind, such as harvest share systems and other non-wage labor contracts. It also includes income obtained from local environmental resources such as firewood, charcoal, house building materials, wild plants, and so forth, in which these can be measured and a value attached to them.

• Non-farm income

It includes to non-agricultural income sources. Commonly, it can be defined into several categories, which are (1) non-farm rural wage or salary employment; (2) non-farm rural self-

employment or it called as business income; (3) rental income obtained from leasing land or property; (4) urban-to-rural remittances arising from within national boundaries; (5) other urban transfers to rural households, such as pension payments to retirees; (6) international remittances arising from cross-border and overseas migration.

Elmhirst (2002) also added that many rural livelihoods are also characterized by participation in non-farm work by applying multi-local livelihoods. It means that incomes are generated from work geographically distant places as people seek a personal spatial fix to the uncertainties of life especially in rural area.

It is important to note that the capability of rural poor to create income diversification is critical point to survive in as their livelihood strategies. It is because poor households are more vulnerable than better off households. It also caused by the lack of assets of poor households; they maybe landless or near landless, and possess few or no livestock, so that the poor must diversify income sources in order to survive (Ellis 2000). According to this, it would be a possibility for me to catch the changes from farm into non-farm livelihoods or farm and non-farm activities of households in the *transmigrasi* location.

3.4.5 Vulnerability Context

People's livelihoods and their access and control to resources can be affected by the vulnerability context. It can be seen as the external environment impacts in which people exist (DFID 1999). The vulnerability has direct impacts to the assets owned by the migrant households and the option of livelihood strategies which are pursued by them to achieve livelihood outcomes. The vulnerability context is widely used when facing risk, coping and survival strategies for livelihoods. Vulnerability is defined as a high degree of exposure to risk, shocks and stress (Chambers 1989 in Ellis 2000).

The resilience and ability of the migrant households to use the assets in order to create opportunities and resist or reduce the negative impacts of the changing environment from Wonogiri to the *transmigrasi* location are important to analyze the vulnerability context especially for the first few years after they migrated to the new resettlement in Sitiung I. The ability of migrant households to reduce vulnerability and to achieve livelihood incomes may depend on their initial assets from Wonogiri and the ability of the migrants to transform those assets to generate incomes especially by the diversifying their strategies. The role of Government of Indonesia was very important to provide the most crucial assets for the farmer

migrants in the form of agriculture land. Unprepared of paddy field, unavailability of irrigational systems, and resource conflict with the local people may appear and make their livelihoods in vulnerable.

3.4.6 Coping Strategies

Vulnerabilities in the context of shocks, trends and stress may influence livelihoods of people but it becomes more vulnerable when the household lacks sufficient coping capacities. In order to solve this problem, households apply coping strategies by utilizing a range of capabilities and assets that they possess. The aim of coping strategies is to save livelihood from unexpected abnormal situations or calamities by applying a range of livelihood strategies. If the intensity and duration of disaster increases and crisis triggered longer than necessary or expected then even those capable households also become vulnerable. Households do not experience the risk in the same or equal measure but it depends on the various assets of households possess and access to the resources.

Coping strategies are employed by migrant households to survive from trends, shocks and uncertainties throughout the year. Coping strategies could take the form of farm and nonfarm activities as the livelihood strategies (Bryceson 2002). The farm activities may include natural resource based activities such as agriculture intensification and wage labor on the agriculture activities. The nonfarm strategies may include livelihood diversification such as trading, service activities and wage employment. In order to study the livelihoods of migrant households, it is important to understand their coping strategies as part of their livelihood strategies. It is possible for migrant households to deploy different assets to cope vulnerabilities and uncertainties of their livelihoods that will be investigated through this research.

3.4.7 Livelihood Outcomes

Livelihood outcomes are the products of livelihood strategies that applied by households. Within the livelihood framework, there are some livelihood outcomes that should been achieved in order to develop sustainability and to reach livelihood achievements. Even though livelihood is not necessarily referring to income generation, people certainly continue to seek a simple increase in net returns from their livelihood activities and overall increases in the amount of money coming into the household. Increased income also relates to the idea of the economic sustainability of livelihoods. In addition, people are also looking for the value of

non-material goods or well-being. It can be affected by numerous factors including self-esteem, sense of control and inclusion, physical security of household members, health status, access to services, political enfranchisement, maintenance of their cultural heritage, etc. One of the most important livelihood outcomes for the poor people is to reduce vulnerability of their livelihoods because they tend to have unsustain and precarious livelihoods. At the policy level, improving food security and sustaining the use of natural resource base are the major concern of governments and donors in order to provide long-term benefits for society.

3.5 The Relevance of Structuration Theory and Livelihood Approach to the Research Problem

Migrant households are integral part of the structure of the society and they act as actors who are adjusting their actions through livelihood strategies. This study considers migrant households as social actors who have certain freedom of choice and action which can be determined by another agency and social structures. Structuration theory provides a more realistic understanding about the access which constraint and enables the actions of migrant households for their livelihoods. Actions represent a series of activities of migrant households produced in particular time and space through their livelihood strategies. The consideration of time and space in structuration theory is much more relevant to my research objective. Since this research is focused on the livelihood strategies of migrant households, the terms of time and space or locality will provide the diversity of livelihood activities applied by migrant households since they came in 1976 to the present. The concept of time and space is also important to understand how the migrant households construct their livelihoods in the *transmigrasi* location.

The decision to choose particular livelihood strategies is often linked to the ability of migrants to access the livelihood assets which can be determined by the presence of structures. The processes to shape livelihood strategies also resulted in the interaction with different actors. Other actors can be a limitation or provide opportunities to migrant households to develop their livelihoods. The Government of Indonesia through the *transmigrasi* policy had provided the access to land ownership for migrant households who decided to involve the *Bedol Desa* program. In addition, the migrant households might provide employment opportunities to other migrants. It indicated that the structure and agency could be resources when it enhances migrant's access to assets. In contrast, the structure and agency probably give negative effect to the migrant households to achieve their livelihoods, in which will be also analyzed in this

research. This research also emphasizes the reasons of migrants to move from their place of origin in Wonogiri which could be affected by the availability of access to pursue better livelihoods.

3.6 Conclusion

This chapter presented relevant theory and concept that is important to this research. Since the focus of the study is to analyze the livelihood strategies of migrant households in the *transmigrasi* location, the livelihood framework is utilized to capture the dynamics of the livelihood activities of the migrant households. These activities are affected by the availability of livelihood assets and the access to assets itself. The structuration theory provided the relation between structure and agency as the determining factors to access the livelihood assets and the options of livelihood strategies.

4 RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter presents the methodology and research approaches that were applied in the collection and analysis of data. In the first part, the chapter explains the choice of methodological approaches which have been chosen, and especially the descriptions about qualitative methodology. It also describes the data collection methods for both primary and secondary sources. Furthermore, the fieldwork experiences, the problems encountered during the fieldwork and the techniques of data analysis are also included in this chapter. The issue of reflexivity and ethical consideration of this study will be discussed at the end of this chapter.

I conducted my fieldwork from June to August 2013 in Indonesia particularly in the *transmigrasi* location in Dharmasraya Regency which is situated in West Sumatera Province.

4.2 Research Methodology

The most important stage in the research process is selecting an appropriate methodological approach according to the research objectives and research questions which are going to be answered through the research itself. Methodology is a coherent set of rules and procedures, which can be used to investigate a phenomenon or situation (Kitchin and Tate 2000). Methodology is a theory of how inquiry should proceed. It comprises analysis of the assumptions, principles, and procedures in a particular approach to inquiry that governs the use of particular methods (Schwandt 2001). In order to get better understanding about migrant livelihoods in the *transmigrasi* location, this research employed qualitative research methods.

Qualitative methods are widely used in the social sciences. Qualitative methodology explores the feelings, understandings and pieces of knowledge of others through interviews, discussions, or participant observation. It is increasingly used by geographers to study some of the complexities of everyday life in order to gain a deeper insight into the processes shaping social worlds (Limb and Dwyer 2001). The emphasis when using qualitative methodologies is to understand lived experience and reflect on and interpret the understandings and shared meanings of people's everyday social worlds and realities.

One of the valid reasons to use qualitative methodology is the nature of the research problem and research questions especially when the research attempts to analyze the person's experiences. According to this, this methodology is suitable for my study purpose and research questions. Qualitative methodology allows me to analyze the livelihood experiences of migrants in the *transmigrasi* location. The experiences of being migrants and the livelihoods stories before and after they migrate are captured from their own perspectives and in their words. I wanted to understand the migrants' livelihoods in their place of origin in order to get the background of their livelihoods before they move to the new place. Their lived experiences before may affect the availability of assets that they can use and the way to construct a new story of livelihood strategies in the *transmigrasi* location. Moreover, I wanted to know the reasons why they are involved in the *transmigrasi* program, what kind of assets that they brought from their places of origin and the assets they got through the *transmigrasi* program, to what extent they are able to create livelihood strategies in the new place and so forth. All those questions are explored in order to understand the livelihood stories of migrants, which suits qualitative methodology.

4.3 Methods of Data Collection

In order to gain a better understanding and in-depth knowledge about migrants' livelihoods in the *transmigrasi* location, I intended to collect both primary and secondary sources. Primary data was collected by using in-depth interviews with 26 migrant households, informal conversation and observation. In addition, I also conducted interviews with different local authorities in Dharmasraya Regency.

I participated in some activities in which the migrant households are also involved. It is been one of the important starting point for me to gathering the primary data because through these activities I can identify my research participants. In spite of the research participants and I have cultural background differences, in which I came from *Minangkabau* ethnic and the research participants are Javanese, there was no language barrier between us. We communicated by using national language, *Bahasa Indonesia*, even though sometimes they used local language for some vocabularies but it did not become a major obstacle when I conducted the interviews. All of my research participants allowed me to record the interviews and they also gave me permissions to take some photographs inside the house and their yards. I also put my attention to the ethical considerations regarding my responsibilities to all participants.

Secondary data was also gathered from reports of local government offices in the study area, published and unpublished journals, articles, the internet, etc.

4.3.1 The Selection of Research Participants

Sampling is an important process for both quantitative and qualitative research. Sampling involves individual selection from a given population. Quantitative research typically emphasizes the number or size of sample because it should be representative of population in order to generalize the research findings. The sample is usually calculated by using statistical methods and it is normally done before data collection commences. On the other hand, qualitative inquiry largely depends on the analysis of meanings in a specific context (Robinson 1998 in Flick et al. 2004). The richness of information can be achieved if the sample reflects the content of the case being investigated (Merkens 1997 in Flick et al. 2004). Pinnegar and Daynes (2006 in Creswell 2007) pointed out that qualitative research does not intent to generalize the information but to elucidate the particular and the specific. In a narrative study, it is really important to find one or more individuals to study, especially individuals who are accessible and willing to provide information or who are capable to shed light on a specific phenomenon or issue being explored (Creswell 2007). Therefore, researchers have to focus on the stories and have the ability to recognize that people have stories to tell.

Qualitative research is not concerned with size of sample being investigated. It is emphasized by Patton (2002) that there are few if any rules in qualitative research related to sample size, and it depends on what is needed in the way of knowledge, on the purpose of the research, on its significance and for whom, and on logistics and resources (Bradshaw and Statford in Hay 2010). Even if researchers have many options to choose the people who will be interviewed, where and when to observe or what information sources to focus on, researchers have to select the right informants that can give proper answers to achieve the objectives of study. Researchers also face any circumstances of doing research, such as resource-limited in relation to time and funding, so then we have to make decisions about what/whom should be included in the study.

Selecting sample of targeted population can be done in various ways. The appropriate strategy to choose the right sample is depending on the research objective and research question of the study (Flick 2009). According to the case of my study, the target population consists of migrant households who live in the *transmigrasi* location. Therefore, I selected a sample

population from the households of migrants and the sample was purposively selected from the entire population.

Purposive sampling techniques have been used in this research. This technique enables researchers to use their knowledge or expertise to select subjects who represent the population (Berg 2001). In my research, I have used purposive sampling firstly in the selection of study area. Since I was interested in studying livelihood strategies of households of migrants in a *transmigrasi* location, I purposively selected one location in Sitiung I. I chose this location because all migrants in this area came from the same place in Central Java Province, particularly from Wonogiri Regency. They moved to this location trough the *transmigrasi* program known as *Bedol Desa*.

Generally, the main livelihood activity of migrants in my study area is in the agricultural sector. Most of them are farmers who are still actively engaged in farming, although there are some who have quit from farming activities due to a physical condition.

In order to address the research objective and research questions in which focus on livelihood strategies of migrant households and the assets were employed by migrants, some criteria for selecting the sample have been set up. The migrants who moved to the *transmigrasi* location from 1976 to 1977 were used as the main criterion to choose these participants. I preferred to interview the households of migrants who are directly involved in the processes of migration from Wonogiri to Sitiung I.

I got help from the Head of *Badan Penyuluh Pertanian* (Center for Agricultural Counseling) of Sitiung and Koto Baru District and from the agricultural trainer to select my research participants. Those people have been working for several years in the area where I conducted my fieldwork so they know the migrants who met my criteria.

I interviewed both males and females of households but most of my participants are males. Actually, it was not my intention to select the head of households more than the wives, but during the agricultural training activities I found the presence of the head of households were more than the wives. The physical condition (healthy condition) also became one of my attentions to select the participants and the heads of households are more able to communicate for the interviews. I gathered information about livelihood strategies of migrants based on the experiences of the household's representative (head of household or wife) but this story can be seen as the holistic experience of household as one unit.

4.3.2 Methods of Primary Data Collection

Interviews

Interviewing is defined as a deliberate conversation and it has been used as one of the main techniques to obtain information and data about migrants' livelihoods in this research. According to Kitchin and Tate (2000) interviews can provide rich sources of data on people's experiences, opinions, aspirations, and feelings and it provides a rich, deep and varied data set in an informal setting for researchers. It is a very common method to exchange and share human experiences as well as daily activities.

For my study purpose, I have chosen an interview guide approach or semi-structured interview to achieve information about the livelihoods of migrants. This approach allows me to conduct interviews in a more informal style and gave me a freedom and flexibility to elaborate the questions to be asked. This approach requires a specific topic that will be discussed which has been prepared in advance in an outline form. Based on this interview approach, I was able to follow up the questions according to their explanations.

I had two different interview guides. First, it was for migrant households as the main subject of my study (Appendix 1) and the second was addressed to local authorities in Dharmasraya Regency (Appendix 2). I used the latter as supplementary information thus I conducted interviews with the Manpower and Transmigration Department of Dharmasraya Regency, Manpower and Transmigration Department of West Sumatera Province, Public Works Department and Department specializing in Irrigation System of Dharmasraya Regency and Bureau of Agricultural Instructor. The questions were about the development program for each department which related to support the livelihoods of migrants. I divided my interview guide for migrants into three main parts: migration process, livelihood activities before and after migration including the questions about how they combine the five main assets to build their livelihood strategies.

During my first interview, I was so nervous and I was afraid if my research participants felt uncomfortable and confused by the questions. Even though, according to my opinion I have structured my interview guide in a good order but after couple of times of interviews I made some changes in my interview guideline. At first, for example, I asked them about the ownership of assets based on the sequence of time and the result was that my participants find it difficult to remember when they had these assets. This also happened to me; it is quite hard

for me to understand their story, especially when we are talking about the story of their livelihoods ten years after they moved to the *transmigrasi* location but in the middle of this explanation they explain the story that occurred during the five-year migration. In order to solve this problem, I changed my interview guide. I did not ask them according to the time sequences but I preferred to ask them about the livelihood stories and when it happened. Once I got the chance to interview more and more of my participants I found it easier to ask them. The more people I interacted with and interviewed, the more knowledge I had about their livelihood stories and the more I got to know the lack of my interview guideline so I repaired it into better questions.

I did my fieldwork in the *transmigrasi* location in Sitiung I District of Dharmasraya Regency. This location is divided into seven blocks of migrants' settlements and I had at least two research participants for each block (Table 4.1). One interview took place in the paddy field (*sawah*) and the rest of interviews were conducted at the house of migrants. Most of my research participants are the heads of households and I had one interview with a wife of the head of household. Sometimes, the wives also joined the conversation during the interviews with the heads of households.

Table 4.1 The number of research participants

No	The transmigrasi settlements	Number of research participants
1	A	8
2	A'	5
3	В	4
4	B'	3
5	C	2
6	D	2
7	Е	2
Total		26

Source: Fieldwork 2013

I met my research participants and organized the interviews more than one time. I spent two until four hours for each interview. I started my work from 09.00 am until 17.30 pm and took a rest in the middle of the day. Consequently, for one day I conducted two until three interviews with my research participants. I realized each migrant household had their own experiences about livelihood strategies before and after migration. The expressions shown by them were also different during the interviews.

I had four interviews where both the husband and wife were present together. Three of these interviews were led by the head of households though sometimes they need help from their wives to remember the stories of their lives and livelihoods in a certain time. In this situation, the wife preferred to talk after the husband. According to the eye contacts between them I knew that the wife is not so confident to answer my question before the husbands explains about it. On the other side, I had one interview with the same case but the wife and the husband talked together at the same time loudly. In this time, I felt so difficult and confused to listen and understand their stories. I realized my position as a researcher and I tried to be more patience and let them speak freely. After that, I did some confirmation by repeating their answer right after they finished talking though sometimes they just kept talking to each other.

According to these three cases, the wives were emotionally involved, especially when they tried to remember when they are "forced" to leave their home place in Wonogiri and the conditions during the early years after they migrate to the *transmigrasi* location. The point is the wife may have different perspectives and feelings about the story that I might not get from their husbands. Therefore, I tried to encourage them to actively participate during the interview.

Most of my research participants have properly described their livelihood experiences, but I also found some of them with limited responses even though I asked them the same questions but in different ways.

Observation and Informal Conversation

Observation is a valuable method for researchers to get better understanding to analyze an event, and activities of people. Observation is based on the observer's ability to interpret what is happening and why such phenomena happened. As described by Frankfort-Nachmias and Nachmias (1996 in Kitchin and Tate 2000), the major advantage of observation as a technique is its directness. Observers or researches watch what people do and listen to what they say and it can be a method to do comparison analyses between what people really do and what they say they will do.

During the fieldwork, I can say that I became a passive observer so that I applied non-participation observation. I started my observation towards migrants since I was involved in agricultural training activities. The agricultural training activities were organized by the cooperation between the central government of Indonesia and local government. The central

government through the Ministry of Agriculture has established a specific institution that handles the operational level called *Balai Penyuluh Pertanian-BPP* (Center for Agricultural Counseling) which is in charge of several districts. This training aims to improve the capability and empowerment of farmers and their families in order to improve productivity, business efficiency, increased revenue and sustainable prosperity. These programs contain the development in four main sectors of agriculture including food crops, plantations, fishery and forestry. The training itself is provided to the farmers which incorporated into some farmer groups according to the location of their paddy fields.



Figure 4.1 Households of migrants

Source: Fieldwork 2013

Involving in agricultural training was very important to engage and capture various types of activities of migrants. It also created some benefits for me to introduce myself into the new community and hoped they can accept me slowly as a newcomer in their environment. Moreover, the observation process provided me with the opportunity to select my research participants. During the training activities, I put myself as a listener and observer for my potential research participants. I kept watching what they did, listening to what they talked about, and observing the interaction and communication among them. Finally, I came up with the results by choosing my research participants according to the criteria that I made before.

I did observation during the interviews as well. I noticed that my participants felt comfortable through their body language. Generally, they were very calm at the beginning of the interviews but when we talked further about their experiences in the *transmigrasi* location they got more excited and passionate to explain it.

I also used the observation technique to observe the availability of infrastructures in the *transmigrasi* location such as roads, markets, irrigation canals, farm equipment, building for worship, and etc. I went to the paddy fields, plantation areas of migrants and saw the livestock were owned by them. It aimed to obtain a direct visualization about the assets owned by migrants and the availability of assets to support their livelihoods.

I made informal conversations with my potential participants before I organized appointments with them to do interview. I gave a brief description about myself, my research, what I am going to do and my expectation from them. I asked them a few questions regarding their experiences in the *transmigrasi* program and their current livelihood activities in order to get a general idea about their livelihoods.

4.3.3 Secondary Data Collection

Secondary data consist of information that has already been collected for another purpose but which is available for others to use (White in Clifford et al 2010). Secondary data can be very useful to provide a description of information that cannot be facilitated by the primary data. In this study, I have used secondary information from various sources, which include published and unpublished documentary sources; books, articles, etc.

During the fieldwork, I attempted to find various secondary data in local government offices which related to the *transmigrasi* program, such as Manpower and Transmigration Department in Dharmasraya Regency and West Sumatera Province, Central Bureau of Statistics, and Regional Development Planning Department in Dharmasraya Regency. Most of the data provide information about the socio-economic conditions and general contextual background of my research location including spatial data of the study area. The data from Public Works Department specializing in the Irrigation System presents some information about the development of irrigation system in order to support the livelihood activities of migrants on agricultural. Information about various training activities on agricultural received by migrant community are also provided by Agricultural Department of Dharmasraya Regency.

Furthermore, I was also looking at the data and information in the library of local university in West Sumatera called Andalas University (UNAND). I found some academic reports from bachelor and master thesis that contain additional information about my research. Besides,

other relevant literatures, books, journals and information from internet have been widely used in this study.





Figure 4.2 Agricultural Training Activities

Source: Fieldwork 2013

4.4 Method of Data Analysis

Qualitative analysis is an analytical representation containing of sentences, pictures and sounds. There is no a fixed linear approach for analyzing qualitative data. Creswell (2007) described it by using analytical circles which contain the general spiral processes of data management, reading, describing, interpreting and representing the data. Researcher started with all type of data such as text, images or video tapes and ends with an account or narrative, but in between there are back and forth processes of analysis.

There are several approaches to analyze qualitative data including phenomenology, grounded theory, ethnography and case study. For my study purpose, the narrative approach was employed to analyze qualitative data that I collected during the fieldwork specifically the data obtained through interviews with migrant households. This approach contains three elements which are interaction (personal and social), continuity (past, present, future), and situation (physical places or the storyteller's places) as described by Clandinin and Connely (2000 in Creswell 2007) as the three-dimensional space approach. Denzin and Lincoln (2002) also called this as the biographical method in which the analysis focuses on the experiences in the subject's life.

According to this method, it enabled me to look for experiences of migrant households in order to develop the chronology of the individual's livelihood. The stories about migrants' livelihoods have gathered through interviews with the participants and I have recorded all the interviews that have been conducted. The story itself comprised the personal experiences of household to became a migrant and they are "forced" to move to Sumatera Island because the environmental problems in their place of origin in Java Island. Furthermore, the important point from this story was the livelihoods' experiences in a temporal perspective. The history of livelihoods in the place of origin, their first experiences in the new place and the story about how they use the assets that they owned from the place of origin and the assets which acquired in the *transmigrasi* location, were elaborated during the interview. It also gave me a new insight to understand the reason behind the migration processes and the circumstances including problems were encountered by them in the *transmigrasi* location.

As the primary data, taped interviews had to pass through a series of steps before analyzing. The recordings were transcribed by listening to the recorder and converting the stories into written text. Transcripts are needed to represent on paper the strings of words uttered or verbal features for scientific analysis (Kowal and O'Connell in Flick et al. 2004). The second step was to read the total collection of transcripts and classified the transcripts according to the relevant category of themes. Some photographs from observation and the data obtained from secondary sources were also processed and put it together with the transcript into these categories. In the interpreting step, I tried to make sense of the livelihoods stories of migrants and then linking it into the theory of structuration and livelihood framework. This process enabled me to find the relation between the theories and the findings and finally to addressed the planned objective and research question of the study. According to the structuration theory, it enabled me to analyze the structure and agency that affect the access to assets and

application of livelihood strategies by migrants. Within the livelihood framework I focused on the livelihood assets and livelihood strategies of migrants. This framework allowed me to define the different assets owned by migrants and the range of strategies which can be applied by migrants to develop their livelihoods in the *transmigrasi* location.

4.5 Challenges during the Fieldwork

Before I could begin the fieldwork, I had to get a permission letter from national until local level. I live in Sumatera Island which is the different island while the central government of Indonesia is located in Java Island. Traveling in order to get several pieces of permission letters was costly and these letters are only used to obtain secondary data at government authorities. It spent two weeks until I finally got a letter of permission to conduct the fieldwork.

It was not easy to get data from government authorities and I found many challenges such as bureaucracy process especially for research permit and unavailability of data and information. It was time-consuming when I had to be patient for couple hours just to wait for the head of government authorities to see my letter and give me permission to conduct interviews and get some relevant information. This kind of circumstance always happens during my fieldwork.

Since my research is about *transmigrasi* events that occurred in the 1970s so that many government authorities no longer had the documents about this program. Moreover, the government employees who were formerly involved in the *transmigrasi* program in 1976 have retired and thus the representative of the local government that I interviewed had no deep information about this program. Most of data and information gathered from government offices are current conditions. Another challenge for me during the fieldwork was that the period of time that coincides with Ramadhan when most of the Moslems have to fasting from 4.30 am to 6.30 pm for one month.

I was quite worried when I did not get any research participants in a few days. It happened because they were busy with their work on the agricultural land, such as during the planting and harvesting seasons and when they have to keep their farms from nuisance pests. In such situations, I went around to the *transmigrasi* locations to capture some photographs in order to get visualization of migrants' settlements and condition of infrastructures in my study area. Unavailability of public transportation and insecurity issue in the *transmigrasi* location were

also affecting my fieldwork. Therefore, I had a person that I trust to drive me to the places I needed to go.

According to my experience in the field, I found that focus group discussion was not an appropriate method to elaborate livelihood strategies of migrant households. It happened when I was supposed to interview one of my research participants but when I arrived in his home and surprisingly he had already invited two people to be involved in the interview. I had not planned to do focus group discussion since each migrant has their own paths to build their livelihood strategies. Therefore, in this situation I changed my question into more general and as a result I did not obtain detailed information about their livelihood experiences.

4.6 Ethical Consideration and Critical Reflexivity

Qualitative research emphasizes social interactions between the research project, the researcher, the society and people who participate in it. These relationships are critical and cannot be separated and always happen in a societal context (Dowling 2005). For example, the process of data collection and interpretation of social information involves personal interaction between researcher and research participants. This obviously happened during the interview which is basically a two-way conversation between researchers and research participants. Therefore, this kind of relation is typical of qualitative research that distinguishes itself from quantitative research. It has to be considered when designing and conducting research even after the research is completed because the results may potentially change social situations.

Ethical consideration is one of the important things to be taken into account in all research methods. According to this, the researcher has responsibilities and obligations to those involved in research, including sponsors, the general public and most importantly, the subjects of the research (O'Connel-Davidson and Layder 1994). By doing research in social contexts, I was largely concerned about ethical issues because I was directly involved in social environments in migrant communities. These interactions can be influenced by societal norms, expectations of individuals and structures of power (Dowling 2005). Therefore, ethically and morally I have responsibility to all participants who involved in my research process including my own beliefs.

In another position, as a researcher for my thesis project, ethical issues also came to my attention when designing and conducting fieldwork. Besides interview guideline, I also made

a sort of "procedural standard" for myself before I conducted interviews with the research participants. This procedure contained the things that I should do before I start the interview. When I met my potential participants at the first time, the trainers helped to introduce me to them during the agricultural training mentioned above. In addition, after I chose my research participants I introduced myself as a student who is doing a research for master program. Obtaining permission from research participants is one of the critical points in ethical issues which better known as informed consent. Participants need to know exactly what it is that they are consenting to. At that time, I gave a brief description about my research topic of migrants' livelihoods, the sort of livelihoods issues to be explored, my expectations about the story of their livelihoods in the *transmigrasi* location, and how the result of this research will be published. All of their participations were voluntary and I asked whether they want to participate in my research or not. I assured them that all information that will be given to me will be treated anonymously and confidentially. I asked for permission to use a recorder and take pictures where necessary.

In my point view, informed consent can give mutual understanding between researcher and research participants. Some people thought that I work in government agencies, banks and some even thought I am a reporter because I always carry a camera during the fieldwork. So, for me, by providing research information to them was one way to clarify my position as a student or researcher, not from institutions or other agencies.

Another concern related to the relationship between qualitative research and social nature is recognized as critical reflexivity. Reflexivity is a technique developed that is self-critical sympathetic introspection and the self-conscious analytical scrutiny of the self as researcher (England 1994, 82 in Moser 2008). It means we have to be aware about our position, analyzing and reflecting our own situation constantly that may affect the research process and modify it where appropriate. Power relations and subjectivity are two of the important issues in the discussion of critical reflexivity.

The impacts of power relations cannot be eliminated and become one important outcome of the social character of qualitative research. By doing qualitative research in migrants' livelihoods, the research participants and I are occupied different speaking positions in relation to social structures. According to the type of power relations in social research, there was asymmetrical relationship between me and my research participants. This form of relationship is characterized by the significant differences in the social positions of the

researcher and those being researched. In order to obtain information for my study purpose, I felt that households of migrants have greater power in comparison with me as a researcher. They are the primary source that can tell their life's journey in order to build their livelihoods in the *transmigrasi* location. They have stories about how they can move from place of origin to the *transmigrasi* location, situation and conditions they faced when they first arrived in the *transmigrasi* location, the dynamics of livelihoods and how they combine assets as the strategies to build livelihoods. Therefore, I did not have much power to force them to participate in this research or if they cannot continue the interview. I had one interview with household migrant that was not completed because he had to stay and keep his paddy land from pests.

Besides the main research participants of migrant households, I also dealt with government institutions at the local level. In several situations, I encountered new power dynamics from government institutions that affect the research process. When I came to the government institutions, it is an obligation to introduce myself and my research topic in order to get secondary data about socio-economic characteristics of migrants in my study area. In one case, one government employee gave me another topic for my research because he was not interested in my research topic. In another case, the government employee also told me to change my study area to where he worked previously in another *transmigrasi* location which has different characteristic with my case study and the local government does not have the specific data that I am looking for. When these problems emerged, I was in the middle of the fieldwork process and I had interviewed several migrant households. I went back to thinking about my research and at such situations I realized that I had more power to make a decision about my research. So, I kept on my track and received their opinions as positive inputs in order to build awareness in the migration issues.

Based on my experiences on the field, I considered myself as an outsider of the migrant community. During the interaction with the participants, I realized that we are from different social groups; we have different cultures in which my participants are Javanese while I am a part of Minangkabau society which is also a major local community surrounding the *transmigrasi* location. Nevertheless, I attempted to build a friendly atmosphere with my participants during the interviews so they could speak freely to me about their experiences. When they told me about a conflict of interest with the local community, I positioned myself as a researcher without blame or justify what they said even if they continued to talk about the differences between Javanese and Minangkabau culture.

4.7 Discussion of Findings

The trustworthiness is one of the major issues addressed in qualitative research. According to the model built by Guba, there are three criteria that should be considered in assessing the trustworthiness of qualitative data (Krefting 1991).

Credibility

This term concerns about the confidence of researcher in the truth of the findings regarding to the research participants, the context in which the study was conducted and research design that has been used by the researcher. I used qualitative research designs which more suitable for my study about livelihoods of migrants. Furthermore, I have employed triangulation methods in order to obtain information about the livelihoods of migrants by using interview, observation, informal conversation and obtained a variety of secondary sources. I also clearly explained to my research participants about my research topic and my status as a student who is purely conducting research for the academic purpose. Therefore, they can describe their livelihood experiences without fear and pressure from other parties.

Applicability or transferability

It is concerned with the extent to which the findings of one study can be applied to other situations and to a wider population (Merriam 1998 in Shenton 2004). In qualitative research, the findings are defined as unique and specific which made up of a particular interaction with particular informants in certain environments. Thus, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations (Shenton 2004). In my case, each migrant's household has their own story about their livelihoods before and after they migrated to the *transmigrasi* location. Migrants who live in this area had the unique stories about the historical background of migration processes. Therefore, generalization of livelihood stories in this case is not relevant to be applied to the others.

Confirmability

It refers to the degree to which the findings are a function solely of the informants and conditions of the research and not of other biases, motivations, and perspectives. By using the qualitative methodology, the stories of migrants' livelihoods were the result of the experiences and ideas of the research participants. In addition, I tried to decrease the distance between my research participants and I by involving in several agricultural activities on the field.

I have to say that all my research participants were males or the head of households. It might produce biases regarding to the results of the experiences of household livelihoods because I only interviewed one representative of the household members. Therefore, in some interviews I encouraged the females (wives) to participate in the discussions and tried to "push" them to tell the story of the livelihoods based on their perspectives. During the interviews I directly asked the question *what do you think* or *what is your opinion about this*, in order to obtain the answers from them. Thus, it will reduce the biases of my study.

4.8 Conclusion

In summary, this chapter describes the methodology adopted for the research. It started by introducing qualitative methodology and explained why it was chosen in this study. It also highlights the methods of data collection both for primary and secondary sources. Interview, informal conversation and observation were employed as techniques to gathering primary data from migrant households. Various sources of data including academic reports from local university have been used in this study. This chapter also provides explanation about the procedure and technique to select respondents. Furthermore, the method of data analysis and problems encountered on the field were explained. In this chapter I have explained my consideration on ethical issues and self-reflection about the research process, especially during the data collection on the field.

5 MIGRANTS ON THE MOVE: DECISION TO MOVE

5.1 Introduction

The information and data which were collected during the fieldwork will be analyzed in this chapter and the next two chapters (chapter 6 and 7). In order to address the objective and research questions of this study, this chapter is designed to describe the reasons of migrants to move from their place of origin in Java Island into the *transmigrasi* location in Sumatera Island. The migration processes and the experiences of migrants during these processes are also captured in this section.

5.2 Historical Background: Dam Construction Program

Rural resettlement under the *transmigrasi* program of Indonesia was the largest scheme of people movement which was constructed by the Indonesian government. A massive population has been transferred from sending to receiving areas. *Transmigrasi* program was initially focused on alleviating population pressure in overpopulated area but during the time it greater emphasized on the regional development and attempted to promote cultural assimilation between migrants and local society.

Under the Indonesia Ministry of Transmigration, the central government has established the *transmigrasi* program which is not necessarily resettled people from overpopulated areas but where the area has had environmental problems. The *Bedol Desa* program was particularly designed for an area to which the latter applied. The idea of this program was developed in the early decades of the nineteenth century (Pelzer 1948 in Gondowarsito 1990). Through this program, the communities were entirely transferred into the new places. The word of *Bedol* comes from the Javanese language and means to uproot and then transplant.

In this case, Javanese people who lived in Central Java have been moved from their place of origin because the area has had to be inundated. The *Bedol Desa* program has been applied in Wonogiri; the area which located in the southern part of Central Java. Due to the environmental problems, the *transmigrasi* program was the only way to save the people and the environment in this area. The environmental conditions of the Wonogiri area in the South Central Java had deteriorated due to the extreme drought and excessive flooding. Therefore,

the central government of Indonesia and with the aid from Japan decided to build a dam in this area and moved people from the future submerged valley to the new settlements.

The Dam Construction Program in Wonogiri

Wonogiri is divided into 22 *kecamatan* (districts), in which seven of these were influenced by the construction of the dam. Wonogiri had environmental problems with flooding in the rainy season and water shortages during the dry season, from July to September. Another problem of the cultivation and heavy cutting of timber for firewood as household fuels have created erosion of hillsides and exacerbated by floods. One of the most serious flood disasters was happened in 1966 and destroyed 157,000 hectares land which mostly functioned as cultivated land. It caused by the periodically flooded of the longest river in Java called Bengawan Solo and this river has its source at *Kecamatan* Giriwoyo in Wonogiri.

The massive dam named as Gajah Mungkur Dam was constructed between 1976 and 1981 and it was built to restrain the waters flow of the Bengawan Solo. The purposes of the dam were to provide irrigation during the dry season, to reduce floods during the rainy months and as a resource for hydro-electric power generation. Moreover, this dam recently is also functioned as water storage, fishery activities especially for the inland fishery, and as a tourist attraction. The inundation covered 9,496 hectares, affecting 45 villages in seven districts of Wonogiri Regency. The completed dam irrigates 23,000 ha of rice fields, and has a water storage capacity of 800 million cubic meters. Six thousand hectares of the affected area consists of tidal land, which is used for fanning and for nurturing a green belt. This dam can provide irrigation water for the four regencies surrounding Wonogiri Regency including *Kabupaten* Klaten, Sukoharjo, Karanganyar, and Sragen (Figure 5.1).

The amount of expenditure incurred to build the dam was Rp. 55 billion, of which 62% came from the state budget and the rest of the cost funded by Japanese aid. A substantial portion of this expenditure was allocated to finance the *Bedol Desa* scheme, including compensation grants (*ganti rugi*) for inundated lands and property, and the local relocation of ancestors' graves (Gondowarsito1990).

The Transmigrasi Program of Bedol Desa

The *Bedol Desa* of Wonogiri was the biggest scheme of people resettlement in Indonesia. The central government of Indonesia has succeeded resettled approximately more than 10,000 families (over 40,000 individuals) from Wonogiri to Bengkulu, Jambi, West Sumatera and

South Sumatera between 1976 and 1981 (Table 5.1). The *transmigrasi* processes were fully sponsored and organized by the Government of Indonesia. In addition, this scheme was involved a 'political sense' as Wonogiri is the childhood area of President Soeharto; a leader of Indonesia in that time. Therefore, the *Bedol Desa* of Wonogiri received special attention from the national government since the preparation before moving, the processes during the transmigration and in the early years after moving to the new places. It was also admitted by the all research participants and some of them explained that the people who moved from Wonogiri as the 'Golden Boys' of President Soeharto.

In fact, due to the environmental problems, the inhabitants were forced to leave their cultivated lands and their villages. They had limited options to move either resettling locally, or joining the *Bedol Desa* program voluntarily to Sumatera Island. It was such a difficult decision to them because they have to face various concerns regarding to the economic, social and cultural consequences in the new places. The government applied the *Bedol Desa* scheme to resettling people from Wonogiri because the social bonding among the society. Javanese identically have strong attachment with their family, relatives, friends, neighbors and to their village community. They have a very broad relationship instead of nuclear family. According to this, under the scheme of *Bedol Desa*, by resettling all of the communities in the villages were expected to be a suitable form of migration for Wonogiri community so that they could maintain the bonds among the society rather than moving individual families.

5.3 The Processes of Migration

Relocation of the inhabitants who were affected by the dam began in November 1976. The processes started by measuring the total land area and enumerating the number of people affected by the dam development. The *Bedol Desa* program especially the Wonogiri-Sitiung project was the most notable program among the other similar programs because this location is home area of President Soeharto. Therefore, it received more attention from the government especially during the processes of migration regarding to the coordination system of the governments, infrastructures development, and the cost to resettle people.

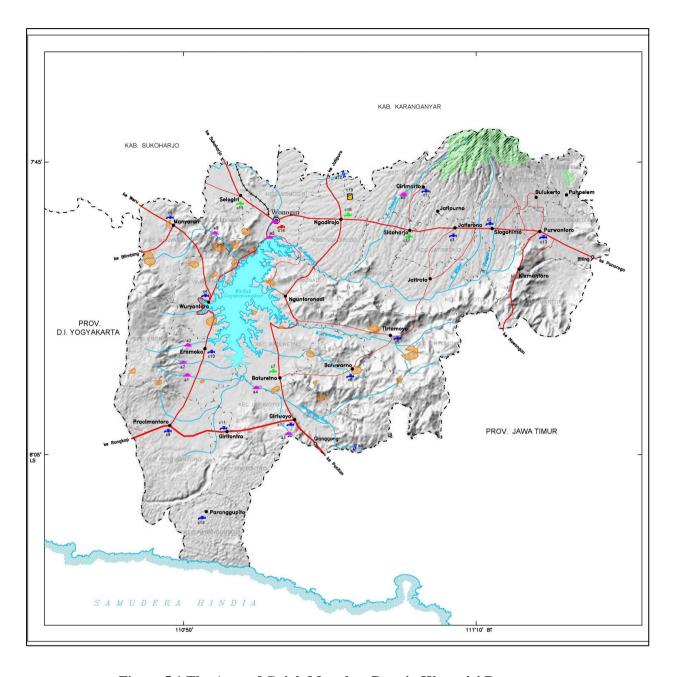


Figure 5.1 The Area of Gajah Mungkur Dam in Wonogiri Regency

Source: loketpeta.pu.go.id

Table 5.1 Area of origin, destination and number of Wonogiri *Bedol Desa* migrants in Sumatera from 1976/77 to 15 June 1981

Place of Origin			Destination Area		Number of	
Kecamatan (district)	Approx. No. of Villages	Year	Province	Project	Households	Persons
Nguntoronadi Wonogiri	3 3 2	1976/1977	West Sumatera	Sitiung I	2,001	8,815
Wuryantoro Nguntoronadi Wuryantoro	2 2		West Sumatera	Sitiung II	1,200	5,207
Nguntoronadi	1		Tt.	T ! 1	900	2.007
Wuryantoro	1	1977/1978	Jambi 	Jujuhan	800	2,897
Baturetno Nguntoronadi Wuryantoro	3 2 2		Jambi	Rimbo Bujang/ Alai Hilir	1,859	7,728
Baturetno Eromoko Wuryantoro	4 2 1	1978/1979	Bengkulu	Air Lais Sebelat/ Kurotidur	1,800	7,123
Baturetno Eromoko Giriwoyo Nguntoronadi	6 4 3 5		Bengkulu	Ketahun	1,726	6,935
Wuryantoro Baturetno Eromoko	2 3 1	1979/1980	Jambi	Pamenang	265	1,067
Wuryantoro	2					
Giriwoyo Wuryantoro	3		South Sumatera South Sumatera	Pematang Panggang Baturaja	189 300	770 1,210
Bulukerto Giritontro Ngadirojo Selogiri Tirtomoyo Wuryantoro	10 1 4 1 1	1980/1981	Jambi	Pamenang	100	372
Baturetno Bulukerto Eromoko Kismantoro Ngadirojo Nguntoronadi	9 4 4 4 1 8	1000/1001	D	V	507	2.202
Purwantoro	2	1980/1981	Bengkulu	Ketahun	596	2,392
Sidoharjo Slogohimo Tirtomoyo	1 1 1					
Wonogiri Wuryantoro TOTAL	3 3				10,836	44,516

Source: Gondowarsito1990

Administration and Management

During the First Five-Year Development Plan (Repelita I, 1969-1970 to 1974/1975) of Soeharto regime, a major source of transmigration failure was caused by the lack of coordination between central, provincial and district offices in which during that time the Transmigration Department was assigned to carry out the program (Suratman and Guiness 1977). The Transmigration Department was responsible for the whole processes of the program until the program submitted to the provincial government after the certain period.

In the next Second Five-Year Development Plan (Repelita II, 1974-1975 to 1978/1979), the Government of Indonesia changed the coordination system by applying three types of coordinating bodies at central, provincial and district levels to bring together all departments involved in the transmigration program, such as the National Planning Agency (Bappenas), the Departments of Home Affairs, Finance, Public Works, Agriculture, Health, Education, with the Department of Manpower, Transmigration and Cooperatives.

In the case of the *Bedol Desa* Wonogiri-Sitiung project, all of the operation was managed by the Department of Public Works and the coordination among the different level of governments has established. In principle, the main responsibility of the resettlement was retained on the central government of transmigration authorities until they become self-supporting and finally it transferred into local authorities. Thus, it would be integrated into provincial and regency administration. After five years of resettlement, management of the *Bedol Desa* Wonogiri-Sitiung project transferred into West Sumatera authorities in 1982.

The cost of the *Bedol Desa* Wonogiri-Sitiung project proved far higher than usual. Including compensation grants, it probably exceeded the overall Indonesian estimated average of some US\$5,000 per family for all forms of sponsored transmigration in the early 1980s (World Bank 1988 in Gondowarsito1990). In 1973/1974 the cost of settling one migrant family was estimated at Rp 350,000 (about about \$850); this increased to Rp 500,000 in 1977. At Sitiung the comparable cost was Rp 1.3 million or Rp 1.8 million if costs of infrastructure are included (Suratman and Guiness 1977). The Government of Indonesia was done the processes that required for the project including the recruiting of migrants, transportation to project areas, actual settlement work like land clearing, house construction and road building, and so on.

For example, the Government has upgraded the roads to Merak (on the north western tip of Java) and improved the ferry service between the two islands; Java and Sumatera Island. The sections of the Trans-Sumatera Highway running through Jambi and South Sumatera have been completed (*ibid*).

The Selection of Migrants

Since the beginning of the *transmigrasi* program in Indonesia, the principles to select the migrants were created but the criteria have undergone several changes. Transmigration should move family units, participation should be voluntary and priority should be given to people from critical areas. Then, the government made more specific criteria regarding to the personal characteristics of migrants. The head of family should be aged between 20 and 40 years, married with a family of not more than five members. No member of this household should be over 60 years, none under six months and no pregnant women may join the group. Farming skills were desirable but not a condition for selection (Suratman and Guinness 1977).

All migrant households who I interviewed are included in family unit, either they have married before migration or they included in the nuclear family as son or daughter. The criterion of age became one of the important factors because it related to the assets that provided by the government in the *transmigrasi* location. It was also the major problem to those who want to join the *Bedol Desa* program. Single men and women, widowed with children were unqualified according to the rules of the program unless they could arrange married before the departure time. For such a case, some migrants faced the situation when they have to set up the quick married with someone, who might even be a brother, sister or cousin, so that they could acquire the married status, at least on paper.

One of the research participants, a woman, explained that she was pregnant in the ninth month when she joins the *Bedol Desa* program in November 1976. In addition, some migrants also had children under the sixth months when they move from Wonogiri to Sitiung I. Based on these, the criteria from the government were no so strict. Most of the migrants have certainly made up of the nuclear family, but that in other respects the criteria that have been applied contain some things that can be tolerated.

Recruitment processes and selection of migrants were the tasks of transmigration offices which set up in the level of regency. These processes were also helped by the head of the villages. One function of these officials was to spread information among village

communities, so they would become interested in moving away from their previous location. The head of villages visited each family from house to house in their authorities. They did census for each family in order to make lists of willing migrants who want to move to Sumatera.

Some basic information about the *Bedol Desa* program was given by the government authorities to the whole village communities. It included information about the location to move in Sumatera Island, processes of registration, the facilities and assets provided by the government in the new places, and an explanation of when they have to move. Furthermore, the government invited local people who live in the destination area, in Sitiung, to give description about the location of transmigration. It aimed to convince the migrants that local communities in the *transmigrasi* location in Sitiung are welcomed the migrants to come to the new places so that the migrants do not have to worry about the different cultures between them. In addition, the government also invited the migrants who already involved in the *transmigrasi* program in Bengkulu, a province in Sumatera Island, before the *Bedol Desa* Wonogiri-Sitiung program. The purpose was to persuade the village communities in Wonogiri to move to Sumatera Island and explained that the *transmigrasi* program could give many benefits to improve well-being of migrants and achieve the better livelihoods instead of remain living in Java island.

As program targets were raised during the Second Five Years of Development Plan (Repelita II), quotas were allocated for the program. There was a possibility to involve in the *Bedol Desa* program although the migrants were not belonging to the village communities affected by the dam construction. One household of the migrants came from the different village with the others. He lived in *kecamatan* Pracimantoro, 35 kilometers away from the Gajah Mungkur Dam and this *kecamatan* is not included in the priority area of the dam construction. In order to be included in the *Bedol Desa* program, he must be registered (*mengaku induk*) as a village resident in priority areas.

The first generation (*Trip Pertama*) of migration happened in November 22, 1976 when 100 families were moved from Wonogiri to Sitiung. The first group arrived in Sitiung on 1 December 1976 and it took around ten days in the journey. Continuously, every one week after the previous group moved the next group which also contained 100 families already to resettle to Sitiung. Thus, on April 13, 1977 around 2,000 families already placed in Sitiung I and the *Bedol Desa* program for Sitiung I was completed.

5.4 Decision to Move

Before the *Bedol Desa* program started, the national government of Indonesia gave opportunities to the Wonogiri community who were affected by the dam construction to choose the location to move. The options were between resettling locally and joining the *Bedol Desa* program voluntarily to Sumatera Island. For the former, the Government only provided the compensation of the lands and properties affected by the dam construction. However, for the people who want to involve in the *Bedol Desa* program, the Government offered the compensation and also the rights of lands in West Sumatera Province.

According to the migrants, the Government of Indonesia suggested two options for *transmigrasi* locations in West Sumatera. The first choice was Sitiung I located in West Sumatera and the Government will provide two hectares of land including the home plot and a house. The second was Rimbo Bujang in Jambi Province for five hectares of land. Both of these locations have different geographical characteristics. Sitiung I is suitable for agricultural activities especially for paddy field (*sawah*) while land in Rimbo Bujang more appropriate for plantation especially rubber and palm oil. The location of Sitiung I was chosen as the main location to move for Wonogiri communities because this location has similar characteristics with the agriculture land in Wonogiri.

Due to the economic condition of the migrants in Wonogiri, in which many of them come from poor rural backgrounds and the possibility to obtain the better livelihoods in the new place were the main objectives of migrants to move to Sitiung I. Availability of the property rights such as house and agricultural land for paddy and plantation that they would not have if they do not involve in the *Bedol Desa* program, was also the major concern that affect the decision to move. They believed that they will better off in the new place instead of staying in Wonogiri.

All of the migrants described that it is very difficult for them to leave their homeland in Wonogiri. The attachment to the place of birth and doubts about the conditions in the *transmigrasi* location were the motives that make the migrants think twice to join the *Bedol Desa* program. However, the bonding to the family and the feeling of togetherness as a unit of Wonogiri community have tackled these reasons. As one of the migrants mentioned:

"Actually I was afraid to join Bedol Desa because some people are frightening us. They said that Sumatera is still wilderness and there are many tigers. But it is nothing as long as we are together then we will deal with it."

The reason to get better education for their children was also mentioned by the migrants. Most of the migrants only completed primary school and only a few of them are able to proceed to the higher education level of junior high school. None of research participants are continued their education to the senior high school or to university. Poor economic situation and difficulties to access the location of the school were the major obstacles for migrants to not continue to the higher education. Therefore, through the *Bedol Desa* program, where the school facilities provided by the Government, the possibility to get higher education for their children is much wider than if they stay in the Java Island, along with the improvement of family economic situation.

5.5 Conclusion

This chapter explains the migration processes of migrants from Wonogiri who resettled to the *transmigrasi* location in Sitiung I through *Bedol Desa* program. Historical context of the dam construction in Wonogiri and the roles of the Indonesian Government to provide resettlement facilities in Sitiung I have contributed to affect the decisions of migrant households to move. The rights to own two hectares of land in Sitiung I along with the opportunity to improve livelihoods and better access to get higher education for their children were together become the major concern of the migrant households to involve in this program.

6 LIVELIHOOD ASSETS OF MIGRANTS

6.1 Introduction

This chapter is designed to explain the objective of this research which covers the livelihood assets of migrants. The chapter will be divided into two main sections. The first part of this chapter contains a brief description about the livelihood assets of migrants before they resettled from Wonogiri and the compensation provided by the Government to compensate the properties affected by the Gajah Mungkur Dam construction. The next part will discuss about the livelihood assets of migrants after they migrated to the *transmigrasi* location in Sitiung I and the changes of livelihood assets since the initial time when they came to Sitiung I until this research conducted in 2013.

Within the livelihood framework, assets are the important element of livelihoods that can be utilized for achieving the well-being of households. It includes different types of capitals namely social capital, natural capital, financial capital, physical and human capital. The analysis of assets or stock of capitals can be used to get better understanding of household strategies to attain livelihoods. The changes of assets over time, the causes of the changes and the impact of access to assets are important to be analyzed. Therefore, the livelihood approach is used to analyze the asset status of the poor as a fundamental understanding to know the options open to them, the strategies they adopt to attain livelihoods, the outcomes they aspire to and the vulnerability context under which they operate (Ellis 2000). I will much more focus on the changing of livelihood assets of the migrant households after they migrated to the *transmigrasi* location by defining the five different types of assets in the livelihood framework. In addition, I also look at the assets of migrants in Wonogiri which had been compensated by the Government.

The livelihood activities of migrants in agricultural sector have been affected by the availability of the assets and vice versa. The migrants have brought the two necessary assets together with them from Wonogiri to Sitiung which are financial capital in the form of cash money and the essential items to support their new lives in the new place. They used these assets to improve their livelihoods in Sitiung I. For those who received large amounts of cash are able to increase another asset in the new place of *transmigrasi* and utilized the money in the processes of agricultural cultivation.

Initially, the Government of Indonesia played an important role to provide the access to livelihood assets of migrants. Further, the migrants use the availability of assets to create livelihood strategies in order to generate income for households. On other side, the livelihood strategies provide the opportunities to access the assets.

6.2 Livelihood Assets before Migration and the Compensation

Through the *Bedol Desa* scheme, all the land owned by the migrants in Wonogiri which affected by the Dam construction were compensated by the Government of Indonesia. It included the land for crops, property land and attributes inside the home plot such as the plant trees and the graveyard of the ancestor. Most of migrants who participated in this research are landless in Wonogiri. They did not have their own lands because most of them lived with their parents or parents in-law who were original landowners. They are workers in their family lands without payments or they became wage laborers on agricultural lands owned by other people. Even though some of them had livelihood experiences on non-farm activities, the main livelihood activity for them was farming (will be explained further in Chapter 7).

Compensation

The amount of compensations (*ganti rugi*) grants were varied depending on the estimated value of land and other assets lost through dam construction. For migrants who did not have any assets, they did not receive the compensations. In addition, the migrants who lived outside the priority areas of the dam construction were not allowed to receive the compensation from the Government of Indonesia due to the regulation of the *Bedol Desa* Wonogiri – Sitiung I scheme. One of research participants did not receive the compensations because he lived outside the priority areas for the dam construction.

Not all the migrants had their own assets. Most of them were still living in the same house with their parents or live together with the parents in-law in Wonogiri. Thus, the assets will belong to their parents or the parents in-law. From the interviews, twenty-two of migrant households stayed in their parents' house while three migrant households already had their own house in Wonogiri.

The assets compensated by the Government of Indonesia included paddy field, plantation land, property land, and various plants growing in the yard especially for teak plant (*pohon jati – Tectona grandis*), which has the highest value and the most expensive compared to the other plants. The house and livestock owned by migrants were excluded from the

compensation scheme. The government gave freedom to the migrants towards their houses, whether they wanted to sell it or just leave it and will be inundated along with the construction of the Gajah Mungkur Dam.

In order to prepare themselves for the new life in the new place of *transmigrasi* location, all the migrants who had their own property have sold their houses. Mostly, the houses of Javanese made of teak woods. According to the research participants, they disassembled their houses and sold the teak woods piece by piece. It was impossible to sell the house as a building unit because nobody was attracted to buy it due to the location was affected by the dam construction plan. Therefore, they had to dismantle it into pieces of teak wood.

They could generate extra income from this action and save the money to continue their lives in the *transmigrasi* location in Sitiung I. The migrants also sold their livestock such as cattle, goats, and poultry to the people who were not participating in the *Bedol Desa* program, because they had not been affected by the dam construction and had not considered joining the *transmigrasi* scheme.

The compensation provided by the Indonesian Government has not been given directly as cash money to the migrants but it was kept on the form of deposit. Based on the experience of migrants who received the compensation, they were not able to take the whole money from the deposit before they move to the *transmigrasi* location. Half of the amount of money from the compensation can be taken in Wonogiri and the rest of the money will be kept until they arrived in the *transmigrasi* location. One of the national banks of Indonesia was responsible for keeping the deposit. The Government of Indonesia has also taken into consideration the issue of safety so the deposit of the migrants would be safe if they were kept it in the bank.

According to the research participants, they received some money from the compensation. Their parents or the parent in laws distributed the money from the compensation to the entire family members. The amount of money received by migrants from the shared compensation ranged from Rp. 200,000 to Rp. 800,000. The migrants who had their own lands and property received around Rp. 1 million until Rp. 2 million from the compensation grants. The following table shows the ownership status of land by migrants in Wonogiri and the amount of compensation received by them, which depended on these statuses.

Table 6.1 Landownership status of migrant households and the amount of compensation

Type of Migrant Household	Number of household	The amount of compensation
Landowner	3	Rp. 1-2 million
Landless (lived with parent or parents in-law)	22 (1 migrant did not receive the compensation)	Rp. 200,000-Rp. 800,000

Source: Fieldwork 2013

Additionally, the migrants were allowed to bring any things as long as it fixed the box container except livestock. The Government did not limit the number of items that could be brought by migrants from Wonogiri to the *transmigrasi* location in Sitiung I. They packed many useful things that were helpful for continuing their lives in the new place, such as kitchen utensils, seeds crops, and agriculture tools.

6.3 Livelihood Assets after Migration

In this subchapter I will use the concept of the livelihood assets based on the livelihood approach and explain the availability of the different assets attached to the migrant households and the changing of these assets.

Natural Capital

For the community who rely their livelihood in natural resource-based activities, natural capital is the main assets to them. The asset of natural resource especially agricultural land is the primary source of rural society to build their livelihoods. It applies to the migrants from Wonogiri who have the basic livelihood activity in the agricultural sector since they lived in their place of origin. It was also the main reason of the majority of *Bedol Desa* migrants from Wonogiri to choose Sitiung I as the new place to live because this area provided them the important assets to sustain their livelihoods. In spite of, during the processes of migration in Wonogiri the Government of Indonesia has provided another location for resettling in Rimbo Bujang with five hectares of lands, the migrants are preferred to choose only two hectares of lands in Sitiung I because of the suitability of land characteristics for agricultural cultivation.

Two hectares of land was provided to the migrants who were involved in the *Bedol Desa* Wonogiri – Sitiung I program. These lands include one hectare for paddy cultivation (Figure 6.1), three-quarters hectare for plantation and one-fourth hectare of land for home plot including the house. The migrants have received the same rights over the amount of lands. The paddy land is located close to the home plot of migrants. Some seeds and plants are

supplied by the Government for free during the first few years; including fruit seeds which could be planted in the home plot, cloves, coconuts, and soybeans.

Some of the plantation lands of migrants were rented by food industry for two to four years around 1982. These lands were planted with cassava trees and the migrants received the payments through a sharing system. This industry was not sustained and collapsed. The next year, the plantation lands of migrants continued to be rented by the rubber industry. The lands cultivated by the rubber trees for eight years. The payment was different with the previous system. The industry only rented the lands but the migrants conducted the cultivation processes. The industry provided the equipment for cultivation, fertilizers, rubber seeds, and other production inputs. All the production factors were not free but it was given in the form of loans. The farmers were obliged to sell their harvest of rubber to the industry and through this scheme the migrants could pay the loans. The rent systems were contributed to the income generation for households of migrants.

Based on the information of research participants, the conflict between local people and migrants has made 1,839 of migrant households in Situng I losing three-quarters hectare of the plantation lands (further explanation in Chapter 7). Only 161 migrant households finally received their rights on the plantation lands. From twenty-six of my research participants, only one household acquired land for plantations. The plantation lands for the rest of migrants have been taken by the local people. Therefore, most of the migrants were not able to generate livelihood incomes from their plantation lands.

In order to solve this problem, the Government of Indonesia established a solution by providing compensations to the migrants who lost the plantation lands. Some migrants received small cattle (*Sapi Madura*) and the others obtained cash money Rp. 3 million for each household. The compensations were given in 2005. The migrants were less satisfied with the compensations and they preferred to get their plantation lands. As the farmer migrants who were highly dependent on asset of land, the plantation land was more valuable and its value did not correspond to the amount of compensation received by them. They explained that they will get better livelihood incomes if they obtain their plantation lands because they could grow rubber and palm trees and earn more incomes to sustain their livelihoods.

Only three of the research participants have added their assets on natural capital. One of them has expanded the plantation land outside Dharmasraya Regency. He bought one hectare of

plantation land in Rimbo Bujang, which is located in Jambi Province. He selected this location due to the difficulty to buy a land in Sitiung because migrants do not want to sell it. The other two migrants bought one hectare paddy land for each in Sitiung from the migrants who went back to Java. To sum up the changing of natural capital owned by migrant household can be seen in Table 6.2.



Figure 6.1 Paddy lands of migrants in Block A (left) and Block B (right)

Source: Fieldwork 2013

Table 6.2 The Changes of natural capital owned by migrant households

TD 6 4 1	Initial year		2013		
Type of natural capital	Size of land (ha)	Number of Household	Additional land (ha)	Number of Household	
Paddy land	1	26	1	1	
Plantation land	0,75	1	1	2	

Source: Fieldwork 2013

Financial Capital

Financial capital refers to bundles of money and financial assets such as loan, deposits, shares and household possessions, which can be converted into other assets or consumption (Ellis 2000). It also includes the access to financial institutions. Especially in rural areas, keeping livestock plays an important role as a store of wealth and buffer against bad time.

In the *transmigrasi* location in Sitiung I, livestock particularly cattle is the most important goods for investment. The entire households of migrants received two cattle from the Government through President Program (*Bantuan Presiden*) and Transmigration Department in 1981. For migrants who had adequate financial capital from the compensation also bought their own livestock. According to the migrants, the cattle is a kind of long-term savings which

can be used for the future needs that require a large amount of money, such as for children's education, to build a house, to buy a land, festivity (*ewoh*), for medical expenses, and other unexpected expenditures. Livestock can be sold immediately if they need money, so that the migrants preferred to save money in the form of livestock than in the financial institutions.

Up to now, at least every single household has one cattle in their home plot (Figure 6.2). The number of cattle will be increased in accordance with the economic condition of the household. For the rich households or households with good financial capital, they tend to have more than one cattle and some of them pay people to take care of their cattle.



Figure 6.2 Livestock in the home plot of migrants

Source: Fieldwork 2013

Social Capital

The migrants from Wonogiri in Sitiung I kept their social relationships into strong ties. They maintain many aspects of the traditions from their place of origin. Sometimes, the migrants also perform traditional arts in their environment such as Wayang and Reog and they maintain some custom rituals which they believe, such as Mauludan.

One of the most important social activities among the migrants is called *ewoh* (festivity) especially the celebration of wedding and circumcision of their children. Usually, these events are held on a large scale in which the household of migrant who has these events invites the entire community of migrants. The people who invited on these events are "obliged" to bring gifts such as money and the daily needs, for example sugar, coffee, tea, rice, cooking oil, coconut, and other things. The amounts of these goods depend on the economic capacity of the migrants. Those things and the money will be noted by the owner of the event. And if other migrants create events for the next time, the money and all of the

things will be given on the same amount or more and it certainly will not be less than the previous amounts. They called it as *kerukunan*. Most of migrants explained that the *kerukunan* in Situng I is stronger than in Wonogiri because it relates to the increasing economic conditions of migrants. The goods obtained through these events can be sold or stored by migrants.

Local people who are invited to the events also follow this tradition. Despite, they competed towards property rights claim, they live in harmony. Culture assimilation such as language also occurred between local people and migrants. During the interviews, the migrants also spoke Minang, which is the local language in Dharmasraya Regency. Intermarriage between migrants and local people are rare happened. Both of these communities prefer to get married with people in the same culture.

Social capital provides the opportunity to improve other types of assets. In the case of my research, all farmer migrants incorporated into farmer groups since they came to Sitiung I. The presence of the groups gives benefits to the migrants to increase their livelihood incomes on agriculture. Through this group, the farmers could receive support from the local government of Agricultural Department in Dharmasraya Regency, including financial support or agricultural equipment. The groups are able to propose an agricultural activity plan in order to improve technical practices on faming. The financial support is used to buy agricultural needs for members of the groups such as plant seeds, farming tools, and fertilizers. It helps the members of the groups to maximize the farming production and further it provides the opportunity to generate more incomes for the migrant households.

Human Capital

Human capital highlights the importance of labor including health, education, and skills which could be improved by education, training activities and the availability of education and health facilities. The knowledge on agriculture is the fundamental skill of the migrants that is already owned by them since in Wonogiri. In addition, the Government of Indonesia was also preparing the training activities in order to increase the human capital of the migrants to pursue their livelihoods in the new place.

Technical guidance is needed for the migrants especially on the agriculture. It has been given since the preparation of migration in Wonogiri. The technical guidance was organized by the Government in order to prepare the migrants to be able cultivate the agricultural land and

involved in construction works. The migrants received agricultural training and obtained practical guidance in construction. After they came to the *transmigrasi* location in Sitiung I, they also received training on agriculture from local agricultural trainers. The training provided the education in techniques of working on the paddy land, animal husbandry, use of fertilizer especially to overcome the soil problems, and the cultivating variety of crops, including soybean, peanuts, cloves, cocoa, fruits, and so forth. The migrants are divided into groups that contained twenty to thirty people in each group. One trainer is responsible for each group. The trainings are still continuing until today.

The Government also provided health workers or doctors and teachers for migrants. The doctors accompanied the migrants since the journey from Wonogiri to Sitiung I. In the *transmigrasi* location in Sitiung I, the health workers were also available for the migrants along with the availability of health care center. Teachers and school buildings were prepared to educate the children of migrants especially for elementary and junior high school at the first time. Most of the teachers were residents in Dharmasraya regency and surrounding areas. But after a few years of migration, some migrants also involved in educational programs and became teachers in public schools in Sitiung I. The migrant households have developed; their children are more successful on education compared to their parents. The children of migrants could achieve higher education in senior high school and university. Moreover, they get better occupation in public services, such as civil servants, teachers and doctors.

The availability of wage labors on agriculture is also an important factor to support livelihood activities of farmer migrants. The farmers who have adequate financial capital are able to employ labors to cultivate their agriculture lands. It provides benefit for the wage labor because they can generate income by working on the lands owned by other farmer. This system has been established since the migrants from Wonogiri arrived in *transmigrasi* location in Sitiung I and it contributes as one of the important portfolio of livelihood strategies for migrant households.

Physical Capital

For the farmer migrants in Sitiung I, the physical asset of irrigation system is the essential capital to develop their main livelihood activity on agriculture sector. The development of irrigation system started in 1976 through the irrigation project called Sedasi (Sungai Daerah Sitiung/ *Sei Dareh Sitiung* – The River of Sitiung Area). There were three pumps and small dams, which have been developed during the project, namely Piruko and Palangko dam and

Batang Siat Dam with a total capacity plan 17.5 m³/second and the total area to be drained 12,464 hectares (Irrigation Project of Batang Hari 2011). But these irrigation systems were not able to provide sufficient water irrigation for the entire paddy lands of migrants.

There were three main factors that led to the failure of these projects (Irrigation of Batang Hari Report 1999): the high cost of operation and maintenance of the pumps and decreased capacity of the pumps, the large amount of sludge that must be removed from the upstream pumps, and reduced ability of the existing dams due to the decreasing of water flow from the river which was affected by deforestation in the upstream dam. Therefore, in order to solve the problem in 1996 the construction project of the dam namely Batang Hari was carried out (

Figure 6.3).

The development of Batang Hari irrigation system aimed to irrigate 18.936 hectares of paddy lands in West Sumatra Province. The irrigation system is utilized the Batang Hari river basin which is the largest river in the West Sumatera Province and it has a discharge capacity of 86 m³/second (Figure 6.4). The Batang Hari irrigation system also uses irrigation channels that already exist with the integrated system. Most of the construction was funded by the Overseas Economic Cooperation Fund of Japan (OECF), but also supported by the State and Regional Budget.

The availability of farming tools as a part of physical capital is also substantial for the farmer migrants. The famers have received various farming tools such as axe, machete, hoe, and fork from the Government of Indonesia during the first few years in the *transmigrasi* location. The support has continued to be given through the farmer groups' programs, such as tractor and rice milling.

Since the migrants moved to the *transmigrasi* location, transportation infrastructure such as road was poorly developed especially within the settlements of migrants. According to the migrants, the development of the road in migrant settlements was only conducted two times since they came to Sitiung I and it did not provide any significant changes since the first time. Most of the roads are covered by the gravels, asphalts concrete pavement (Figure 6.5).

In 1976, the Government of Indonesia provided a house building for each migrant household in the *transmigrasi* location with the size 30m^2 . The house was made of woods with the ground floor and inside the house contained one living room, one bedroom and kitchen. The

Government did not provide electricity and bathroom in the house. The Government built a common well (*sumur*) for every four houses. Therefore, during the early years of *transmigrasi*, the migrant households built a conventional bathroom by themselves near to their houses. For the current situation, all the migrant households have reconstructed their houses much bigger than the initial house from the *transmigrasi* program and also added the electricity.



Figure 6.3 The Location of Batang Hari Dam Project

Source: Irrigation Project of Batang Hari 2011

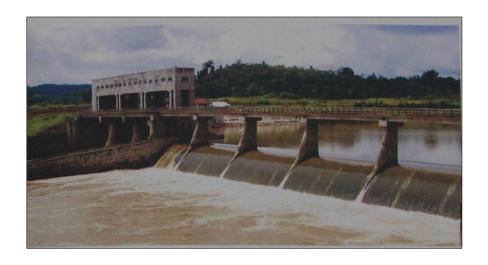


Figure 6.4 Batang Hari Dam in Dharmasraya Regency

Source: Irrigation Project of Batang Hari 2011



Gravel Concrete Pavement



Asphalt

Figure 6.5 The condition of roads in the migrant settlements

Source: Fieldwork 2013





Figure 6.6 Original house building from the *transmigrasi* (left) and current house building of migrant (right)

Source: Fieldwork 2013

6.4 Conclusion

This chapter showed the changing of livelihood assets after 37 years of migrant households had moved from Wonogiri to the *transmigrasi* location in Sitiung I in 1976. This chapter also provided the description about the assets of migrants in Wonogiri.

Before the migrants moved to the *transmigrasi* location most of them were landless with the background livelihoods in the agricultural sector. Most of them lived with their parents or parents in-law. In Wonogiri, the migrants had cultivation land, livestock, home plot, house, but all these lands and properties were belong to their parents or parents in-law, so that the compensation of the lands and properties were addressed to their parents. The migrant households also received the amount of money because their parents had shared with them. The migrants who owned the lands and properties were received compensation more than other migrants with the shared compensation. The compensation or financial capital from Wonogiri had been used to develop the livelihood assets of the migrants in the *transmigrasi* location especially it contributed to increase assets on livestock and to provide employment opportunity for the wage labors.

The Bedol Desa program provided the ownership of lands for the migrant households, those were landless in Wonogiri became landowners for paddy field, plantation land and home plot in the *transmigrasi* location. Natural capital of paddy land and the availability of physical capital in the form of irrigation system, and livestock are the most important assets for the farmer migrants. The training activities also contributed to increase the human capital of

migrants in order to improve their knowledge on the farming activities. In addition, the farmer groups as a part of social capital among the migrants has a significant influence to generate financial support for livelihood activity on agriculture. Based on these five assets, it is showed the mutual impacts of assets which contribute to create livelihood strategies of migrant households.

As a conclusion, Table 6.3 shows the changing of livelihood assets of migrant households since they resettled to the *transmigrasi* location. Most of the assets were changing positively except for the natural capital in which almost all the migrants lost their plantation lands because the conflict with the local people.

Table 6.3 The changes of livelihood assets of the migrant households

Type of Asset		T 101 1	2013		
		Initial years	Positive	Negative	
	Paddy field	all the migrants received 1 hectare of land	2 migrant households have added 1 hectare of land for each		
Natural capital	Plantation	only one migrant household received plantation land	1 migrant household has added 1 ha land	most of migrant households lost their land due to the conflict with local people	
Financial Capital		compensation and livestock	every migrant households have at least one cattle even more than initial year		
Social Capi	ital	farmer groups to receive training activities	farmer groups provide possibility to generate support from government		
Physical Capital	Irrigation System	inadequate	sufficient		
	House	each migrant households had a house with size 30 m ²	all migrants reconstruct the house bigger than the original house		
Human Capital		the migrant received training on agriculture from the Government	training activities is continuing to the present		

Source: Analysis 2014

7 LIVELIHOOD STRATEGIES OF MIGRANTS

7.1 Introduction

This chapter is designed to analyze the objective which covers livelihoods of migrants in Sitiung I before and after they involved in *the Bedol Desa* project. It includes the explanation about the livelihood activities of migrant households before they moved to the *transmigrasi* location in Sitiung I. Furthermore, I will focus on the livelihood strategies of migrant households after they migrated to Sitiung I. Various livelihood activities and the dynamics of livelihood strategies over the time will be explained as well.

For the first section, this chapter will explain the livelihoods of migrants before migration. In general, migrants from Wonogiri were highly dependent on agriculture especially farming and livestock activities in their place of origin while some of them worked in non-farm activities. In the second section I will elaborate the livelihoods of migrants after they moved to the *transmigrasi* location in Sitiung I. Most of the migrants are still depending on agricultural activities including farming, plantation and livestock as their livelihoods activities.

Livelihood, in a broader context, encompasses the accumulation strategies that should be exploited by individual or household to survive (White 2009). The survival strategies are affected by the assets, access, and the vulnerability context. In this research I also take into account the problems encountered by migrant households which made their livelihoods vulnerable especially during the early stages after the migration. In order to overcome these problems, the migrant households implement a range of livelihood activities as survival strategies which are divided into three categories: on farm, off-farm and non-farm activity. The availability and access of assets determine the livelihood strategies of migrant households positively or vice versa. Therefore, I will focus on the analysis of the livelihood strategies applied by migrant households to cope with the vulnerability context and to sustain their livelihoods.

7.2 Livelihoods before Migration

Agricultural sector is one of the main economic leadings in Indonesia. This sector is also one of the largest contributors to provide employment opportunities, in addition to the trades, services and industrial sector. More than 38 percent of Indonesian people are working in this field (Employment Statistic of Agricultural Sector 2013). This is including sub-sector of food crops, plantation, livestock and horticulture.

Wonogiri, as one of the rural areas in Indonesia is characterized by the agricultural sector as the main economy activity of the community in this regency. Mostly, communities in Wonogiri work as farmers for food crops and livestock.

During the fieldwork, questions regarding the livelihood income activities before leaving the homeland area were asked to the migrants. The result was that the migrants from Wonogiri had several categories of livelihood activities both in farm and non-farm activities (Table 7.1). Out of 26 research participants, 22 had a farming background and only the rest of 4 migrants who worked in non-farm sectors as civil servants, involving as a labor industry and services.

Table 7.1 Income activities of the research participants before migration

No	Activities	Number of research participants
1	Agricultural	22
2	Civil Servant	1
3	Labor in factory	1
4	Service (cleaning and shopkeeper)	2

Source: Fieldwork 2013

On-Farm and Off-Farm activities

As I already mentioned before, income generation on agriculture was the main livelihoods activity of migrants in their place of origin before migration. Migrants living in rural areas depend on subsistence farming for their survival. Migrants who worked as farmers have not always had their own land. Most of them worked as agricultural laborers on the land owned by other farmers. It caused by the economic condition of migrants in which most of them were from the poor families so that they need to work as laborers to generate their livelihoods.

Only a few of them were smallholders of agricultural land and the size of the land was less than one hectare. Family members are the most valuable for human capital in order to manage agriculture land. Unpaid workers which are imposed to the family members are typical of employment system among the household members who work in their own land. Therefore, it was possible for the households to reduce their expenditure for production factors by applying such a scheme.

Non-farm activities

Besides on-farm activities, few of migrants had also non-farm income generation such as involving in service works and become a civil servant in the Department of Public Works in Wonogiri Regency. Before the *Bedol Desa* program, three of the research participants are compelled to migrate to the urban areas as temporary migrants due to unavailability and limitation of any other jobs in rural areas as well as to get life experiences. Two of the research participants had migrated to the nearby urban area in the capital city of Central Java Province, Semarang. It is located 133 kilometers from Wonogiri Regency. One of them worked as a janitor in a public office and the other one worked as a pharmacy shopkeeper in Semarang city.

At that time, they were young and because of poor economic conditions, they migrated to the urban areas to get some economic return for the households. One of the research participants said:

"I am the oldest child in my family and I have four younger brothers who are living together with my parents. Even though my parents have paddy land, it is not enough to provide the family consumption for the all members and we cannot earn so much money from the rice production. I sacrifice myself to migrate to Semarang because the economic situation of my family. I worked as a janitor in one of the public office in Semarang City thus I can earn some money for myself to survive in Semarang and for my family in Wonogiri. I send some of the money that I received from my job to my family in order to provide the school needs for my younger brothers."

In addition, one of the research participants went to several urban areas for a couple of years before he involved in *Bedol Desa* program. He went to Solo City, which is still located in the Central Java Province and worked in the musical instrument factory for six months. Continuously, he had been to the capital city of Indonesia in Jakarta and worked as a laborer in industry for ten years.

"I went to Solo City in 1961 when I was 19 years old. I went there with my friends to gain experience of my life and worked in a music instrument (guitar) factory for six months. After that I went to Semarang City and worked in the soybean curd factory for six years that was owned by my uncle. Every six months I returned to Wonogiri, to my family and I spent one month in my village and then back again to Semarang. In 1967, I went to Jakarta and worked as laborer in the food industry for ten years. When I finished work in this industry, I followed my uncle to work in construction building just for three days after my younger brother picked me up from Jakarta to go back to Wonogiri and join Bedol Desa program."

According to these cases, migration has been a part of the livelihoods of migrants before they even involved in the *transmigrasi* program through *Bedol Desa*. The poor economic condition was the major reason that made them look for another job out of farm activities in their home areas.

7.3 Migration as a Livelihood Strategy

Migration was a livelihood strategy of rural community in Wonogiri. Migration has been a response of rural community especially for poor family to cope with vulnerabilities of their livelihoods. They attempted to advance their life chances through mobility in search of property rights of land especially for agriculture and opportunities for employment. As some of the research participants explained, if they stayed longer in Java and did not involve in *Bedol Desa* program, it was impossible for them to have two hectares of land. In spite of, at the end they did not receive their right for plantation land and instead they only accepted compensation in the form of money or cattle.

Despite, they forced to migrate from their place of origin but they look like no regret has been joined in the *transmigrasi* program. They believed that the Government of Indonesia, in which at that time was led by President Suharto, was very concerned for people, especially for the communities from Wonogiri. *Transmigrasi* program through the *Bedol Desa* was a form of the Government attention to improve the welfare of Wonogiri communities. As one migrant quote:

"I believe to the Indonesian Government (President Soeharto) that they will not harm their own people. If there was no Bedol Desa program from the Government, the people from Wonogiri will never be what they are today. Here, our life is more prosperous than at Wonogiri, I thanks to Presiden Soeharto."

I had one case in which the government employee tended not to join *Bedol Desa* program and preferred to move to another location outside the Dam but still located in Central Java Province. I interviewed one person who had worked as a government employee at the Department of Public Works since in Wonogiri and continued in Dharmasraya after migration. During the migration processes, he had no plan to join the *Bedol Desa* program. But finally, he and his extended family were participating in the program because he had many relatives who were farmers. He also considered the sustainable livelihoods of his relatives and the next generation for the whole family and if they choose to stay in Java it will be unsecured for the long term of livelihoods.

He became the first government employee who decided to involve in *Transmigrasi Bedol Desa* program from his village. Mostly, government employees were reluctant to join *transmigrasi program* because they were worried about losing their jobs in the new place (Gondowarsito 1990). This also happened to my research participants. He explained after his relatives have settled in Sitiung I, he planned to go back to Wonogiri in order to continue his previous occupation. He came to Sitiung I in 1977 and four years after, he went back to Wonogiri, in 1984. He got protests from his relatives because of his decision to go back to Wonogiri. At the end, he decided to choose Sitiung than Java Island after passing through a long administrative process to obtain the official letter to move as a government employee. The problem of long delays of salaries which should be paid from Java also become one of the major problems that made the government employees decide to go back to Wonogiri.

Migration is seen as to contribute positively to the achievement of secure livelihoods, and to the expansion of the scope for poor people to construct their own pathways out of poverty (Ellis 2000). Deep inside of the *transmigrasi*, the program was not merely moving people from Wonogiri to Sitiung I but also, provided them with the opportunity to have a right towards several lands. This was always mentioned by migrants during the interviews. The opportunity to have a claim for property right was an important value of *Bedol Desa* program. They mentioned it because most of them have a background of livelihood activities as farmers thus agriculture land is considered to be an important asset for them.

7.4 Livelihoods after the Bedol Desa Program

Migration provides various positive impacts of migrants' livelihoods. In the case of interisland migrants who resettled from Wonogiri to Sitiung I Dharmasraya, the migration was an important action to improve migrants' livelihoods. As already described, migrant community from Wonogiri seek for a better life and livelihoods in the new place. Insecurity of previous livelihoods and the uncertainty to sustain their livelihoods due to the lack of assets especially on the agricultural sector were important factors that affected their decision to move through the *Bedol Desa* program.

As a background on livelihoods in agriculture, the majority of migrants who moved to Sitiung I still remain as farmers. During the processes of migration, the Government of Indonesia explained very well in order to motivate the village communities in Wonogiri to get involved in the *Bedol Desa* program. According to the information from migrants, there was no negative impression from the Government's explanation.

"The Government said that paddy land (sawah) is readily available in Sitiung I."

Conversely, all of the research participants explained that they encountered many problems that had impacts on their livelihoods pattern.

7.4.1 The problems encountered

It is no doubt that the migrants from Wonogiri faced several problems when they first arrived in *transmigrasi* location in Sitiung I. It was recognized by the all research participants that they had the same arguments about the first impression of *transmigrasi* location. They expectations before migrating did not meet with the actual conditions on the site. All migrants were surprised to see the condition of the house and yard (kitchen garden), the paddy land and plantation land. As one migrant mentioned:

"Before we moved to Sitiung, the Government explained that the paddy field is ready to be planted, but in fact it was not printed, there was no irrigation system, even in the backyard (kitchen garden) of the house there were large residual wood from logging. Even, it is difficult to see the houses of my neighbors on the left and the right side of my house because the yard has been covered by alang-alang (Imperata cylindrical)."

The major problems encountered by them included unavailability of irrigation system for several years after moving to the *transmigrasi* location, less-fertility of paddy land due to the mechanical process of land clearing and deprivation of 0.75 hectares of plantation land due to conflict with local people.

Unprepared of Paddy Land (Sawah)

Suitability for irrigation (for wet rice production) and proximity to Java Island in order to reduce transport costs were the two major factors for sites selection of transmigration location under the Dutch Colonization policy (Arndt 1984). After the Government of Indonesia undertook the government system, especially in the regime of President Soeharto, these criteria had been shifted due to the shortage of land availability for the transmigration location. The choices were the relatively poor soils of rain-fed upland; under primary forest or under grass with secondary timber growth; and reclaimable swamp (*ibid*).

The reclaimed swampland seemed to be a sufficient alternative land for transmigration location alongside with the high priority on the increasing food production program. This location provided the opportunities for tidal irrigation and it was suitable for wet rice cultivation. It became a major concern of the Government of Indonesia in 1967-1969, and the high cost of swamp reclamation can be tackled by the oil boom revenues. After the oil crisis held on 1975, the targeted area for swamp reclamation for migrant settlements was declined and supported by the technical constraints in which not all the coastal land was suitable for tidal irrigation. Thus, the site location for transmigration location shifted to the rain-fed upland areas of the Outer Islands.

Most of the land in Sumatera, Kalimantan, Sulawesi and Irian Jaya contain red-yellow podzolic soils. These lands are deep, well-drained, friable and porous providing favorable physical conditions for plant growth (Thomas 1981 in Perry 1985). Under original rainforest conditions important nutrients are stored in vegetation and continuously recycled to a shallow layer of surface soil rich in organic matter. Before clearing, the soil and forest have a remarkably closed nutrient cycle in which most nutrients are stored in the biomass and topsoil, and transferred from one to the other by rain wash, litter fall, timber fall, root decomposition and plant uptake (Sanchez cited in Ross 1980: 76). But due to the mechanical methods which applied for land clearing of forested areas, it reduced the agricultural potential for transmigration location. This shallow surface layer is susceptible destroyed by rapid weathering and leaching.

The result of land clearing causes the significant changes in soil physical properties including soil and air temperatures increase, soil moisture regimes are altered, soil structure deteriorates leading to run-off, and erosion losses occur in poorly aggregated top soils (Ross 1980). The soils loss of essential nutrients needed for plant growth such as nitrogen, phosphorus, potassium, calcium, and magnesium and produce high levels of aluminum and iron which can be toxic for the plants.

The major soils in Sitiung I are characterized by the red-yellow podzolic and the mechanical system was used for the land clearing of this area. During the early years after the migrants moved to Sitiung I, they were not able to grow food crops on their paddy land because of the larger trees logs after felling and bulldozers were still lagging on the field. Even though the Directorate for Planning in the Department of Public Works was responsible for the land clearing but the program did not include removal of the stumps of larger trees logs (Arndt 1984). In addition, the migrants also faced the soil problems that were caused by the mechanical system for land clearing. The paddy field which has been promised by the Government was not equipped with the embankments and irrigation system. Those problems have been added to the land problems, which were encountered by the migrants during the early stages.

The Government of Indonesia has provided the migrants with the agricultural tools such as axe, machete, hoe, and fork for each migrant's household. These tools were not sufficient to remove and clean the paddy land from the big trees, so they started to cut the tree logs into small pieces and burn. These conventional techniques gave advantage to the soil fertility because it provided nutrients for growing plants. The soils affected by the burning of logs are could be planted by the crop trees.

All the big trees were impossible to burn immediately because it depends on the moisture level content and density of the wood. In addition, if the rain drops, they had to postpone burning the logs and waiting until the logs become well-dried. Therefore, the migrants did not directly clean all the land, but they did it gradually in order to provide small access for planting agricultural crops. They began to plant agricultural crops after they cleaned small areas from their plots. It also happened on the 0.25 of hectares of land for house where the stumps of the tree logs partially filled their backyard or kitchen garden.

It took three to five years for the land preparation in order to provide an appropriate land for planting including the process to remove or clean the paddy land from the trees logs, construction of dikes or embankment, and the development of irrigation system leading to their paddy lands. In consequence, labor shortages have been one of the causes of the length of the cleaning process.

Insufficient Capacity of Irrigation System

Inadequacy of primary irrigation system that should serve the paddy fields of migrants was also the main factor that caused the failure of crops cultivation. There were three main development projects of irrigation systems that has been built under the Sedasi program before the latest Batang Hari Dam was constructed in 1996, namely Piruko and Palangko Dam, Batang Siat Dam and Pompanisasi (the Pumps). All of these irrigation systems have failed to provide water supply for the entire paddy lands of migrants. In fact, the system capacity of the dams was only able to irrigate 39 percent of land targeted, which was 4.938 hectares.

During the Sedasi until the Pumps project, the migrants had to wait their turn in order to obtain water filled in their paddy land. It meant that, when the migrants in certain paddy land location cultivated the lands the Sedasi irrigation would be used for it. So, the paddy lands of migrants in other places, which were also irrigated by the Sedasi must wait their turn after the paddy harvested in previous location. It took four until six months for one harvest. The water irrigation has been improved since the availability of the Batang Hari Dam. The farmer migrants are able to cultivate their paddy lands and harvest the production of paddy from two until three times a year.

Conflict with Local People

Officially, each household of migrant received two hectares of land which were divided into three plots: one hectare for agricultural land, 0.75 hectares for plantation and 0.25 hectares is adjusted for home plot including the kitchen garden. According to the migrants, local people have taken the right of migrants towards plantation land. As one respondent mentioned:

"When I went to the plantation land, I met the local people who already cultivated my land. I explained to him that this land is owned by me. I showed him the certificate that I got from the Agrarian Affairs but he did not accept it and he still insisted that the land belonged to him (local people). Local people said: You (migrant) can take the certificate but you cannot cultivate this land because it belongs to me."

Before the Government of Indonesia provided land settlements for Wonogiri community, the site location for *transmigrasi* in Sitiung I was owned by the community of indigenous people (Minangkabau tribe) with hereditary rights (*tanah ulayat*-customary property). The conflict emerged because local land claims have not always been properly dealt with before arrival of migrants (Hardjono 1978). For migrants, the Government of Indonesia has indemnified the plantation lands for migrants and it has been agreed with the Minangkabau ancestor or with the generation who live during land preparation for the *transmigrasi* Bedol Desa before 1976. Probably, information about the land was not delivered to the next generation so that the conflict appeared.

Some migrants also mentioned that the local people are asserted property rights promised by the government to them. During the process of land compensation for *transmigrasi* location, the Government has pledged paddy lands for local people. However, the local people never received such lands thus they took back the lands that entitled to them previously.

Another factor that affects the appearance of this conflict was the length of cleaning processes of home plot and paddy field. None of the research participants had yet begun to prepare their plantation lands during the first few years. It was also caused by limited energy and labor to cultivate the plantation land. Due to the lack of cultivation activities in the plantation lands, the local people assumed the lands were empty and were not owned by anyone thus they started to farm the plantation lands of migrants.

Despite, the migrants from Wonogiri experienced many problems in initial stages but now they showed a considerable degree of success. Now they can say their lives is even better in comparison to their relatives who stayed in Java Island. All the research participants did not regret to be resettled by the government through *Bedol Desa* program and they have no plans to return to Java. They are satisfied with their current living conditions. Their houses are larger than the previously and their children can obtain higher education.

7.4.2 Livelihoods Strategies of Migrants

Livelihoods of migrants from Wonogiri tend to be complex. They pursue varied activities to generate income even though the main livelihood activity is on natural resource-based activities on agriculture. The problems encountered by the migrants were the basic reason of most migrants to transform their livelihood strategies since they came to the *transmigrasi* location in 1976.

On-Farm and Off-Farm Activity

Bedol Desa Wonogiri-Sitiung I was promoted to the people who had a background as farmers or to those with a famer's soul and who had willingness to cultivate the agriculture land. In Wonogiri, the basic livelihood of migrants was on farm activities. Repeatedly, income generation through agricultural sector is the main livelihood activity of migrants in the *transmigrasi* location in Sitiung I.

As a farmer, natural capital is one of the most principle assets to generate income for the livelihoods of migrants. Since the paddy field could not be planted with rice in the first few years because the soils problems and insufficient water irrigation, they started to grow subsistence crops (*palawija*) such as cassava, maize, and peanuts in their paddy lands for couple of years. Most of these crops utilized for household consumption because it did not produce economic value on the market. They also cultivate fruit trees, cocoa, coffee and clove trees around the house.

Farming of livestock had become one of the characteristics of the community of Wonogiri. This activity is not an easy task for the migrants even though they have been practicing it since they live in Wonogiri. They need to cut the grass two times a day in the morning and afternoon to feed the cattle. The migrants, who are able and have adequate physical condition, will maintain this work by themselves. Vice versa, the migrants who have a physical limitation condition tend to hire another people and pay them.

Since the first year of settlement, all migrants in Sitiung I received a monthly supply (*jatah hidup*) that was provided by the Government, including rice, salted fish, salt, kerosene, sugar, sweet soy, soap, green beans and cooking oil. The supplement of rice has been extended for six months because the dry season and crop failure that made the migrants did not have enough food for households' consumption. These supplements were very helpful for households of migrants to survive, especially in the early stages when the agricultural production could not sustain their daily needs.

During the first few years, all migrants faced the same problems of soils and irrigation system. In order to accelerate the processes of land cleaning, some of the migrants have made working groups (*Kerja Bakti*), which contain ten to fifteen people. The members of the group are people who live in the same neighborhood. They worked together cooperatively to help the members of the group to clean the lands.

The cleaning processes of lands provided an opportunity for some migrants to generate income from the landowner who needed additional labors to speed up the land cleaning. Three of my research respondents have employed some labors to work in their paddy lands since the first time they came to Sitiung I. Based on the economic status of them, they are rich family who earned more money from the compensation than other migrants. Hence, they are able to hire labors to work for them.

The wage labor on agricultural production is continuing until the present days. The wages between woman and man labor are different. The wage for man is higher than woman although they work with the same amount of time. Usually they work from 8.00 a.m. to 14.00 p.m. The wage for man is Rp. 10,000 - Rp. 20,000 more than woman, in which woman will be paid around Rp. 50,000 per day (with meals provided by the landowner) and man is Rp. 60,000 - Rp. 70,000,- per day. The landowners normally employ five people to cultivate their paddy lands.

Land Conversion from Food Crops to Tree Crops

More than fifty percent of the research participants have changed the land use of paddy fields, where it was supposed to be planted by the food crops into tree crops since 1990s. It was caused by the shortage of water irrigation in Sitiung I where not all the paddy lands of the migrants can be supplied by the irrigational systems. The migrant farmers cannot rely on their livelihoods on food crops production as a single means of income. Therefore, the migrants began to plant some portion of their paddy lands with tree crops, particularly rubber and palm trees (Figure 7.1). In addition, the migrants also mentioned that the tree crops are less demanding than food crops in relation to the production inputs of fertilizer and maintenance.

The expenditures to plant tree crops are also lower than food crops. For example, the migrants who planted the palm trees explained that once the tree crops have been planted, the following work needed to be done are fertilization for every month, spraying weeds and trimming the palm leafs. For the first time, the palm trees can be harvested after four years. The results will continue to increase along with the age of the plant and the palm trees can continue to produce until seven years.

Besides the low demand on production inputs, the production resulted by the palm trees has a higher economic value than the rice crop production. Hence, the migrants can generate more revenue than the income derived from food crops. The amount of fresh fruit bunches can be

harvested from a half hectare of land of palm trees is between 250 to 500 kilograms per month. The price of fresh fruit bunches per kilogram is around Rp. 1,600-Rp. 1,800,- thus the farmer will receive approximately Rp. 700,000 per month and Rp. 8,400,000 per year for their livelihood income. One of my research participants has become a middleman as one of livelihood strategies besides the cultivation of food crops. He started this business since 2010 and has been gathering the production of palm trees from the farmers (Figure 7.2).

Generally, the migrants sell the fresh fruit bunches (*Tandan Buah Segar* – TBS) of palm trees to the middleman or intermediary. A middleman is the person who collects the production of palm trees from the farmers and then sells the accumulation of these productions to the Crude Palm Oil (CPO) Industry. The payment of the production depends on the agreement between the middleman and the farmer. The migrants explained that sometimes they are able to receive the payment directly from the middleman with the price that has been set by the company. Or, they will be paid after the intermediary has been selling the palm trees production to the industry.

The Government has encouraged the migrants to not convert their paddy lands into plantation lands since this issue emerged before the construction processes of Batang Hari Dam. It is related to the characteristic of land in Dharmasyara that is more suitable for food crops. It is also associated with the plan to make Dharmasraya Regency as the rice granary of West Sumatera to support national food security. In fact, the land use change of paddy fields is inevitable. There are some migrants who do not agree if the farmers replace their paddy lands to be planted by tree crops but some of them agree to change land use of paddy lands. As a migrant said:

"In the past, why the, why people moved from Wonogiri to Sitiung I is because they asked to look for paddy fields. Now, the fields have been obtained but instead they changed into plantation lands." (Quote from a migrant who is not agreeing to change the land use of paddy fields).

Another migrant has mentioned:

"The migrants (farmers) cannot be blamed if they changed the paddy lands into plantation fields. For a couple of years we could not produce enough food and generate income from rice production because the shortage of water irrigation. So, the farmers are not wrong. We need money to feed our family." (Quote from a migrant who is agreeing to change the land use of paddy fields).



Figure 7.1 Land conversion in paddy fields for palm trees

Source: Fieldwork 2013



Figure~7.2~The~fresh~fruit~bunches~of~palm~trees~in~the~yard~of~research~participant~(middleman)

Source: Fieldwork 2013

Livelihood Diversification

a. Wage Labor

Most of migrants those rely their livelihoods on-farm activities received inadequate income to provide their households needs in a couple of years after they migrated to the *transmigrasi* location in Sitiung I. Therefore, they commenced another job outside the cultivation activities. The availability of employment was mainly on construction projects, which were provided by the government in Dharmasraya Regency and in the urban area. There were several construction projects especially in the development of irrigation systems which held In Sitiung. More than 50 percent of research participants are involved in these projects. The first

project was the construction of Sedasi Dam in 1976 but the migrants started to involve in this project in 1978. The next project was the construction of Pumps (*Pompanisasi*) from 1980-1982 and continued with the Batang Siat dam project until 1986. The last project of dam construction which needed labor intensive was the Batang Hari. The training given by the Government before the departure to *transmigrasi* location in Sitiung I on construction has made them able to involve in this project.

Research participations who involved in construction project outside of Sitiung tended to live away from their house for several months. They have been involved in building construction in Padang, the capital city of West Sumatera Province. Consequently, their agriculture lands were often poorly attended and thus the shortage of labor input was influenced to the delaying of paddy lands cultivation. However, it gave a positive contribution to the livelihoods of migrant's households directly because it provided a complement for farm incomes in the early stages before all the paddy land is producing.

Within the *transmigarsi* location in Sitiung I, the construction of new houses of migrants also provided the opportunity for income generation for migrant farmers. One of my research participation built a new house during the first few years, replacing the original house of *transmigrasi* program. He recruited other migrants to work. In line with the increasing well-being and incomes of migrants, more migrants build a new house in their home plot for them and their children. Thus, in 2,500 square meters of home plot they may have more than one house.

Even though, they had been involved in some construction projects as wage laborers, but they are essentially farmers. The availability of Batang Hari Dam is the big momentum of some migrants to their livelihoods. Most of migrants mentioned that after the water irrigation from Batang Hari Dam filled their paddy lands in 2000s, they were more concentrated to cultivate their paddy lands.

b. Trading Activity

One of the research participants is also involved in non-farm activity in trading to generate livelihood income for the household. He built several kiosks in the home plot since 2011 and sells many things such as clothes, daily needs, and telephone kiosk (Figure 7.3). Sometimes he also works as a contractor in construction building. Before he started the business, he worked in his own paddy land but now he employs people to cultivate his land.



Figure 7.3 Kiosk owned by migrant farmer

Source: Fieldwork 2013

c. Non-Farm Activities as the Main Livelihoods

I had two research participants who had main occupation in the public sector, one of them is a teacher in elementary school and the other one who has been working as a public servant but he is already retired. Different from other migrants who have main occupation as farmers, both of them generate incomes from non-farm activities although they also obtain livelihood incomes from agriculture cultivation. One research participant who worked as a public servant, before he retired from his job, he utilized the main salary from public servant occupation as the main income of household in line with the income from farming activity. After he retired, agriculture activity became the main livelihood of his household.

7.5 Conclusion

This chapter has explained the livelihoods strategies of migrants before they resettled and after they moved to the *transmigrasi* location in Sitiung I. In Wonogiri, most of migrants generated livelihood income from farming activities as farmers on their own land and became agricultural laborers. Some migrants had also significant activities of income generation on non-farm activities outside Wonogiri, such as involving in trading, services, becaming a civil servant, and laborer in factory. Furthermore, after the migrants migrated to the *transmigrasi* location the basic livelihood activity still remain in the agricultural activities. Most of migrants had diversified their livelihood income activities since the early stages of migration because they encountered several problems. Shortages of natural and physical capital, which are the most important assets for the farmer migrants, have turned their livelihoods in a vulnerable condition. They could not rely only on farming activity especially on the paddy

field. Therefore, they pursued varied livelihood activities in order to sustain their livelihoods in the *transmigrasi* location in Sitiung I. They were diversifying the livelihood activities onfarm, off-farm and non-farm sector as their livelihood strategies.

According to the sustainable livelihoods approach, poor people are more vulnerable and they tend to diversify their livelihood income in order to survive. This, I also found in my research. Most of migrant households in the *transmigrasi* location have backgrounds from poor family and even in the early years after migration they still remain in poor circumstances. Therefore, their livelihood activities are more diversified than the better off. Table 7.2 shows the differences and the diversification of livelihood activities of migrant households during the time. I classified the livelihood activities into two categories, which are farm and non-farm activity. In the early stages of the migration, the poor households were highly dependent on the availability of employment provided by others such as the government through the construction projects, and from the rich people, which could provide wage labor on the agricultural sector. When this research was conducted in 2013, the pattern has changed. The poor farmer migrants previously worked as laborers on the other agricultural lands but now they could pay wage laborers to work on their own lands. Some of them are also involved in trading activities and have become a contractor. This indicates that their livelihoods have positively changed.

Table 7.2 The changes and diversification of livelihood activities of migrant households

Category of Activities	Type of Activities	1976	Now
	Farmer (rich households)	FarmerProvide wage labor on agriculture	FarmerProvide wage labor on agriculture
Farm Activities	Farmer (poor households)	Wage laborer on construction worksWage laborer on agriculturefarmer	 Provide wage laborer on construction works Trader/contractor Middleman farmer
Non-farm Activities	Public Servant	Public servantProvide wage labor on agriculture	FarmerProvide wage labor on agriculture
	Teacher	Farmer	TeacherProvide wage labor on agriculture

Source: Analysis 2014

8 CONCLUSION

8.1 The Causes of Migration

This research is about the livelihood strategies of migrant households in the *transmigrasi* location in Indonesia. They have been resettled by the Government of Indonesia from Wonogiri, in Central Java Province, to the *transmigrasi* location in Sumatera Island called Sitiung I, which is located in the Dharmasraya Regency. The resettlement started at the end of 1976 to April 1977 through *transmigrasi* program called *Bedol Desa*. The environmental problems occurred in their place of origin, Wonogiri, where this location became prone to extreme drought in the dry season and excessive flooding during the rainy season. In order to save the community and the environment of this area, the Government of Indonesia decided to build a dam in this location and moved people from the area that has had to be inundated to the new location.

According to the concept of *Bedol Desa*, no one remained in the villages because the entire communities have been moved collectively to the new place, especially for those who lived in the location that will be affected by the dam construction. The *transmigrasi Bedol Desa* Wonogiri- Sitiung I was fully sponsored and organized the Government of Indonesia. The political sense was also colored the processes of migration because Wonogiri is the childhood area of President Soeharto. Therefore, this *transmigrasi* received special attention from the national government of Indonesia since the preparation before moving the people until the migrants resettled to the new place. The Government of Indonesia was provided the compensation for the lands, property and even for the relocation of grave ancestors in Wonogiri.

The *Bedol Desa* Wonogiri-Sitiung project was managed by the Department of Public Works of Indonesia with top-down coordination system established until the local level. The processes before the departure times were also arranged by the Government, including recruitment processes, criteria for selecting migrants, and delivery of information about the *transmigrasi Bedol Desa* itself. The migrants have met the criteria from the Government especially the criterion of age in which the head of family should be aged between 20 and 40 years, single men and women, and widowed with children were unqualified. The age became a critical point for the migrants because it relates to the assets provided by the government in

the *transmigrasi* location. Therefore, some migrants had to set up a quick marriage with someone in order to acquire the married status on the paper. There was also a possibility for the households who were not affected by the dam construction to involve in the *Bedol Desa* program, but they had to be registered as a village resident in priority areas. As a consequence, they did not receive the compensation towards the land and property they owned.

The Government provided two options for them before the resettlement started, which were resettling locally or joining the *Bedol Desa* voluntarily to Sumatera Island. The Government only provided compensation for the former, but the compensation and the rights of land tenure in Sumatera Island were given to the migrant households who joined the *Bedol Desa* program. The latter became the main reason that affected the decision of migrant households to move from their place of birth. Even though the migrants were forced to leave their villages in Wonogiri, they never recognized themselves as forced migrants because they voluntarily joined the *Bedol Desa* program. In addition, the predicate of the 'Golden Boys' of President Soeharto has been attached to them because they received particular attention from the Government as mentioned above.

In Sumatera, the Government gave two choices of *transmigrasi* location that can be selected by the migrants, named Sitiung I in West Sumatera and Rimbo Bujang in Jambi Province. Location of Sitiung I was suitable for agricultural activities especially for paddy field and the Government provided two hectares of land. Meanwhile, Rimbo Bujang was fit for plantation activities especially for rubber and palm oil cultivation. The location of Sitiung I was chosen as the new settlement of migrants from Wonogiri because it had similar characteristics of land in Wonogiri particularly the condition for agricultural activities. The government provided two hectares of land for them including one hectare for paddy cultivation, three-quarters hectare for plantation and one-fourth hectare of land for home plot including the house.

As already mentioned, the opportunity to have own lands was the main concern of migrants to involve in *Bedol* Desa program. Most of them come from poor family backgrounds and were landless, thus the *Bedol Desa* program gave them the possibility to improve their livelihoods in the new place by cultivating their own agricultural lands. In addition, to prepare the better education for their children to the higher levels was also being taken into consideration in their decision to move because the Government provided school facilities in the *transmigrasi* location.

All the migrants described that it was very difficult for them to leave their homeland in Wonogiri. They had strong attachment with their family, relatives, friends, neighbors and to their village community. Through the *Bedol Desa* program, the uncertainty and doubts about the conditions in *transmigrasi* location have been resolved by the bonding to the family and the feeling of togetherness as Wonogiri community.

Under the *Bedol Desa* scheme, all the lands affected by the dam construction were compensated by the Government of Indonesia. This included land for crops, property land and attributes inside the home plot, such as the plant trees and the graveyard of the ancestor, except the house building and livestock, which can be sold by them. Most of migrant households were landless in Wonogiri because they lived with their parents or parents in-law those owned the lands; only two of the research participants had their own land and properties. However, the migrant households still received the compensation because their parents or parents in-law distributed the money to the entire family members, but the amount of money they received was less than the migrant households who had their own lands. Therefore, from Wonogiri the migrants have brought financial capital from the compensation and essential items such as such as kitchen utensils, seed crops, and agriculture tools to support their new lives in the *transmigrasi* location.

8.2 The Availability of Assets

After migration, the *Bedol Desa* program was provided ownership of lands for the migrant households. So now, the migrant household had their own lands, including paddy field, plantation land and home plot in the *transmigrasi* location. Most of the assets were changing positively except for the plantation lands, where most of the migrant households lost their lands due to conflict with the local people. As a compensation for this, the Government provided cattle or cash money for the migrants.

According to their basic activities, natural capital of paddy land, the availability of irrigation system, and livestock are the most important assets for the farmer migrants. The availability of livestock is very important for the migrant households because it provides a long-term investment for children education, building a house, to buy a land, and other needs that require a large amount of money. Since they came to the *transmigrasi* location they kept farming livestock in their home plot. On the natural capital, only few migrants have added

their assets on lands, both of paddy land and plantation, and the rest of the migrants still rely on the one hectare of paddy land.

The social capital among the migrant households remains strong even stronger than in Wonogiri especially for the celebration of wedding and circumcision of their children, known as *kerukunan*. The migrant households have also farmer groups since they come to Sitiung I. Initially, the groups were created to receive training activities from the Government but now the farmer groups provide the opportunity to receive support from the government especially financial support or agricultural tools for cultivation. The training is provided to improve the human capital of the migrants on the agricultural sector.

For a few years in Sitiung I, the irrigation systems were not sufficient to irrigate the entire paddy lands of migrants. But since 1996 the project of the Batang Hari dam was constructed and has provided water irrigation for all paddy lands of the migrants until now. All the migrant households have reconstructed their houses and added electricity, in which in 1976 the Government of Indonesia only provided a house building, 30m^2 , for each migrant household in the transmigrasi location.

8.3 Livelihood Strategies of Migrants

Farming activity is the main livelihood for all migrant households in Sitiung I. The problems encountered by them during the initial years of migration have made them diversify their livelihood activities. The problems included shortage of irrigation system, and soil problems in the paddy fields, which made it difficult to generate income from their natural assets. Conflict with local people has made the migrant household losing their plantation land; thus they had fewer possibilities to sustain their livelihoods on agriculture. Therefore, a range of livelihood strategies have been applied by migrant household to cope the vulnerability of their livelihoods. The diversification of livelihood activities involved both farm and non-farm activities. There were differences between poor households and the better off. The livelihood activities of poor households are more diverse than rich households because they have limited resources to pursue their livelihoods. They worked as wage laborers on agriculture which provided by the other migrants and also involved in the construction projects providing by the Government. Only one migrant household had non-farm occupation as the main livelihood income. During the time, the availability of sufficient irrigation system has changed the livelihoods pattern of migrant households. They started to cultivate the paddy lands intensively and they could generate income from the rice harvest. The livelihoods of migrant households were better than previous time. The poor migrants who worked as wage laborers previously are able to provide employment on their paddy fields for other migrants. Some of them were also involved in non-farm activities such as trading. The livelihoods of migrant households have positively changed since they came to the *transmigrasi* location in 1976 until now.

According to the historical background, the migrant households were forced to migrate or they were categorized in the involuntary migration because their place of origin has had to be inundated due to the dam construction. Most of empirical evidences showed that development-caused involuntary population resettlement are lead to impoverishment of displaced people. Contrarily, what I found in my study is that the livelihoods of the migrant households have positively changed during the time. In addition, they do not considered themselves as forced migrants but as "Golden Boys" of President Soeharto because the Government provided special attention through this program due to the political sense. It was true that they encountered many problems during the first few years of the resettlements but they could manage the vulnerabilities of the livelihoods helped by the access of the governments and other actors. Since the beginning of the resettlement, the Government provided the needs of the migrants including the access to the job opportunities, incentives for agricultural activities, and education on agriculture by training activities. It gave positives impact to the migrant livelihoods. In addition, the migrant households, as the active agency who have ability and knowledge, are able to change their livelihoods through a series of livelihood strategies and employ livelihood assets possessed by them, which initially were given by the Government. Therefore, it was such a case where the development induced displacement of people leaded to positive livelihood changes.

REFERENCES

- Arndt, H. W. & International Labour Office & World Employment Programme & International Labour Organisation. Population and Policies Branch (1984). *Transmigration in Indonesia*. International Labour Office, Geneva
- Arndt, H. W. & Sundrum, R. M. 1977. Transmigration: Land Settlement or Regional Development? *Bulletin of Indonesian Economic Studies*, 13(3), 72-90.
- Arndt, H. W. 1983. Transmigration: Achievements, Problems, Prospects. *Bulletin of Indonesian Economic Studies*, 19(3), 50-73.
- Beaman, L. & Dillon, A. 2012. Do household definitions matter in survey design? Results from a randomized survey experiment in Mali. *Journal of Development Economics*, 98, 124-135.
- Bryceson, D. F. 2002. The Scramble in Africa: Reorienting Rural Livelihoods. *World Development*, 30(5): 725-739.
- Cernea, M. 1997. The Risk and Reconstruction Model for Resettling Displaced Populations, *World Development*, 25(10), 1569-1587.
- Chambers, R. 1989. Vulnerability, Coping and Policy. IDS Bulletin 2002, 1989, 20(2), 1-7.
- Clifford, N., French, S., & Valentine, G. 2010. *Key methods in geography*. Thousand Oaks, Calif.: SAGE.
- Creswell, J. W. 2007. *Qualitative inquiry & research design: choosing among five approaches*, 2nd ed. Thousand Oaks, Calif.: Sage.
- de Haan, L and Zoomers, A. 2005. Exploring the Frontier of Livelihoods Research. *Development and Change*, 36(1): 27–47.
- de Haas, H. 2010. Migration and Development: A Theoretical Perspective. *International Migration Review*, 44(1), 227-264.
- Denzin, N.K. & Lincoln, Y.S. 2002. *Handbook of qualitative research*, 2nd ed. Thousand Oaks, Calif.: Sage.
- DFID. 1999. Sustainable Livelihoods Guidance Sheets. Department for International Development.
 - (http://www.unscn.org/layout/modules/resources/files/Sustainable_livelihoods_guidance_sheets_framework.pdf). (accessed March 3, 2014).

- Dowling, R. 2005. Power, ethics and subjectivity in qualitative research, in I. Hay (ed), *Qualitative Methods in Human Geography*, second edition, Melbourne: Oxford University Press, 19-29.
- Ellis, F. 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford University press, Oxford.
- Elmhirst, R. 2002. Daughters and Displacement: Migration Dynamics in an Indonesian Transmigration Area. *The Journal of Development Studies*, 38(5), 143-166.
- Fearnside, P. M. 1997. Transmigration in Indonesia: Lessons from Its Environmental and Social Impacts. *Environmental Management*, 21(4), 553-570.
- Flick, U. 2009. An introduction to qualitative research. Los Angeles, Calif.: SAGE.
- Flick, U., Kardorff, E. V., & Steinke, I. 2004. *A companion to qualitative research*. London: Sage Publications.
- Frederick, W. H. & Worden R. L. & Library of Congress. 2011. *Indonesia a country study* (6th ed). Federal Research Division. Library of Congress: Washington, D. C.
- Frederick, William H & Worden, Robert L & Library of Congress. Federal Research Division 2011. *Indonesia : a country study* (6th ed). Federal Research Division, Library of Congress: Washington, D.C.
- Gondowarsito, R. 1990. Transmigrasi Bedol Desa: Inter-Island Village Resettlement from Wonogiri to Bengkulu. *Bulletin of Indonesian Economic Studies*, 26(1), 48-68.
- Hammar T., Brochmann, G., Tamas, K. & Faist, T. (Eds.). 1997. *International Migration, immobility and development: multidisciplinary perspectives*. New York, Berg.
- Hardjono, J. 1977. Transmigration in Indonesia. Oxford University Press, Kuala Lumpur.
- Hay, I. 2010. *Qualitative research methods in human geography*. Oxford: Oxford University Press.
- Kellerman, A. 1987. Structuration theory and attempts at integration in human geography. *Professional Geographer*, 39(3), 267-274.
- Kementerian Pekerjaan Umum. 2011. *Proyek Irigasi Batang Hari*. Direktorat Jenederal Sumber Daya Air.
- Kitchin, R., & Tate, N. J. 2000. Conducting research in human geography: theory, methodology and practice. Harlow: Prentice Hall.
- Krefting, L. 1991. Rigor in Qualitative Research: The Assessment of Trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.

- Leinbach, T. R., Watkins, J. F. & Bowen, J. 1992. Employment Behavior and the Family in Indonesian Transmigration. *Annals of the Association of American Geographers*, 82(1), 23-47.
- Limb, M., & Dwyer, C. 2001. *Qualitative methodologies for geographers: issues and debates*. Arnold, London.
- Ministry of Public Works of the Republic of Indonesia. *Infrastructure Map of Wonogiri Regency 2012*, (http://loketpeta.pu.go.id/peta/peta-infrastruktur-kabupaten-wonogiri-2012/), (accessed April 4, 2014).
- Moser, S. 2008. Personality: a new positionality? Area, 40(3), 383-392.
- Patton, M. Q. 2002. Qualitative research & evaluation methods. Thousand Oaks, Calif.: Sage.
- Pemerintah Kabupaten Dharmasraya. *Rencana Tata Ruang Wilayah Kabupaten Dharmasraya* 2011-2031. Badan Perencanaan Daerah Kabupaten Dharmasraya, Dharmasraya.
- Perkumpulan Sada Ahmo. *Country of Indonesia*. (http://www.pesada.org/home/wp-content/uploads/2012/03/Peta-Indonesia.png). (accessed May 4, 2014).
- Perry, D. H. 1985. The Economics of Transmigrant Farming. *Bulletin of Indonesian Economic Studies*, 21(3), 104-117.
- Rakodi, C. 2002. A Livelihoods Approach-Conceptual Issues and Definitions in Rakodi, C. & Lloyd-Jones, T. (eds.) *Urban Livelihoods: A people-centered approach to reducing poverty*, Earthscan Publications Ltd, UK.
- Rigg, J. 2007. An Everyday Geography of the Global South. Routledge, London.
- Ross, M. S. 1980. The Role of Land Clearing in Indonesia's Transmigration Program. *Bulletin of Indonesian Economic Studies*, 16(1), 75-85.
- Schwandt, T. A. 2001. *Dictionary of Qualitative Inquiry*, 2nd ed. Thousand Oaks, Calif.: Sage.
- Scoones, I. 1998. *Sustainable rural livelihoods: A framework for analysis*, IDS working paper No.72, Sussex, UK.
- Shenton, A. K. 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Singarimbun, M. 1968. Family Planning in Indonesia. *Bulletin of Indonesian Economic Studies*, 4(10), 48-55.
- Statistics Dharmasraya. *Dharmasraya in Figures 2013*, (http://dharmasrayakab.bps.go.id/?hal=publikasi_detil&id=1), (accessed April 4, 2014).

- Statistics Indonesia. *Statistical Yearbook of Indonesia 2010*, (http://sp2010.bps.go.id/files/ebook/SI_2010.pdf), (accessed April 4, 2014).
- Statistics Indonesia. *Statistical Yearbook of Indonesia 2013*, (http://www.bps.go.id/hasil_publikasi/SI_2013/index3.php?pub=Statistik+Indonesia+2013), (accessed April 4, 2014).
- Suratman & Guiness, P. 1977. The Changing Focus of Transmigration. *Bulletin of Indonesian Economic Studies*, 13(2), 78-101.
- Turton, D. 2002. Forced Displacement and the Nation State, Development and Displacement, edited by Robinson, J. (2002), the Open University, Oxford.
- United Nations. 2004. *United Nations Demographic Yearbook Review: National reporting of household characteristics, living, arrangements and homeless households*. Department of Economic and Social Affairs Statistics Division, Demographic and Social Statistics Branch.
- Van Lottum, J. & Marks D. 2012. The determinants of internal migration in a developing country: quantitative evidence for Indonesia, 1930-2000. *Applied Economics*, 44(34), 4485-4494.
- White, A. 2009. Internal migration, identity and livelihood strategies in contemporary Russia. *Journal of Ethnic and Migration Studies*, 35(4), 555-573.

Appendix 1

Interview Guideline for Migrant Household

Number of interview:
Date of interview:
Name of town/village areas
Home address:

Part I: Respondent Information

1. Name : 2. Sex : 3. Age :

4. Marital status:

5. Family sizes:

People who normally live with respondent

Number in household	Relationship to respondent	Sex (F/M)	Age	What is the highest level of education/currently attend school	Born where, town/village, province	Did X do any work for income? (type of
						work)

6. Do you have any family or relatives who lived in this area?

Part II: Migration Process

- 1. Place of origin: town/village
- 2. How long have you been there? Year to Year
- 3. Year of moved
- 4. Type of migration:
 - a. government program
 - name of program
 - Why did you choose this program?
 - Who are decided to move?
 - How did you involve to this program? Migration process such as regristration process to government office or another way
 - Did you have any options to choose where to move?
 - What was the explanation of government about this program?

- What did you expect about this program at the first time?
- Number of family who migrated and who moved?
- b. self-motivation/spontaneous transmigrasi
 - Who are decided to move?
 - Why did you move? Push factors
 - Why did you choose to move to this area?
 - Did you get any information from people or relatives who already lived in this area? From whom?
 - How did you move (the processes of migration)
 - What did you expect in the new place?
 - Number of family who migrated and who moved?

Part III: Livelihoods

A. In place of origin

- 1. Number of family members who worked and their occupation/profession/job
 - a. Husband:
 - b. Wife:
 - c. Children:
 - d. Others:
- 2. What kinds of asset that you had?
 - a. Agricultural Land
 - b. House
 - c. Vehicle
 - d. Livestock: animal (poultry, goats, cows)
 - e. Others (mentioned)
- 3. How did you get these assets?
- 4. The most important asset to the livelihood
- 5. The average income per month
- 6. Who is the important actor among family members to make decision?

B. Place of Destination

The first five years

1. What was the main occupation/profession/job of family members

Family	Main job	How did X get	Why did X	What year X
members		into this job	choose this job	started into this job
Husband				
Wife				
Children 1				
Children 2				
Children 3				
others				

2. Did your family have another job except the main job?

Family	Another job	How did X get	Why did X	What year X
members		into this job	choose this job	started into this job
Husband				
Wife				
Children 1				
Children 2				
Children 3				
others				

3. What kinds of asset that you had?

Natural capital

agricultural land

Type of agricultural land	Size of land	Ownership of land	How did you get these assets	When did you get these assets (month, year)	
Paddy land			these assets	(month, year)	
Plantation					
land					
Forest land					
Pasture land					

- Did people have access to irrigation water? From where?
- What is the most important asset to generate livelihood? Why?
- Main problems of agricultural land
- What laws exist regarding property rights
 - Customary
 - Resettlement policy
 - Governmental and district policy
 - The impact of the laws to land use rights
- What was the major conflict in natural capital? Why this conflict emerged?
- Are people allowed to use the forest as an income resource? (firewood, fishing, vegetables, etc)

Physical Capital

- Availability of infrastructures:
 - Housing
 - School
 - Roads and public transportation
 - Health center
 - Electricity
 - Communication centers
 - Irrigation

- Clean water
- Markets
- Machinery for production
- Problems of physical capital and the impact to livelihood

Human Capital

- Household size, age, and sex
- Level of education
- Type of skill to generate income
- Household's status of health and physical ability to work
- Problems of physical capital and the impact to livelihood

Financial Capital

- Availability of saving before migrate
- Access to credit
 - Government
 - Banks
 - Private credit institutions
 - Other family members
 - Other
- How have people saved the money?

Social Capital

- Which social networks existed?
- Do any members of the household participate in local institutions? What position do they hold?
- Level of education
- Type of skill to generate income
- Household's status of health and physical ability to work

Problems of physical capital and the impact to livelihood

- 4. The most important asset to the livelihood
- 5. Source of livelihood and the main source of livelihood
- 6. How was the economic condition of your family during first five years?
- 7. What the difficulties encountered when arriving in transmigration location?
- 8. Did you get any help from government?
- 9. The availability of infrastructures from government:
 - Road
 - House
 - Land
 - Livestock
 - Clean water
 - Electricity
 - Public transportation
 - Education facility

- Health facility
- Worship facility
- Others (mentioned)
- 10. The average income per month
- 11. Who is the important actor among family members to make decision?

After 5 years until 10 years

- 1. Occupation/profession of family members
- 2. The transformation/differences of livelihood after 5 years
 - Agriculture
 - Non-agriculture
- 3. Why did you choose that occupation / profession?
- 4. Source of livelihood and the main source of livelihood
- 5. The addition of assets that you had?
 - Land
 - House
 - Vehicle
 - Livestock
 - Others (mentioned)
- 6. How did you get these assets?
 - From government?
 - Credit/loan?
 - Own expense?
 - Support from relative/friend/other migrants/other people?
- 7. If there was a reduction of assets and why
- 8. The most important asset to the livelihood
- 9. The economic condition of your family after five years
- 10. The difficulties encountered after 5 years?
- 11. Did you get any help/support from government?
- 12. The additional infrastructures development from government:
 - Road
 - House
 - Land
 - Livestock
 - Clean water
 - Electricity
 - Public transportation
 - Education facility
 - Health facility
 - Worship facility
 - Others (mentioned)

- 13. The average income per month after 5 years
- 14. If there was family members who moved to another place
 - Who
 - Why
 - Where
 - What is he/she doing in the new place
- 15. Who is the important actor among family members to make decision?

After 10 years

- 1. Occupation/profession of family members
- 2. The transformation/differences of livelihood after 10 years
 - Agriculture
 - Non-agriculture
- 3. Why did you choose that occupation / profession?
- 4. Source of livelihood and the main source of livelihood
- 5. The addition of assets that you had?
 - Land
 - House
 - Vehicle
 - Livestock
 - Others (mentioned)
- 6. How did you get these assets?
 - From government?
 - Credit/loan?
 - Own expense?
 - Support from relative/friend/other migrants/other people?
- 7. If there was a reduction of assets and why
- 8. The most important asset to the livelihood
- 9. The economic condition of your family after five years
- 10. The difficulties encountered after 10 years?
- 11. Did you get any help/support from government?
- 12. The additional infrastructures development from government:
 - Road
 - House
 - Land
 - Livestock
 - Clean water
 - Electricity
 - Public transportation
 - Education facility
 - Health facility
 - Worship facility

- Others (mentioned)
- 13. The average income per month after 10 years
- 14. If there was family members who moved to another place
 - Who
 - Why
 - Where
 - What is he/she doing in the new place
- 15. Who is the important actor among family members to make decision?
- 16. Planning for the future livelihood

Part IV: Networks/Organization/Relation among the migrants

- 1. The involvement in organization
 - Name of organization
 - The establishment of organization
 - The purpose of organization
 - The members of organization
 - Since when have you been involved
 - The role of respondent
 - The activities of organization
 - The impact of organization to the livelihood
- 2. The relation between migrants in transmigration location
- 3. Who is the important actor in migrants community to the livelihood
 - Who is the actor
 - The role of the actor
 - The influence of the actor

Appendix 2

Interview Guideline for Local Government

- 1. When did transmigration program start in this area?
- 2. Why this location was chosen as transmigration area?
- 3. What was the initial program of transmigration?
 - Objective
 - Location
 - What government did (national and local) to prepare the transmigration area?
 - migrants (number, place of origin, criteria)
 - the relation between national and local government
- 4. What problems are encountered at the beginning? (initial 5 years)
 - Why these problems emerged?
 - Impact to migrants/migrant livelihoods
- 5. What the government did to solve the problem?
 - Local government
 - National government
- 6. Since the beginning, was there any change for the program?
 - When did it change?
 - Why did it change?
 - What kind of change?
 - Objective
 - location
 - programs (support from government)
 - migrants (number, place of origin, criteria)
 - the relation between national and local government
- 7. Whether there were any problems after 5 years?
 - What were the problems?
 - Why these problems emerged?
 - Impact to migrant/migrant livelihoods
 - How to solve the problems?
- 8. How the government supports the migrant livelihoods?
 - Development of infrastructure/facilities
 - Access to credit/loan/funding
 - Access to market
 - Support/ incentive for production factors
 - Agricultural and non-agricultural
- 9. Is there any development program for transmigration at this time? What are the main programs for transmigration?
- 10. Perception about this program, success or not? Why? Criteria of success?
- 11. The future plan for transmigration program