

**IMPACTS OF RURAL DEVELOPMENT POLICIES ON FARM
HOUSEHOLDS IN SOUTH KOREA**

by

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Abstract

Following an increase in the openness of the South Korean economy since the mid-1990s, farm households have experienced a decrease in their real farm incomes. Hence, over the last decade the Korean government has adopted a variety of rural policy measures, which mostly support community enterprises, to increase the non-farm incomes of farm households and to support rural development. The aim of this study is to explore the major impacts of some key rural development policy measures that aim to boost non-farm activities of farm households in South Korea.

This research employed a combination of both quantitative and qualitative techniques. First, an exploratory online survey of farmers provided insights into the most helpful rural policy measures across different regions. Then, face-to-face interviews with 14 key informants helped to narrow the focus of the study down to four main policy measures. Finally, face-to-face in-depth interviews with 48 farmers were used to explore the impacts that these measures have had on farm households and the communities to which they belong.

Findings from this study reveal that these four policy measures have all succeeded, to varying degrees, in promoting farmers' participation in community enterprises. This in turn has led to an increase in household incomes and also to a range of non-financial benefits such as improved skills and better access to social networks. Community enterprises that are supported by rural development policies are argued to be more successful when supported by effective partnership and leadership, along with appropriately designed support services. The support services currently offered by these policy measures are generally found to be less helpful than improvements to physical assets and in some cases they appear not to respond to the needs of the community businesses that they seek to help. Farm households with higher levels of assets are found to benefit more from these measures and access to financial capital is found to be particularly influential in this respect. This study recommends that the design of future rural policies could be improved to increase participation in community enterprises by making them more accessible to households that do not have the financial means to support co-financing and by including a range of measures (e.g. around partnership, capacity building and advice) designed to improve their impact on rural livelihoods.

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Lists of Abbreviations

BOP	Balance of Payments
BSARLD	Budget of Special Account of Regional and Local Development
CAP	Common Agricultural Policy
CIRR	Complex Industrialisation of Rural Resource programme
DFID	Department for International Development
DRSFI	Development Regional Strategic Food Industry programme
EU	European Union
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GBP	Great British Pounds, the Code of Official Currency of the United Kingdom
GRVD	General Rural Village Development programme
GV	Green-tourism Village programme
HACCP	Hazard Analysis and Critical Control Point
IMF	International Monetary Fund
KAFF	Korean Advanced Farmers' Federation
KBGS	Korean Block Grant System
KRCC	Korea Rural Community Corporation
KREI	Korea Rural Economic Institute
KRW	Korean Won, the Code of Official Currency of South Korea
LID	Local Industry Development programme
MAF	Ministry of Agriculture and Forestry
MAFF	Ministry of Agriculture, Forestry and Fisheries
MAFRA	Ministry of Agriculture, Food and Rural Affairs
MIFAFF	Ministry of Food, Agriculture, Forestry and Fisheries
NHERI	Nong Hyup Economic Research Institute
OECD	Organization for Economic Cooperation and Development
SL	Sustainable Livelihoods
UK	United Kingdom

UN	United Nations
UR	Uruguay Round
US	United States
WTO	World Trade Organization

Chapter 1: Introduction

1.1 Introduction

Korean rural society has been facing serious problems resulting from depopulation, ageing and market liberalisation (KREI, 1999a; Oh *et al.*, 2001). One of the most important problems for farm households is the stagnation of their incomes (Oh *et al.*, 2001; MAFRA, 2013a). Korean farm households have experienced a decline in their household income as a result of agricultural market liberalisation in the 1990s, a decline that has continued following the expansion of markets in the early 2000s (Moon *et al.*, 2012). Korean farm households own, on average, only about 1.5 hectares of land and have been highly affected by this expansion of agricultural market access and the resulting impacts on commodity prices (KREI, 1999a; Oh *et al.*, 2001).

Over the last 50 years, the decline of farm household income has been one of the most important issues in Korean agriculture and increasing farm household income has become an important policy objective for the South Korean government (KREI, 1999a). To sustain farm household incomes, non-farm activity has come to be viewed as an important source of additional income (Oh *et al.*, 2001). Thus, rural policy measures that aim to support farmers' non-farm activities have also become increasingly important (KREI, 1999a). Since the expansion of globalisation, the Korean government has implemented diverse agricultural and rural policies to sustain and increase farm household incomes (MAFRA, 2013a). For example, since the 2000s a range of rural policy measures, such as the Green-tourism Village programme and the General Rural Village Development programme, that aim to boost non-farm activities have been introduced. As agricultural market access by overseas competitors has increased, then the income gap between residents of urban and rural areas has widened (Lee and Yun, 2012; MAFRA, 2013a). Rural policy measures are expected to play an important role in sustaining both farm household income and rural communities. The non-farm activities of farm households and the impacts of associated rural policy measures have become an important research topic for those with an interest in rural development in South Korea.

Sections 1.2 and 1.3 of this chapter present the research motivation and the research problems underpinning the present study while section 1.4 defines research aims and research questions.

Sections 1.5 and 1.6 respectively introduce the intended research design and anticipate the contribution of the research. Lastly, section 1.7 describes the structure of the thesis.

1.2 Research Motivation

Non-farm activity and income diversification have been studied in various countries. Non-farm sources have been found to account for around 40-50 per cent of average rural household income in sub-Saharan Africa and Latin America and 30-40 per cent in South Asia (Bryceson and Jamal, 1997; Reardon, 1997; Barrett *et al.*, 2001b; Reardon *et al.*, 2001). The share of households' incomes from non-farm sources is increasing (Start, 2001; Jin and Deininger, 2009). This trend has also been noticed in developed countries. More than 50 per cent of the total gross income of Irish farm households was found to have been derived from off-farm activities and the number of Irish farm households that earned money from off-farm employment is increasing (Hubbard and Ward, 2008). This is also the case in South Korea, where it is clearly recognized that the share of non-farm income has increased significantly in recent years (See Chapter 2, Figure 2.7). This leads to the hypothesis that non-farm income may play a critical role in the economic sustainability of the farm household and the broader rural economy. This suggests that studies on non-farm activity and related rural policy measures will be useful to the Korean government.

As the non-farm activities of farm households become more important (Oh *et al.*, 2001), there is a greater need to conduct research on the impacts of non-farm activities and associated rural policy measures. However, in South Korea relatively little research has been done regarding the relationship between non-farm activity, farm household income and rural policy. Some studies (e.g. Lee and Kim, 2011; Hwang and Lee, 2015) have examined the impacts of specific rural policy measures. Since the mid-2000s, various rural policy measures that aim to support non-farm activities have been introduced and it would be useful to investigate the impacts of these measures. In particular, several of these newly introduced measures have the aim of supporting the development of community enterprises in rural villages in which both farmers and non-farmers can participate. This study will provide insights into the impacts of these community enterprises and the extent to which they help farm households achieve more sustainable livelihoods.

1.3 Research Problems

As mentioned earlier, farm household income has been an important issue in South Korea for many years. Lee and Yun (2012) found that the Gini coefficient measure of inequality of farm income increased from 0.490 in 2001 to 0.627 in 2011, and that of non-farm income increased from 0.563 to 0.657. This suggested that the inequality between farmers has become greater over recent years. According to Park *et al.* (2005) low income farm household groups demonstrated the least dependence on farm income, while higher income groups showed the highest dependence. However, few studies have the role played by rural policy measures in the development of non-farm activities in farm household in South Korea and this research gap needs to be addressed.

Over the last decade, rural policy measures in South Korea have tended to implemented through a bottom-up approach based around partnerships formed between villagers or local farmers. Such measures tend to have multiple objectives, and as well as increasing household incomes they may aim to improve community infrastructure or local capacity for economic growth. Farm households may find it easier to participate in community enterprises, rather than to diversify into individual businesses, because most policy measures tend to support the development of the former rather than the latter.

1.4 Research Aims and Research Questions

This study explores a set of key rural policy measures designed to encourage the development of non-farm activities in farm households in South Korea. Specifically, the research explores the impacts that these policy measures have on the farm household both in terms of income and of the capacity of household to develop alternative income streams. By doing so, the study will identify recommendations for the design and implementation of future policies designed to enhance non-farm income and promote rural development. In order to achieve these research aims, the research must address the following research questions:

- a. Is non-farm activity important for rural development?
- b. What are the main factors that influence farm households to diversify into non-farm activities?
- c. Why does the Korean government support non-farm activity through rural development

programmes?

- d. What are the main impacts of key rural development policy measures on farm households?
- e. Is government support for non-farm activity an effective means of increasing household income?
- f. What are the differential impacts of key rural development policy measures in terms of households' characteristic, e.g. age, farm size and farm type?
- g. Do these impacts vary over different types of rural area, e.g. more or less remote; higher or lower reliance on agriculture for employment?
- h. What else does non-farm activity contribute to the rural economy?
- i. What are the recommendations for the design and implementation of rural policy measures?

1.5 Research Design

This study used a combination of quantitative and qualitative techniques. Such mixed methods can provide more complete answers to research questions and can help to answer research questions that cannot be answered by quantitative and qualitative approaches used alone (Creswell and Plano Clark, 2011; Bryman 2012). Although both quantitative and qualitative methods are employed in this study, qualitative methods played a more important role because the majority of the research questions set out above could be best addressed using qualitative approaches.

Firstly, an exploratory online survey was undertaken, collecting data from 252 farm households. This helped to identify the important rural policy measures across different geographic areas and also provided some useful preliminary data on why farmers diversify.

This exploratory work was supported by a series of face-to-face semi-structured interviews with key informants. The 14 key informants interviewed were all experts in their respective fields and were carefully chosen to provide insights that could be useful in exploring the impacts of rural policy measures (Patton, 1987; Patton, 2002). Informants were selected from different professions (e.g. local and central government, academia, farming) in order to provide a breadth of informed perspectives on policies and implementation (Mattas *et al.*, 2008). Their responses helped to narrow down the focus of the research to four key rural policy measures that were each identified as offering the greatest opportunities to increase the non-farm incomes of farm households.

Finally, face-to-face semi-structured in-depth interviews were conducted with 48 farmers that had engaged with one (or more) of the four rural policy measures, usually as participants in a community enterprise project. The sampled farmers covered a range of demographic and locational characteristics and the resulting interviews provided valuable data on the impacts of key rural policy measures on farm households.

1.6 Anticipated Contribution

Non-farm activity and rural business have been studied in both developing and developed countries. Many studies in developing countries (e.g. Adams, 1994; Ellis, 2000; Escobal, 2001; Reardon *et al.*, 2006) have focused on factors that influence participation in non-farm or other income diversification activities. Some of these studies have examined how non-farm activities have affected poverty and income distributions between farm households. Meanwhile, some studies in developed countries (e.g. Bateman and Ray, 1994; Ahearn *et al.*, 2006) have examined how non-farm activities influence employment. Such activities have been argued to be particularly important because they help to sustain farming and support rural development. Other studies (e.g. Benjamin, 1994; Midmore *et al.*, 2008a) have focused on how rural policies influence the decisions of farm households' to participate in non-farm activities.

As described earlier, the Korean government has recently introduced a range of rural policy measures to support the formation and development of community business partnerships as a means of helping farm households increase their non-farm incomes. Up till now, little research has been done into the effectiveness of this approach, and therefore this study seeks to make an original contribution by focusing on the most important examples of these policy measures and exploring how they affect farm households and communities in rural Korea. Findings from the research will be used to inform the design of future policy measures aimed at supporting farm household incomes.

1.7 Thesis Structure

This thesis consists of nine chapters: Introduction (Chapter 1), Korean Rural Policy (Chapter 2), Literature Review (Chapter 3), Methodology (Chapter 4), result chapters (Chapters 5, 6 and 7), Discussion (Chapter 8) and Conclusions (Chapter 9).

Chapter 2 provides the context for the study, describing agricultural and rural policies and providing data on farm households in South Korea. The evolution of Korean agricultural and rural policy is provided as background to the development of the present set of rural policies.

Chapter 3 reviews the academic literature relevant to the present study and includes a review of the literature on non-farm activity and income diversification in farm households in both developing and developed countries. The review focuses on the reasons for diversification and on the impacts of different non-farm activities. The literature review also influenced the design of the present study.

Chapter 4 describes the methods that were employed in this study and the rationale for the research design. The chapter describes in detail the survey, key informant interviews, and in-depth interviews that were undertaken for this study and the reasons for the choice of questions, sample design and the implementation of each approach.

Chapters 5, 6 and 7 present the findings from survey, key informant interviews, and in-depth interviews, respectively.

Chapter 8 discusses the overall findings from the fieldwork (Chapters 5, 6 and 7) and explores the differential impacts of rural policy measures and the impacts of key rural policy measures across farm households and regions.

Finally, Chapter 9 presents the conclusions of the present study and the author's views of the study's implications for future policy changes to enhance the non-farm incomes of farm households and promote rural development.

Chapter 2: Korean Rural Policy and Farm Households

2.1 Introduction

This chapter describes the agricultural and policy context and farm household statistics in South Korea (hereafter referred to as Korea). The history of agricultural and rural policy, the current rural policy measures and institutions, such as the Block Grant System and the context of agricultural and rural conditions will be of value in investigating the impacts of rural policy on farm households.

Market access has been one of the most difficult challenges faced by Korean agriculture, because the majority of farm households are small in scale with an average farm size of 1.5 hectares (MAFRA, 2013c). These farms have to compete with cheaply priced agricultural products from the rest of the world. Addressing this situation has been the highest priority for the Korean government¹ since the agricultural markets were first opened up. Therefore, the most important policy objectives in Korea have been to increase agricultural competitiveness and farm income. At the same time, the Korean government has introduced rural policies that aimed to boost non-farm income. Section 2.2 addresses the evolution of Korean rural policy and section 2.3 covers current rural policy measures that relate to non-farm income support. In section 2.4, the status of the Korean farm households will be explored.

2.2 Evolution of Agricultural and Rural Policy in Korea

2.2.1 Key events which have shaped agricultural and rural policy in Korea since 1945

The Korea Rural Economic Institute (KREI) (1999a) claims that the evolution of Korean agricultural and rural policy is based on the economic environment, changes to national economic policy and the structure of the agricultural sector. Market liberalisation has had a profound influence on Korean farming and farm households throughout the history of Korean agricultural and rural policy (KREI, 1999a; OECD, 2008; Song, 2012). Although market

¹ The name of the Ministry in charge of agricultural and rural affairs in South Korea has been changed several times: MAFF(-1987); MAF(1988-2007); MIFAFF (2008-2012); and MAFRA (Since 2013)

liberalisation has proceeded gradually, the Uruguay Round (UR)² (1986-1994) has been the most influential event in Korean agriculture over the last five decades (Park *et al.*, 2010). This round of negotiations led specifically to the opening up of the Korean agricultural markets (KREI, 1999a). The period before the UR can be subdivided into the periods before and after 1977, when self-sufficiency in rice (the staple food) was achieved for the first time in Korea. After Balance of Payment (BOP) graduation³, Korean government opened agriculture market slightly. The period after the UR can be subdivided by the first bilateral Free Trade Agreement (FTA)⁴, i.e. the Korea-Chile FTA in 2002, because the opening up of markets has been extended through FTAs. Table 2.1 shows the critical events in Korean agricultural and rural history. The evolution of agricultural and rural policy will be described for the following periods: 1945-1977; 1978-1994; 1995-2001; 2002 onwards.

Table 2.1 Critical events in Korean agricultural and rural history

	Before UR Agreement		After UR Agreement	
Year	1945 - 1977	1978 - 1994	1995 - 2001	Since 2002
Event	Self-sufficiency in rice (1977)	BOP graduation (1989)	UR Agreement (1995)	Korea-Chile FTA (2002)

2.2.2 Increasing production and self-sufficiency in rice (1945-1977)

Korea experienced extreme food shortages during the Japanese colonial period (1910-1945) and the Korean War (1950). Between the 1950s and the 1970s, agricultural policies concentrated primarily on increasing crop productivity, as well as achieving self-sufficiency in rice, which is the staple food for the country (OECD, 2008). Since 1961, the Korean

² The Uruguay Round was the 8th round of multilateral trade negotiations conducted within the framework of the General Agreement on Tariffs and Trade (GATT), spanning from 1986 to 1994 and embracing 123 countries as “contracting parties”. The Round aimed to extend GATT trade rules to areas previously exempted as too difficult to liberalise (agriculture, textiles) and increasingly important new areas previously not included (trade in services, intellectual property, investment policy trade distortions). The Round came into effect in 1995.

³ The subject of trade relations between developed and developing countries is one of the key elements of the Uruguay Round along with non-discrimination, the treatment of domestic measures such as subsidies, and the future role of a strengthened GATT. New concepts such as “graduation” have been advanced, while arguments for and against “special and differential treatment” of developing countries have been renewed (Anjaria, 1987). In 1989, Korea applied the principle of “graduation” from the provision of General Agreement on Tariffs and Trade (GATT) XVIII (b), which allows developing countries to restrict agricultural product imports due to the surplus of the Balance of payment (BOP).

⁴ A Free Trade Agreement (FTA) is an agreement that results from cooperation between at least two countries to reduce trade barriers—import quotas and tariffs—and to increase trade with each other. So far, Korea has signed 12 FTAs, which include 50 countries. The FTA with Chile (2002), U.S. (2007) and EU (2010) came into effect in 2003, 2011 and 2012, respectively. The FTA with the U.S. took a long time to obtain the assembly’s approval.

government has assigned a high priority to food production and the modernization of farming in the Economic Development Plan⁵. For example, the government has introduced new rice varieties that can achieve higher productivity and the agricultural policy formed part of the National Economic Development Plan until the 1970s (KREI, 1999a).

Since 1967, the Korean government's strategy has been to focus on secondary industries and export-oriented industrialisation. This strategy places emphasis on increasing farm income, co-developing agriculture and industry in rural areas, and achieving self-sufficiency by increasing production in the agricultural sector (KREI, 1999a; Lee and Kim, 2011; Lee, 2014). The Korean government has developed industries, as well as increasing farm income (KREI, 1999a). As a result of this strategy, the number of farm households has decreased since 1968 (KREI, 1999a) because rural people, and in particular young people, moved to the cities where industrialisation had increased job opportunities. Although this strategy of investing in chemical and heavy industries was successful in achieving economic growth, it widened the gap between large and small-scale businesses, industry and agriculture, and urban and rural areas (KREI, 1999a; Lee and Kim, 2011; Lee, 2014).

In 1970, a regional development policy called the Saemaeul Undong⁶ was implemented. This was a national development campaign driven by the Korean government (KREI, 1999a) and its original focus was on rural areas. The policy was introduced to increase household income and improve the living environment in rural areas, because the development of rural areas fell behind that of urban areas (Lee, 2014). Saemaeul Undong included several projects: mental development projects, welfare and environmental projects, production-based projects, and income-boosting projects (ibid.). The Saemaeul Undong policy has been designed to incorporate community projects that seek to improve the living environment in villages, production-based projects and income-boosting projects (ibid.), while the mental development projects were implemented on an ongoing basis. In order to improve the rural village environment, the Korean government tried to motivate rural people to develop their own villages⁷ by providing them with cement and iron (Lee, 2014). Rural people in the village

⁵ Korea implemented three Five Year Economic Development Plans between 1961 and 1976. Korean GNP increased by an average 9.5 percent annually during these 15 years (KREI, 1999).

⁶ This term in Korean means New Village Campaign. The Saemaeul Undong has the characteristics of a social campaign. There was economic development in the country with the help of the industrialisation strategy through the Five Year Economic Development Plan. However, the gap between urban and rural areas increased. The increased gap became a political burden. Thus, the Korean government introduced the Saemaeul Undong (KREI, 1999).

⁷ The target of this Undong was 34,000 villages across the country. Traditionally, people in the villages have a sense of community based on blood relationships within Korea (Lee, 2014).

provided their own labour and invested some money of their own when they used the cement and iron. Many village communities widened the roads in their villages.

In order to increase household income, the government supported income-boosting projects, such as common production facilities for flowers or livestock, and building factories (Lee, 2014). As a result, the ratio of farm household income to urban household income increased from 78.8 per cent in 1971 to 103.2 per cent in 1982 (KREI, 1999a). This policy also extended to the cities. Lee (2014) claims that the policy target, i.e. village and government support, was suitably designed to achieve the policy aims. Education was also continually emphasised within the Saemaeul Undong programme, whereas other policies mainly focused on physical development (ibid.).

The Korean government made rice self-sufficiency a high priority policy objective. Thus, Korea achieved self-sufficiency in rice and barley for the first time in 1977. However, Korea changed its national policy from protecting the domestic (agricultural) market to promoting its comparative advantage in 1977, by boosting industry (KREI, 1999a). The fourth Economic Development Plan (1977-1981) included importing agricultural products that were in short supply to stabilise the price of domestic agricultural products (KREI, 1999a).

2.2.3 Farm diversification and non-farm income policy (1978-1994)

Following an improvement in the Balance of Payments (BOP), the Korean government pursued a course of import liberalisation⁸ in 1978. Agricultural policy between 1978 and 1994 was represented as a partial open market policy and non-farm income policy such as the Agricultural Industry Complex. This led to an increase in imports of agricultural products. In addition, rice-centred farming began to diversify into the production of other crops and livestock in line with the increase in demand for meat and vegetables (KREI, 1999a).

During the 1980s, increasing non-farm income through the Agricultural Industry Complex⁹ and promoting farm diversification were among the most important policy objectives (Park *et*

⁸ This action took place three times (First in May 1978, second in September 1978, third in January 1979). The percentage of liberalised agricultural products against total agricultural products was 72.8 per cent in 1988. In addition, the average tariff for agriculture and fishery decreased from 43.2 per cent in 1978 to 25.2 per cent in 1988.

⁹ Since 1983, the Agricultural Industrial Complex has been introduced to decrease the gap between city and rural areas and to achieve balanced development. This policy measure supports industry complexes in rural areas. There was no restriction on the type of production.

al., 2010). However, the Korean government continued to employ the strategy of importing agricultural products to stabilise domestic prices. However, it also focused on policies to enhance non-farm income, in view of the inherent difficulties in increasing farm income. For example, the government enacted a law entitled ‘Act on Promotion on Development of Agricultural and Fishery Income Source’¹⁰ in 1983 to cover income diversification in rural areas. Based on this law, the Agricultural Industrial Complex, the Rural Special Production Complex¹¹, and the Farm Tourism were implemented. The Agricultural Industrial Complex in rural areas has been seen as a means of increasing non-farm income since 1984. The objective of this programme was to create small industrial complexes within rural areas and to employ local labour. This programme provided tax reductions, loans, and simplified administrative procedures for industrial complexes in rural areas (KREI, 1999a). Under this programme, four ministries, including the Ministry of Agriculture and Forestry (MAF) which is a pilot agency, were involved. The Korean government established 122 agricultural industrial complexes between 1984 and 1988 (KREI, 1999a). KREI (1999a) claims that ‘mixed farming or farm diversification’ has led to a decrease in the price of cattle and an increase in farm household debt. Thus, the Korean government implemented the Comprehensive Plan for Agriculture and Fishery to cope with the difficult conditions in 1986. The Plan included tax benefits to industry in rural areas and a low interest rate for loans to buy land for rural industry (*ibid.*).

In 1989, Korea graduated from the provisions of the General Agreement on Tariffs and Trade (GATT) XVIII (b)¹², which allows developing countries to restrict the import of agricultural products to protect the ‘Balance of Payment’ (BOP). Thus, the Korean government liberalised trade for 273 restricted products in three steps over eight years (1992-1997) (KREI, 1999a). The Korean government established the Comprehensive Plan for Rural and Fishery areas in 1989, and this was implemented between 1992 and 2001. The Plan focused on increasing the competitiveness of Korean agriculture (Park *et al.*, 2010). The Plan had the following aims: commercial farmers will manage farms of an efficient size in rural areas; non-farm income will increase through the coexistence of agriculture and industry; rural areas will be a clean and convenient living place. Therefore, the restructuring of agriculture and fisheries, the stabilisation of agricultural prices and increasing sources of non-farm income were

¹⁰ In 1990, the section on income diversification was included in the law, Special Implementation for Rural and Fishery areas.

¹¹ This rural policy programme was implemented in 1967. The original title of Part-time Complex was changed to Rural Special Production Complex in 1991 (Lee, *et.al*, 2008).

¹² Article XVIII (b), to apply quantitative restrictions for balance of payment purposes in a manner which takes full account of the continued high level of demand for imports likely to be generated by the programmes for economic development (GATT 1947).

emphasised. In addition, measures to develop rural areas as good places to live and to decrease farmer's debt levels were also implemented (ibid.). KREI (1999a) claims that the priority of the policy objective changed from equality to efficiency and the policy target widened from agriculture to agriculture, fishery and rural areas.

In 1991, the Korean government developed the Comprehensive Plan to improve the structure of agriculture and fisheries based on an investment of 42 trillion KRW¹³ over ten years (1992-2001). This Plan comprised measures for increasing agricultural competitiveness (35.5 trillion KRW), and the vitality of rural areas (6.2 trillion KRW). The direction of agricultural and rural policy changed from increasing production to structural improvements, with the aim of increasing productivity and competitiveness. This Plan included developing diverse income streams, such as the expansion of the Agricultural Industry Complex (KREI, 1999a). KREI (1999a) claims that the Plan is meaningful in terms of having a large budget and providing policy direction and specific policy measures for 10 years.

2.2.4 Open market policy: Under UR (1995-2001)

The UR negotiation reached an agreement at the end of 1993, and had an immense influence on Korean agriculture. Import tariffs¹⁴ for all agricultural products had to be decreased. In addition, the government subsidy¹⁵ also had to be decreased. At the UR negotiation in 1993, all Korean agricultural products, with the exception of 23 products including rice,¹⁶ were opened up to the global market. Domestic agricultural markets were to be influenced by the UR agreement and a decrease in farm income for farm households was expected because the price of domestic agricultural products was significantly higher than global agricultural products. Thus, the price of domestic agricultural products would decrease, thereby affecting farm household income (KREI, 1999a).

¹³ The GBP to won exchange rate in 1992 and 2001 was 1,377.36 KRW and 1,859.01 KRW, respectively. (The Bank of Korea)

¹⁴ Developed countries have to decrease the tariff average by 36 per cent over 6 years; developing countries by an average 24 per cent, over the next 10 years.

¹⁵ Developed countries have to decrease government support by an average 20 per cent, over the next 6 years; developing countries, by an average 13.3 per cent, over the next 10 years.

¹⁶ Korea received special treatment for rice, permitting the suspension of tariffication for ten years from 1995 to 2004. Instead Korea agreed to increase Minimum Market Access for rice imports from 1 per cent of domestic consumption in 1995 to 4 per cent in 2004. After the re-negotiation in 2004, the Minimum Market Access volume increased from 4.4 per cent of domestic consumption in 2005 to 8 per cent in 2014 (OECD 2009, p. 32). In 2014, the Korean government notified that it would open up the rice market. After negotiations on the tariff for rice, the Korean rice market will be opened up.

Thus, the Korean government prepared two further Comprehensive Plans in 1994 and in 1998. The focus of these plans was to increase the competitiveness of Korean agriculture (Park *et al.*, 2010). In 1994, the Korean government published the 10 year Comprehensive Plan for Agricultural and Rural Korea. The investment in the Plan (15 trillion KRW) was as follows: 60 per cent (9.8 trillion KRW) for competitiveness, 28 per cent (4.1 trillion KRW) for improvements to living conditions, and 12 per cent (1.8 trillion KRW) for the welfare of farmers and fishermen. The following measures were suggested as a means of increasing competitiveness:

“Promoting 150,000 specialized (full-time) family farm households by 2000; attracting secondary and tertiary industry to rural areas; introduction of agricultural corporations; production infrastructure for the reform of land; supporting competitiveness and livestock production” (MAF, 1994).

Korea experienced a Currency Crisis in 1997 and received loans from the International Monetary Fund (IMF). This financial crisis influenced the whole country, including agriculture. The increase in the price of feed for livestock and oil price rises led to an increase in farmers’ debts. KREI (1999a) claims that although there is no difference from the previous government in relation to the agricultural environment, apart from the financial crisis, the government would have to establish a new Plan to give hope and vision to farm households. The newly elected government in 1998 published another Comprehensive Plan to give hope to farm households (KREI, 1999a). According to this Comprehensive Plan for Agricultural Rural Development (1999-2004), there were three high level objectives:

“Supplying food and enhancing the multi-functionality of agriculture; increasing farmers’ incomes to the equivalent level of other industries; improving the residential environment and improving welfare” (MAF, 1998).

As a sub-plan for rural development, the government emphasised the need to increase non-farm income by making rural areas a complex space where primary, secondary and tertiary industries could exist together (MAF, 1998). Regarding the policy to increase non-farm income, KREI (1999a) claims that the Agricultural Industry Complex did not contribute significantly to the employment of farmers until 1997, because farm household members account for only 28 per cent of the 10,000 workers in employment.

2.2.5 Open market policy: Under FTA (2002-2015)

The agricultural market became more open following the introduction of Free Trade Agreements (FTAs). The first FTA negotiation with Chile was completed in 2002¹⁷. In 2004, the Comprehensive Agricultural Rural Development Plan was established. This was designed to invest 119 trillion KRW between 2004 and 2013. In the Plan, the government identified policy areas under the headings of agriculture, farmers, and rural areas. In addition, the policies were categorised into agricultural policy, income policy and rural policy. Since the 2000s, policy objectives have been related to enhancing the quality of life, agricultural competitiveness, environmental management, farm household income, and food safety (OECD, 2008). The Comprehensive Plan for 2004 emphasised income policy and regional policy. The Korean government established three main goals: turning agriculture into a sustainable bio-industry; making farmers' income levels comparable to those in cities; and making rural areas beautiful and clean. Income policy includes sub-strategies such as expanding direct payments, enhancing management safety, and increasing non-farm income (MAF, 2004).

In addition, the Five Year Comprehensive Plan for Increasing Quality of Life for Farmers and Fishermen and Rural Development (2005-2009) was established in 2005. Eleven ministries, including MAFRA, participated in the development of the Five Year Comprehensive Plan. This Plan was introduced on the understanding that development in agricultural production and marketing infrastructure had taken place through government support following UR. Meanwhile, wellbeing, education and rural development were of a low standard and are controlled by several ministries with less room for modification. This is a characteristic of the entire government plan. Meanwhile, the Comprehensive Plan in 2004 was produced by MAFRA. This Plan made specific plans for the regional policy section of the Comprehensive Plan in 2004 (MAF, 2005). This five year Comprehensive Plan¹⁸ includes economy diversification, rural development, infrastructure for wellbeing and improvements in education. In accordance with the law, 'Increasing Quality of Life of Farmers and Fishermen', this plan needs to be produced every five years. The quality of life in rural areas has been identified as one of the most important policy objectives (ibid.).

¹⁷ The Korea-Chile FTA took effect in 2004 after the national assembly agreement in 2003.

¹⁸ The Korean government announced the third Five Year Plan for Increasing Quality of Life of Farmers and Fishermen (2015-2019) in 2014.

The Korea-U.S. FTA was signed in April 2007¹⁹. It led to dispute, both from an economic and political perspective. The Korean government made some minor amendments to the Comprehensive Agricultural Rural Development Plan between 2004 and 2013, i.e. in 2007, because it was necessary to reflect the changed environment, which included the Korea-U.S. FTA. The Korean government also needed to consider the increased concern over food security and safety. Therefore, the Korean government revised its original Plan of 2004, and implemented a revised Plan between 2008 and 2013 (MAF, 2007). In addition, the Comprehensive Agricultural Rural and Food Plan²⁰ was published in 2013 for implementation between 2013 and 2017. The main objectives of this Plan are to: provide safe agricultural products; supplement the agriculture and food sector with the 6th industry²¹; stabilise farm household incomes; improve quality of life; and build a smart agricultural policy system (MAFRA, 2013a).

In summary, over the last 50 years, food security, reducing the income gap between rural and urban households, increasing agricultural competitiveness and rural development have been important policy objectives. Since the opening up of the agricultural market, non-farm income has become an important income source. In terms of government intervention, rural policy measures that aimed to boost non-farm income have been given prominence in Korea. In addition, non-farm income and income diversification have been important policy objectives and several rural policy measures have been implemented. In particular, types of tourism and agricultural processing have been developed as the main source of non-farm income over the past 30 years.

2.3 Current Rural Policy in Korea

2.3.1 Scope of rural policy

¹⁹ The Korea-U.S FTA took effect in 2012 after additional negotiations in July 2007 and the national assembly agreement in 2011.

²⁰ This Plan was based on legal obligations under the Framework Act on Agriculture and Rural Community which requires the development of long term plans for agriculture and rural development.

²¹ '6th industry' means a combination of first industry (agricultural industry), with secondary industry (manufacturing) and tertiary industry (tourism).

Rural development has been an interesting issue in policy terms since the Uruguay Round (Lee *et al.*, 2008; Song and Kwon, 2011; Song, 2012) and, in particular, the importance of rural development in Korea has increased since the 2000s (Park *et al.*, 2004). However, no agreement has been reached concerning the distinction between agricultural and rural policies and the scope of rural policy. The OECD (2008) reports that the Korean agricultural and rural policies can be divided into income policy, agricultural competitiveness policy, agro-food policy, environmental policy, rural development policy and trade policy.

The terms agricultural policy and rural policy were generally used by the Korean government before the 2000s (MAF, 1994; MAF, 1998; KREI, 1999a). Agricultural policy covers the production, marketing and sale of agricultural products. Meanwhile, rural policy addresses the rural environment, non-farm activities, and rural industries. However, the policy categorisation for official documents in Korea has been changed. The Comprehensive Plan in 2004 divided policies into agricultural policy, income policy and rural policy (MAF, 2004). Enhancing the quality of life of farmers was incorporated within rural policy. After the revision of the Comprehensive Plan in 2007, this was divided into agricultural policy, agro-food policy and rural policy (MAF, 2007). The agro-food policy has been included as one of the main policy categories for MAFRA since 2007. In addition, the policy direction of the Comprehensive Plan in 2013 was divided into a tri-partite framework: enhancing competitiveness, income policy and welfare policy (MAFRA, 2013a).

To sum up, agricultural policy and rural policy have their own separate areas. Both terms are used and there is no overlap. Rural policy is distinct from agricultural policy in Korea. Table 2.2 provides a summary of the annual budget for MAFRA in 2013. Most rural policy measures are included within rural development and rural welfare in the annual budget summary for Korea. The structure of the annual budget in 2013 shows that the proportion of funding allocated to rural development and rural welfare represents approximately 12.2 per cent of the total annual budget for MAFRA.

Table 2.2 Annual Budget for MAFRA, 2013

Category	Item	Amount (Billion KRW ²²)	Per cent (%)
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²² The GBP to won exchange rate in 2013 was 1,711.45 KRW. (The Bank of Korea)

Total		13,527	100.0
I. Policy measures		13,175	97.4
Agriculture and rural areas	Strengthening agricultural structure	3,068	22.7
	Stabilisation of farm household income and farm management	2,091	15.5
	Rural development and rural welfare	1,648	12.2
	Stable grain management and agricultural product distribution	3,500	25.9
	Agro-infrastructure	2,089	15.4
Food industry		734	5.4
Miscellaneous		45	0.3
II. Management Costs		352	2.6

* In Korea, the budget is decided every year by the assembly.

Source: Annual Work Plan (MAFRA, 2013b)

2.3.2 Korean Block Grant System

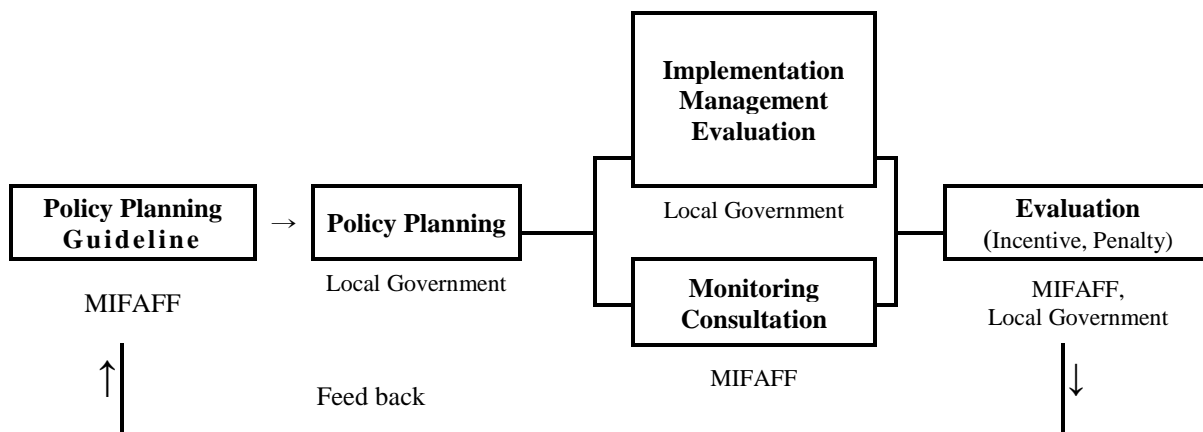
One of the most important characteristics of rural policy is that many rural policy measures are implemented through the Block Grant System. Since 2004, the Korean government has introduced regional policy, including a National Balanced Budget System. In 2010, the National Balanced Budget System developed into the Korean Block Grant System (KBGS)²³. This system broadly defines budget usage and local government (Si, Gun or Do)²⁴ then plan rural policy in line with the allocated budget. A bottom-up approach is employed under the Block Grant System. The central government, including MAFRA, establishes guidelines for local government. The local government decisions follow guidelines set by central government. The Korean Block Grant System allows local government greater autonomy in terms of planning rural policies. This system gives a broad outline of the budget, and the local governments (Si, Gun or Do) are able to make their own plans with their budget allocations (MIFAFF, 2009). Local government plans rural policy measures in accordance with the Five Year Rural Development Plan for Si or Gun. Under this system, local government produces plans based on the local resources and local opinion (KREI, 2008a). Central government evaluates the policy measures.

²³ Under this system, 210 policy measures were integrated into 24 policy groups, including three for MAFRA.

²⁴ The administration of Korea is divided into three levels: central, regional and local government. The top tier of administrative divisions (of regional government) are the provincial-level divisions: province (Do). The second tier of administrative divisions (of local government) are municipal-level divisions: Si and Gun. The population of Si is more than 50,000, while that of Gun is less than 50,000. The third tier of administrative divisions are the sub-municipal level divisions: Eup and Myeon. The population of a Myeon is less than 20,000, while that of a Eup is more than 20,000.

Under the KBGS, rural policy measures have been integrated into several rural policy programmes. Examples include the Complex Industrialisation of Rural Resources (CIRR) programme and the General Rural Village Development (GRVD) programme. Approximately 13 policy measures have been integrated into the CIRR programme and 15 individual policy measures have been included within the GRVD programme (MAFRA, 2013d). The local government (Si or Gun) develops rural policies consisting of several rural policy measures. Figure 2.1 shows that local government, and local people, play a significant role in designing and implementing rural policy measures. The process of planning and implementing rural policy under the Block Grant System is as follows:

Figure 2.1 Planning and implementation of rural policy



Source: Guideline for Block Grant System (MIFAFF, 2009)

Table 2.3 shows the annual Budget for the Special Account of Regional and Local Development (BSARLD). BSARLD accounts for around 3 per cent (9.7 trillion KRW) of the annual national budget (340 trillion KRW). The Korean Block Grant System is applied to regional development, local development and Jeju²⁵ development through the BSARLD. Most rural policy measures aimed at boosting non-farm income, apart from loan aid, are included within the BSARLD.

Table 2.3 Annual Budget for the Special Account for Regional and Local Development, 2010

	Amount (Billion KRW)	Percentage (%)	MIFAFF's programme in BSARLD (Billion KRW)
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²⁵ Jeju became a 'Special Self-Governing Province (Do)' from 2006. It has greater autonomy than other Dos to develop the region, e.g. tourism. In BSARLD, Jeju is classified separately and has its own share of the BSARLD.

Total	9,731	100.0	1,414
Regional development	5,905	60.7	136
Local development	3,474	35.7	1,224
Jeju development	353	3.6	54

The proportion of the MIFAFF programme (1.4 trillion KRW²⁶) in the BSARLD is approximately 14.5%. Source: Guideline for Block Grant System (MIFAFF, 2009)

2.3.3 Partnership and bottom-up approach

Under the Block Grant System, individual farm households cannot participate in the rural policy measures in isolation. Residents of the villages in Si and Gun can participate in rural policy measures only if they are part of an organisation (e.g. an agricultural association or an agricultural company) (MAFRA, 2014c). Partnership between members is therefore important. Rural policy measures follow the Block Grant System which also employs a bottom-up approach. Thus, recently introduced rural policy measures have been implemented based on partnership and a bottom-up approach. These policy measures require households to join an organisation or corporation in order to participate. Networking across diverse groups is emphasised in order to achieve greater synergy or innovation. The farm households participate in organisations such as the village agricultural association or an agricultural company.

The head of local government (Si or Gun) is the principal agent with the responsibility for developing local plans (ibid.). Rural policy measures differ from many agricultural policy measures as a result of the Block Grant System approach. Based on central government guidelines, local government and local people produce an integrated plan that identifies actions and how the funding will be utilised. At the planning stage, diverse people such as farmers, businessmen, researchers, academics and specialists are encouraged to participate and gain feedback from the organisation (MAFRA, 2013d). Local opinion is important in developing rural policy measures. In addition, central government (i.e. MAFRA) supports local government (Si or Gun) to develop the plan through consultation. This is in contrast to the agricultural policy, which is designed and planned by central government.

The recently introduced rural policy measures are implemented by organisation type. Cooperation and partnership between members are important. Through their membership of

²⁶ The GBP to won exchange rate in 2013 was 1,711.45 KRW. (The Bank of Korea)

an organisation, farm households can participate in non-farm activities that are supported by rural policy measures. Participation type and the ways in which profits are distributed vary widely across policy measures and specific individual community businesses. Participants in community businesses decide how profits are to be distributed, e.g. equal distribution or distribution based on the share of investment. Table 2.4 illustrates the rural policy measures that have been implemented by organisations and partnerships between members. Some of these are village-based rural policy measures, and others are broader area-based (e.g. Si, Gun or Do) rural policy measures.

Table 2.4 Rural policy measure and participation type

Policy measure	Geographic focus	Participation type (Beneficiary)	Profit distribution
Complex Industrialisation of Rural Resource (CIRR) programme	Local level	<ul style="list-style-type: none"> ▪ agricultural corporation ▪ producers' organization ▪ agricultural products processing company 	<ul style="list-style-type: none"> ▪ participants decide the method of profit distribution (e.g. based on the share of investment)
General Rural Village Development (GRVD) programme	Local level (capital village, 3-5 villages, Town)	<ul style="list-style-type: none"> ▪ agricultural corporation ▪ producers' organization 	<ul style="list-style-type: none"> ▪ participants decide the method of profit distribution (e.g. equal or based on the share of investment)
Local Industry Development (LID) programme	Local level	<ul style="list-style-type: none"> ▪ agricultural corporation ▪ producers' organization ▪ local company * required to make organization 	<ul style="list-style-type: none"> ▪ participants decide the method of profit distribution (e.g. based on the share of investment)
Development Regional Strategic Food Industry (DRSFI) programme	Regional level and Plural local level	<ul style="list-style-type: none"> ▪ corporation (which is composed of producers, businesses, the local government, universities and researchers) 	<ul style="list-style-type: none"> ▪ participants decide the method of profit distribution (e.g. based on the share of investment)
Green-tourism Village (GV) programme	Village level	<ul style="list-style-type: none"> ▪ village people (both farmers and non-farmers) 	<ul style="list-style-type: none"> ▪ equal distribution among participants

Source: Project implementation guidelines (MAFRA, 2013e)

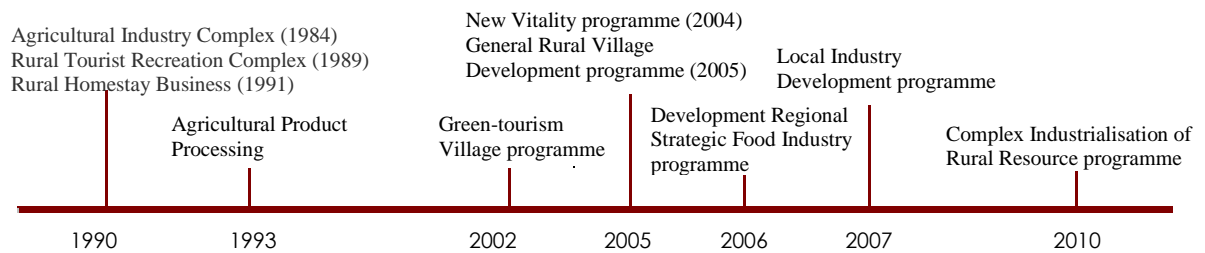
The trend has changed from a top-down approach to a bottom-up approach, so that local people and local government play a major role in rural development. Nevertheless, some studies (KREI, 2008a) have identified problems with the rural policies. The contents of rural policy across the country are broadly similar and there are few differences between them. Also, there is an issue with the evaluation of rural policies. In many cases the impact of the rural policy measures has not been evaluated. Thus, the incentives and penalties are not covered. Third, the autonomy of local government is limited. There is a strong political influence on decision-making by local government.

In addition, rural policy to increase non-farm income has been unsuccessful because of its limited objective (KREI, 2008b). In rural areas, several rural policy measures have been implemented individually without a comprehensive plan. It was therefore difficult to predict synergy effects between rural policy measures.

2.3.4 Non-farm income and rural policy

In recent years, one of the main objectives of Korean agricultural and rural policy has been to increase farm households' non-farm income. Several rural development policy measures have been introduced to deal with the imbalance between urban and rural areas (KREI, 2008b; Kim *et al.*, 2012). Figure 2.2 shows the policy measures that have been implemented in Korea.

Figure 2.2 Introduction of rural policy measures in Korea



The representative rural policy measures for increasing non-farm income before the 2000s were the Rural Special Production Complex, the Rural Tourist Recreation Complex, the Agricultural Industry Complex, Traditional Food, the Agricultural Product Processing and the Farm Tourism. They were designed to increase non-farm income and develop the rural economy by using unemployed labour in rural areas (KREI, 2008b). The Rural Special Production, which is characterized by part-time work, was designed in 1967 to increase non-farm income during the non-crop season.

Based on the ‘Act on Promotion of Agriculture and Fishery Income (1983)’, the construction of the Agricultural Industry Complex and the Farm Tourism were introduced in 1984 (Lee *et al.*, 2008; Kim *et al.*, 2012). The Agricultural Industry Complex was implemented to achieve balanced development and reduce the gap between urban and rural areas by attracting factories to rural areas (Kim *et al.*, 2012). Park *et al.* (2004) claim that the take-up for the Industry Complex was relatively low, i.e. less than 50 per cent. The companies in the

Agricultural Industry Complex have a weak relationship with local agricultural resources, including agricultural products (ibid.). KREI (2008b) argues that although the Agricultural Industry Complex contributed to an increase in job opportunities in rural areas, employment of local people was 63 per cent, whereas the employment of farm household members was only 13 per cent. In this respect, this policy measure has not fully achieved its objectives in terms of increasing non-farm income and the employment of local people (ibid.). Lee *et al.* (2007) argue that the Agricultural Industry Complex has not had the expected results because rural industries that come from outside the rural areas have low competitiveness and poor linkage with the rural economy. The participation in non-farm work is relatively limited because of an ageing and declining rural population (ibid.).

In addition, the Rural Special Production Complex had a marketing problem as the products, which were based on low technology, did not meet the needs of customers (Park *et al.*, 2004). KREI (2008b) argues that the Rural Special Production Complex did contribute to an increase in job opportunities in rural areas. The percentage take-up of the total Complex was about 39 per cent taking into account the ageing population and the decrease in farm households (ibid.).

The growing interest in rural tourism by urban residents is one of consumption diversification, because the real income for the urban population increased four times between 1970 and 1990 (Lee *et al.*, 2012). Thus, several rural policy measures were introduced with the aim of boosting non-farm activities. These included the Rural Tourist Recreation Complex in 1989 and the Rural Homestay Business in 1991 (Kim *et al.*, 2012). However, the Farm Tourism did not have an advantage over other general accommodation (Park *et al.*, 2004). Also, city people came to the rural areas to participate in the Farm Tourism, so the rural policy did not contribute to farm household income (Park *et al.*, 2004). In addition, the Rural Tourist Recreation Complex and the Rural Homestay Business had similar problems to the Farm Tourism (ibid.).

In the 1990s, the policy of increasing non-farm income was a low priority while the Korean government focused on increasing agricultural competitiveness (KREI, 2008b). Although policies that sought to boost non-farm income (such as the Agricultural Industry Complex) were implemented, interest in non-farm income decreased because the policy priority was to restructure agriculture and increase its competitiveness (KREI, 1999b; Lee *et al.*, 2008).

In 1993, as a means of agricultural restructuring, the promotion of Agricultural Processing and Traditional Food were implemented. These policy measures were targeted at small and medium size farm households, while the agricultural restructuring policy supported scaling and specialization (KREI, 2008b; Kim *et al.*, 2012). The Agricultural Production Processing was implemented to increase the added value of agricultural products (KREI, 2008b). This programme encouraged processing enterprises to buy agricultural resources from farm households. The objective of this programme was to contribute towards stabilising the price of agricultural products so that the processing companies would buy agricultural products from farm households (*ibid.*). The Agricultural Product Processing had several problems such as marketing, product differentiation, investment, production costs and management (Park *et al.*, 2004). KREI (2008b) claims that although the Agricultural Product Processing also contributed to an increase in rural job opportunities and income, development was limited due to a shortage of qualified labour. In addition, the percentage take-up of the Agricultural Product Processing was 58 per cent in 2007 (*ibid.*).

KREI (2008b) claims that the rural policy measures prior to the 1990s have had some successful results in rural areas. Those rural policy measures increased employment and income for farm households. Also, these rural policy measures helped to increase capacity building for local people (*ibid.*). Nevertheless there are some problems. The results of these rural policy measures were insufficient because the number of farm households decreased and participation in non-farm activity by farm households also decreased (*ibid.*). These efforts have not achieved good results because of inadequacies in the industry system and networks (*ibid.*). Furthermore, KREI (2008b) argues that rural policy measures from before the mid-2000s faced limitations because their sole objective was to increase non-farm income by farm households. The rural policy measures have been implemented in terms of individual aspects rather than comprehensive strategies and they did not have any positive impacts in terms of synergy.

Meanwhile, the policy measures to enhance non-farm income have had a slightly different characteristic since the mid-2000s. Rural policy had mainly focused on supporting physical assets such as facilities, but until the mid-2000s less support had been given to building the capacity of the rural population (Park *et al.*, 2004). Before the mid-2000s, policy measures focused on increasing non-farm income by farm households, whereas since the mid-2000s, policy measures have had several objectives in addition to boosting non-farm income. Also, the policy measures after mid-2000s have been implemented under the structure of the

National Regional and Industry Development Plan. Rural policy measures introduced before 2000 prioritised farm households as beneficiaries. However, rural policy measures that were introduced after 2000 targeted both farm and non-farm households in rural areas (KREI, 2008b).

The Green-tourism Village programme was implemented in 2002. Rural tourism has increased since the 2000s thereby increasing income diversification for farm households. The number of tourists within the four rural tourism programmes²⁷ has increased by 13 times between 2002 and 2008 (Lee *et al.*, 2008). Although rural tourism has been popular in rural Korea, there are some limitations. Lee *et al.* (2007) argue that the farm households who participate in the programme lack a business mindset, the quality of service provided is low and there are many rural tourism villages that are indistinguishable across the region. Also, village-based businesses experience difficulty in terms of responsible business management (*ibid.*) .

In 2003, the newly elected government implemented the Strategies for Regional Balanced Development which introduced several rural policy measures²⁸. These included the New Vitality programme in 2004, and the General Rural Village Development (GRVD) programme in 2005. In particular, the objective of the GRVD programme is to improve the quality of life and income of the rural population by developing rural areas. Also, the programme aims to improve basic living standards and amenities for the residents and to facilitate rural development. This programme also includes an income project.

In addition, the Local Industry Development (LID) programme was introduced in 2007. The objective of this programme is to promote economic vitality in the region by developing local resources in rural areas, and linking a variety of primary, secondary, and tertiary industries. In particular, Lee *et al.* (2007) claim that the LID programme is similar to the Rural Special Production in that it is based on rural resources. However, it differs from the Rural Special Production in terms of its focus on inputs and services to agricultural production (backward linkages) and processing and marketing services (forward linkages). In addition, in 2010, the

²⁷ There have been four rural tourism policy measures in South Korea since the 2000s. The four programmes have been implemented by different organisations as follows: GV programme (MAFRA), Traditional Theme Village programme (Rural Development Administration), Farm Stay programme (National Agricultural Cooperative Federation), Fishery Village programme (Ministry of Oceans and Fisheries). Some areas of the Farm Stay programme overlapped with the other three areas because the National Agricultural Cooperative Federation is not a government body (Lee *et al.*, 2008).

²⁸ The Strategies Regional Balanced Development includes both urban and rural industries.

Complex Industrialisation of Rural Resource (CIRR) programme was introduced. Support for the CIRR programme is similar to the LID programme, but on a relatively small scale (MAFRA, 2014b).

The rural policy measures that have been introduced since the mid-2000s are different from those introduced prior to this period. These rural policy measures emphasise the networking of farm households (industry), government and academia. Also, an increase in ability by local people through education and the establishment of an innovation system were emphasised (Lee *et al.*, 2007). KREI (2010) claims that linkages and networks between people within the industry, academia, researchers and government are important in terms of improving competitiveness. The linkages and networks are important in terms of creating knowledge, education and innovation (KREI, 2008b). These rural policy measures are based on the ASP (Actor, System, and Programme) model, where rural actors build trust and establish networks to undertake their regional programme (KREI, 2008b). These policy measures tried to systematize production, processing and marketing based on rural agricultural products (Kim *et al.*, 2012). Since the mid-2000s rural policy measures have focused on developing rural resources and networking across primary, secondary and tertiary industries (Lee *et al.*, 2008). In line with this trend, the support services became important because rural policy was normally focused on physical assets, while physical assets were the main emphasis prior to 2004 (Kim *et al.*, 2012). ‘Physical assets’ comprise facilities and infrastructure, while ‘support services’ cover education, consultation and funding for marketing. Table 2.5 shows the purpose of, and support for, the current rural policy measures.

Table 2.5 Current rural policy measures in Korea

Title	Purpose	Period	Support
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Title	Purpose	Period	Support
Complex Industrialisation of Rural Resource (CIRR) programme	<ul style="list-style-type: none"> ▪ diversification of the rural economy through linking a variety of primary, secondary, and tertiary industries ▪ facilitating new enterprises and attracting established enterprises to rural areas ▪ increasing income and employment opportunities by promoting complex industrialisation based on rural resources ▪ boosting establishment and attracting businesses 	2010-to date	<ul style="list-style-type: none"> ▪ support for infrastructure for production and distribution (e.g. modernization of facilities) ▪ support for agricultural product processing facilities ▪ support for experience tourism ▪ creating an agricultural industrial complex to attract companies and local enterprises ▪ support for business infrastructure for experience tourism(e.g. theme park)
General Rural Village Development (GRVD) programme	<ul style="list-style-type: none"> ▪ increasing quality of life for rural people and developing balanced national development by managing rural areas systematically ▪ increasing income and basic living standards for the residents ▪ promoting the rural influx of city dwellers, maintaining the rural population, facilitating rural development and improving rural amenities 	2005-to date ²⁹	<ul style="list-style-type: none"> ▪ increasing income <ul style="list-style-type: none"> - farming based: roads for mechanization, small-scale water development, farm machinery shed. - income-based (20% match-funding): common regional product processing facilities, common packing facilities, common cold storage, multipurpose warehouse. ▪ experience tourism: wildflower complex, village sculptures, ecological learning centre ▪ increasing basic living infrastructure (e.g. roads, parks, libraries, sports facilities) ▪ improving landscape (forest, remodelling roofs, walls) ▪ building local capacity (e.g. education)
Local Industry Development (LID) programme	<ul style="list-style-type: none"> ▪ promoting the economic vitality of the region by developing local resources in rural areas, and linking a variety of primary, secondary, and tertiary industries 	2007- to date	<ul style="list-style-type: none"> ▪ improving existing products and diversification ▪ developing products by using traditional resources, native plants and animals ▪ commodification of traditional folk forms ▪ developing new materials and products through effective use of agricultural products
Development Regional Strategic Food Industry (DRSFI) programme	<ul style="list-style-type: none"> ▪ increasing household income through the establishment of regional strategic industry, based on specialized agricultural industry in the region 	2005-to date	<ul style="list-style-type: none"> ▪ support for innovation system, and networking (e.g. workshops, dedicated labour, business plan consultation) ▪ support for industrialisation and marketing (e.g. brand development, co-marketing, environment-friendly support centre, integrated logistics centre, PR facility)
Green-tourism Village (GV) programme ³⁰	<ul style="list-style-type: none"> ▪ increasing income through tourism 	2002- to date	<ul style="list-style-type: none"> ▪ supporting facilities ▪ supporting tourism programme

²⁹ Several rural policy measures including the Comprehensive Rural Village Development (CRVD) programme were integrated into the General Rural Village Development (GRVD) programme in 2010.

³⁰ The GV programme was integrated into the CIRR programme in 2010 and 2011. However, the GV programme was integrated into the GRVD programme in 2012.

Title	Purpose	Period	Support
Rural Homestay Business	<ul style="list-style-type: none"> ▪ increasing income through homestay business, using single-family homes and multi-family housing 	1991-to date	<ul style="list-style-type: none"> ▪ loans (interest rate 3%) support for the cost of housing increases or reconstruction (no support for new building)
Rural Tourist Recreation Complexes	<ul style="list-style-type: none"> ▪ increasing income and providing opportunities for city people to experience recreational space 	1989-to date	<ul style="list-style-type: none"> ▪ no monetary support
Farm Tourism	<ul style="list-style-type: none"> ▪ increasing income through sales facilities, farming experience facilities, sports facilities, and recreation facilities 	1984-to date	<ul style="list-style-type: none"> ▪ loans (interest rate 3%) support for the installation, renovation and operation of farm tourism
Agricultural Industry Complex	<ul style="list-style-type: none"> ▪ establishing industrial complexes 	1984-to date	<ul style="list-style-type: none"> ▪ low tax, loans, simplifying administrative procedures

Source: Project Implementation Guidelines (MAFRA, 2013e) and the Guideline for Block Grant System (MIFAFF, 2009)

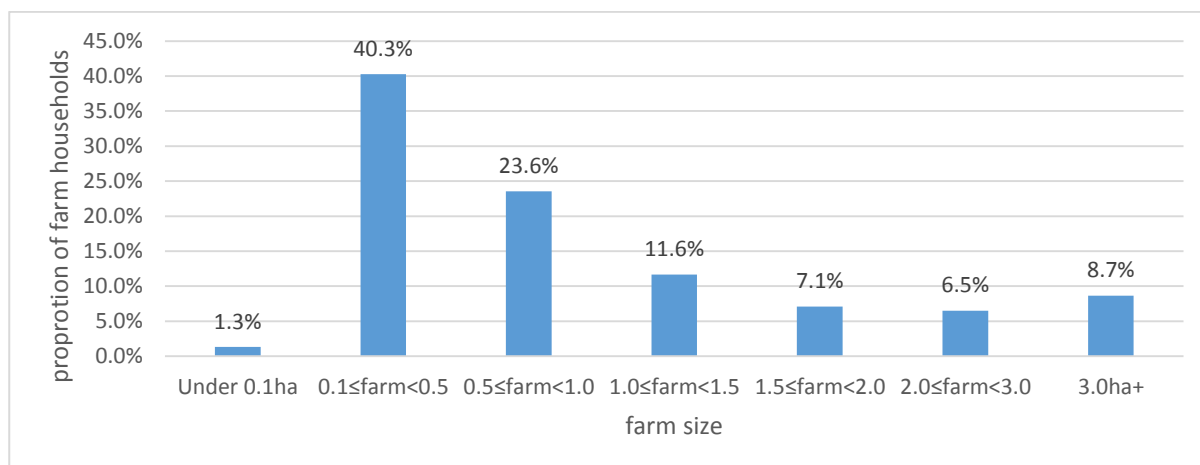
2.4 Korean Farm Households

The international environment, domestic agricultural structure, and agricultural and rural policies may influence the economic status of farm households. Sometimes the status of farm households may lead to the introduction of rural policy measures. In addition, some indicators may demonstrate the influence of the rural policy measures. The impacts of rural policy can be well understood in the context of Korean farm households.

2.4.1 Smallholders

In 2013, farmland accounted for 17 per cent of Korea's total land area (10 million hectares), compared with forest, which covered some 64 per cent of the land (MAFRA, 2014a). Although there were intensive efforts to increase agricultural land area through drainage, irrigation and reclamation, farmland declined from 23 per cent in 1970 to 17 per cent in 2013 as a result of industrial and urban development (OECD, 2006; MAFRA, 2014a). Of the 1.7 million hectare of farmland, 57 per cent is paddy field and 43 per cent is upland (MAFRA, 2014a). The average farm size was approximately 1.5 hectares in 2013 (MAFRA, 2014a). As shown in figure 2.3, about 77 per cent of farm households have less than 1.5 hectares and farmland has been traditionally cultivated by family members.

Figure 2.3 Proportion of farm households by farm size in Korea, 2013 (%)



Source: Korea National Statistical Office (www.kosis.kr)

The percentage of farmland differs across the nine provinces (Dos) of Korea. Table 2.6 shows that Gangwon-do has the lowest farm size out of the nine Dos because it is the most mountainous area in Korea. The proportion of upland (63.1 per cent) is higher than that for paddy fields in Gangwon-do. Gyeongsangbuk-do and Gyeongsangnam-do also have a low proportion of farmland. This is because they also contain mountain ranges. Meanwhile, Jeju-do is an island where 99 per cent of the farmland is upland.

Table 2.6 Farm size in nine Dos in Korea, 2013 (Unit: hectare, %)

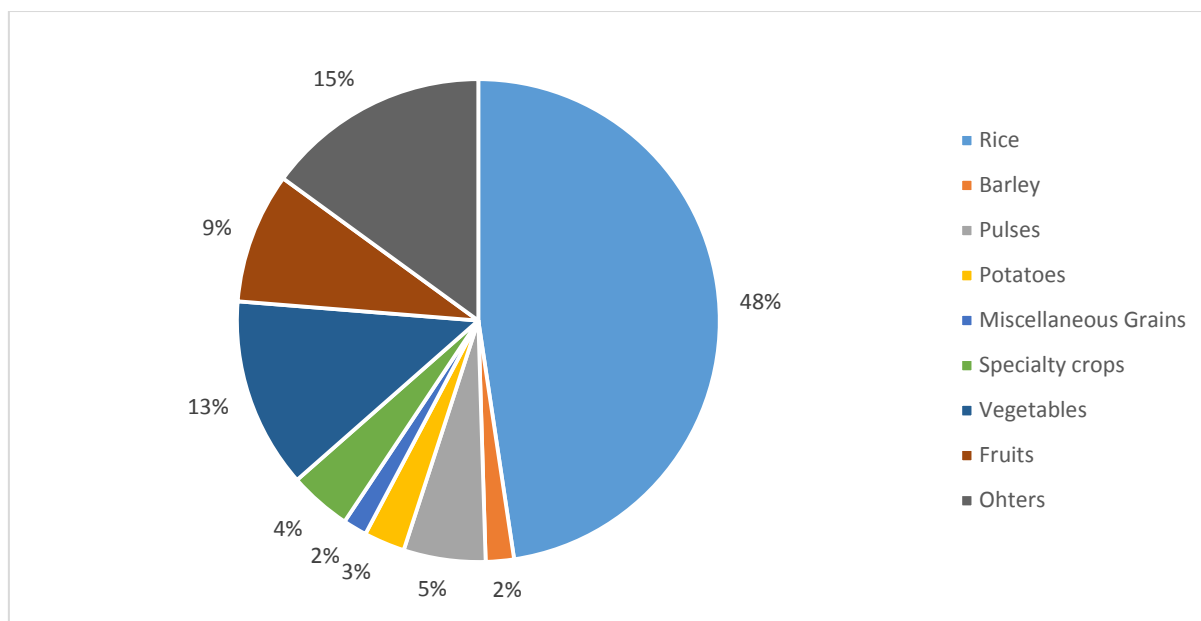
Do	Total area (hectare)	Farmland/Do's total area (%)	Farmland		Farmland per farm household (hectare)
			Paddy Field (%)	Upland (%)	
Gyeonggi-do	1,017,069	17.9	54.2	45.8	1.33
Gangwon-do	1,678,719	6.7	36.9	63.1	1.56
Chungcheongbuk-do	743,326	15.9	42.0	58.0	1.49
Chungcheongnam-do	863,013	28.6	71.2	28.8	1.60
Jeollabuk-do	806,708	25.6	68.9	31.1	1.95
Jeollanam-do	1,225,659	25.2	61.7	38.3	1.88
Gyeongsangbuk-do	1,902,962	14.8	49.6	50.4	1.44
Gyeongsangnam-do	1,053,362	15.2	61.2	38.8	1.16
Jeju-do	184,918	33.2	0.1	99.9	1.61
Average	1,052,860	17.3	55.8	44.2	1.50

Source: Korean National Statistical Office (www.kosis.kr)

Figure 2.4 shows that rice is the most widely cultivated crop in Korea, occupying about half of the total farmland in 2013 (MAFRA, 2014a). Although the use of farmland for rice has decreased over the past 30 years, it still accounts for about half the total usage because rice is the staple food in Korea. The OECD (2008) claims that rice-centred farming has diversified into other crops, livestock production, fruits and vegetables to meet the diverse demands for

agricultural products.

Figure 2.4 Use of farmland in Korea, 2013 (%)

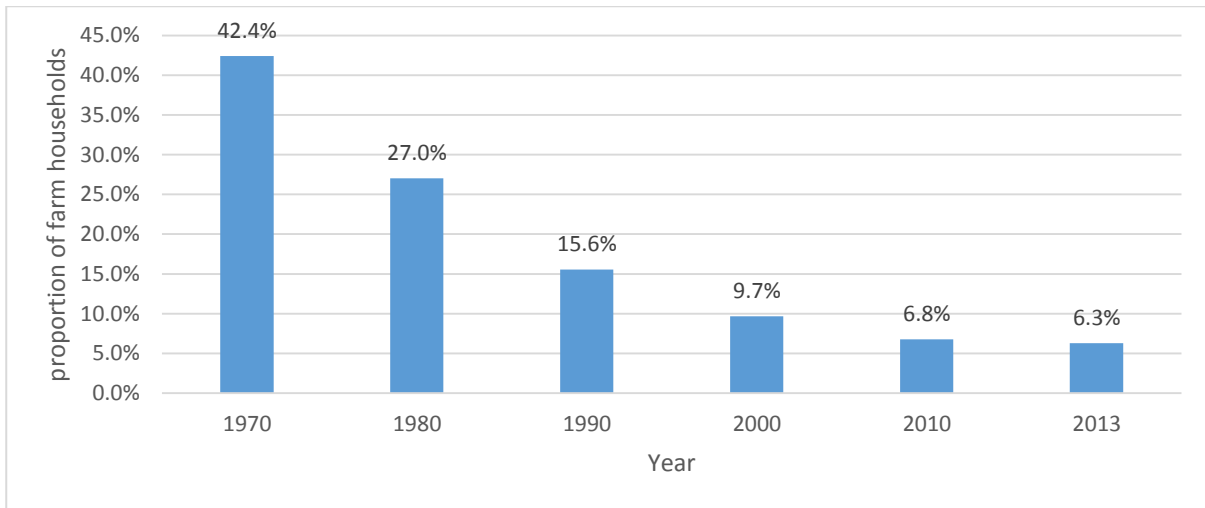


Source: Korean National Statistical Office (www.kosis.kr)

2.4.2 Decrease in the number of farm households

Since 1970, Korea has applied an unbalanced economic growth strategy, i.e. the second industry-oriented strategy for industrialisation (Lee and Kim, 2011). Korea invested in heavy and chemical industries as a strategy for economic development in the 1970s (ibid.). Thus, Korea's economy developed rapidly, with 40 years of growth averaging more than 8 per cent per annum (ibid.). Meanwhile, young people, in particular, have moved to cities where more jobs are available. Figure 2.5 shows that the percentage of farm households out of the total number of households has decreased from about 42 per cent in 1970 to about 6 per cent in 2013 (MAFRA, 2014a). The rural population, and particularly the farm population, has decreased. In 2013, the proportion of the farm population out of the total population is about 5.7 per cent (2,847,000). The OECD (2008) highlighted that the farm population has decreased in both absolute and relative terms since 1960 as a result of industrialisation in Korea. Although decreases have been observed across all age groups, the number of young people in rural areas has sharply decreased (ibid.).

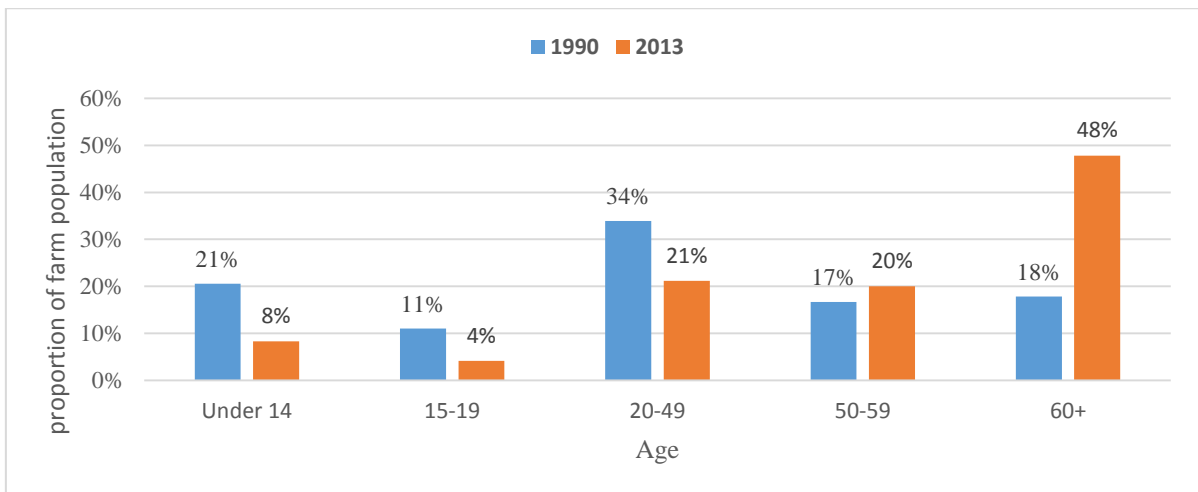
Figure 2.5 Proportion of farm households against total households in Korea, 1970-2013 (%)



Note: (unit: thousand, 2013) total population: 50,200, farm population: 2,847, farm households: 1,142. Source: Korea National Statistical Office (www.kosis.kr)

Figure 2.6 shows the farm population by age group. One of the factors affecting farm households in Korea over the past 20 years is ageing. The percentage of people aged 50 or over in the farming population increased from 35 per cent in 1990 to 68 per cent in 2013 (MAFRA, 2014a). People aged over 60 years made up 18 per cent of the farming population in 1990 and 48 per cent in 2013. Although some people move to rural areas for work or to retire, young people tend to prefer living in the cities where there are more job opportunities available. Also, the convenience of city dwelling and better educational opportunities for their children were important to young people. As a result, ageing is more conspicuous in rural areas than in the cities. The percentage of elderly people aged 65 or over in rural areas reached around 34 per cent, as compared to the national average of around 10 per cent in 2009 (Korean National Statistical Office).

Figure 2.6 Farm population by age group in Korea, 1990 and 2013 (%)



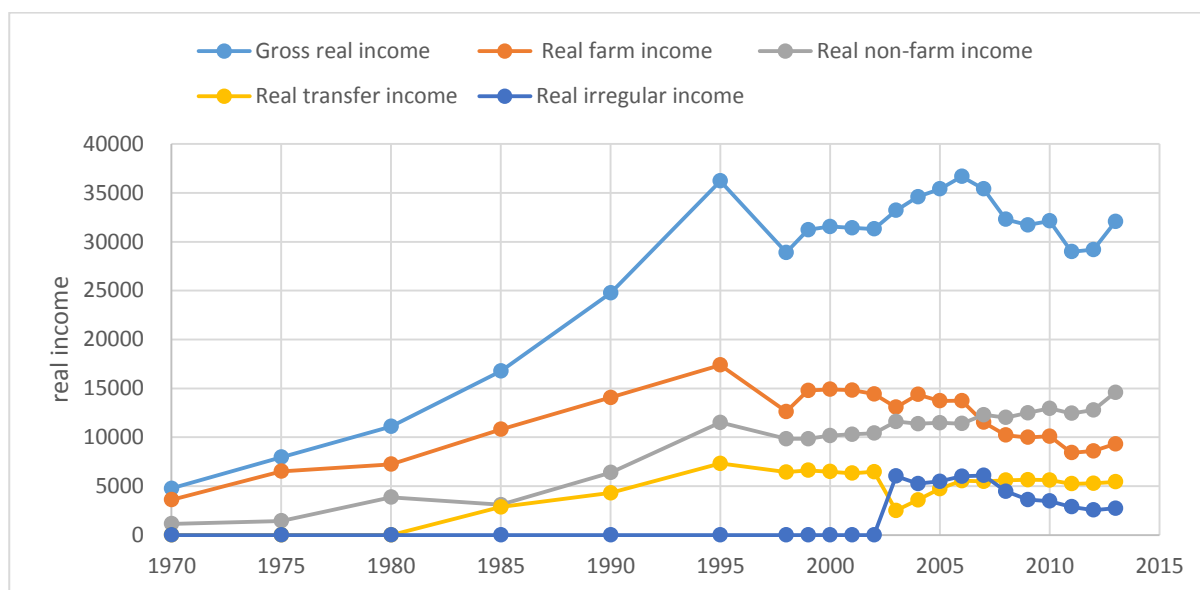
Source: Korea National Statistical Office (www.kosis.kr)

2.4.3 Farm household income

Korean agriculture was faced with globalisation following the UR agreement in 1995 and the Free Trade Agreement of the early 2000s. Figure 2.7 shows that real farm income has decreased since 1995. Increasing farm household income has been a big issue in South Korea. Real farm household income has not increased over the past two decades. The price of agricultural products decreased because of an increase in imports of agricultural products and an increase in domestic production. Also, farmers' terms of trade have deteriorated, i.e. increases in the cost of production, including tools and materials and farm wages were higher than increases to the price of agricultural products (Park *et al.*, 2004; OECD, 2008). The income gap between farm households and urban households increased. The percentage of farm household income compared with urban household income fell from 96 per cent in 1980 to 63 per cent in 2013 (NHERI, 2014). The average nominal income for farm households increased by 13 times from 1980 to 2013, whereas that for urban households increased by 20 times during the same period (*ibid.*). The OECD (2008) claims that Korean policy-makers may have to face the challenge of increasing non-farm income opportunities in rural areas.

Figure 2.7 Average farm households' real income by source in Korea, 1970-2013

(Thousand KRW)



Note: Nominal income was deflated by Consumer Price Index (2010=100). Irregular income was separated from transfer income since 2003. Source: Korea National Statistical Office (www.kosis.kr) and the Bank of Korea³¹

In addition, the source of farm household income has changed over recent years. Figure 2.7 also shows that real farm income has decreased since 1995, whereas from 1998 real non-farm income³² shows a slightly upward trend. The OECD (2008) claims that non-farm income increased twice as much as farm income from 1985 to 2005. The proportion of non-farm income increased as a result of industrialisation in rural areas and the increase in income from non-farm employment since the 1970s (OECD, 2008). Meanwhile, farm income for farm households decreased because the terms of trade worsened, i.e. the cost of farm inputs increased more rapidly than the price for agricultural products from 1995 (Lee and Yun, 2012). Since 2007, non-farm income³³ has become the largest source of income. As a result, the proportion of non-farm income against total household income was 45 per cent in Korea in 2013. (OECD, 2008) Farm households who only have a small farm find it difficult to earn income from farming to the same extent as other activities, so farm households have tried hard to diversify their income sources (ibid.). As a result, farm income comprised only 29 per cent in 2013, whereas farm households gained 75 per cent of their income directly from

³¹ The GBP to won exchange rate in 1970 and 2013 was 744.13 KRW and 1,711.45 KRW, respectively. (The Bank of Korea).

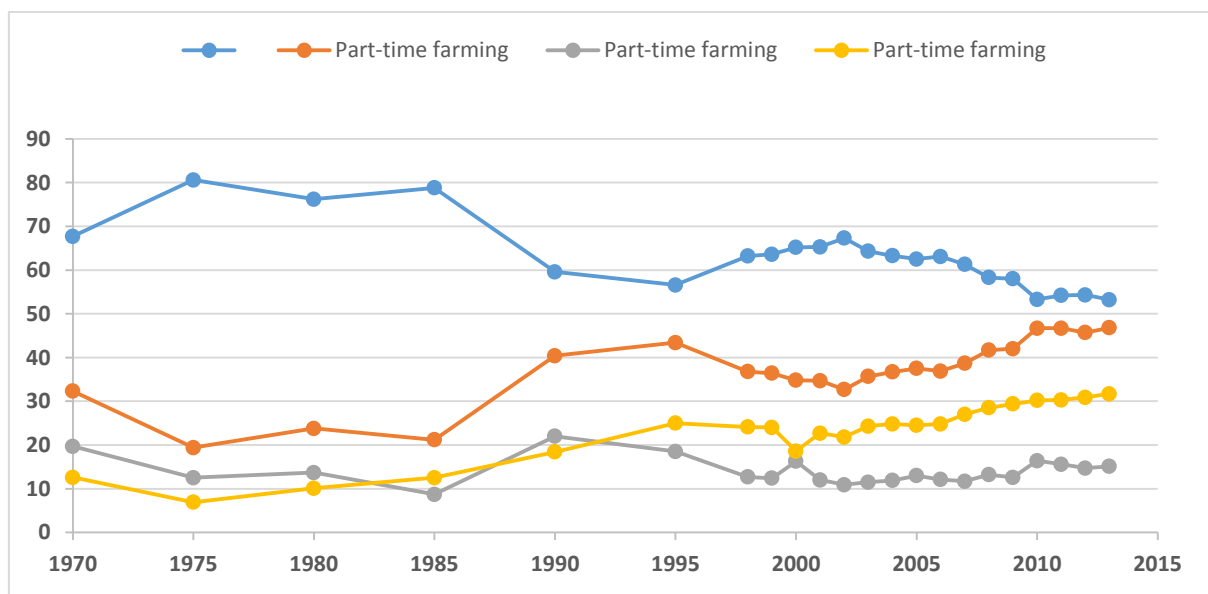
³² Non-farm income comes from, manufacturing, construction, agricultural services, restaurants, provision of lodgings, wholesale and retail sales, rural tourism, forestry, fishery, and/or processing of agricultural products (Korean National Statistical Office)

³³ The Korean National Statistical Office surveys income of farm households. These data do not consider corporations.

farming in 1970 (ibid.). The proportion of transfer income and irregular income against total farm household income was 17 per cent and 9 per cent, respectively. This trend in farm households' real income may have been influenced by the opening up of the agricultural market. The average farm income for farm households has decreased since the UR agreement.

The increase in non-farm income relates to farmers' participation in non-farm activities. Figure 2.8 shows that the number of part-time farming households has increased since 1985, whereas that of full-time farm households has decreased. The proportion of full time farm households is about 53 per cent in 2013, whereas that of part-time farm households is about 47 per cent. This figure shows an increase in type 2 part-time farmers where the contribution of farm income to total household income is less than 50 per cent (OECD, 2008). The proportion of full-time farm households increased from 1995, but began to decrease after 2002. Meanwhile, the proportion of part-time farm households (defined as farm households in which one or more members are engaged in jobs other than farming) has increased from 19 per cent in 1975 to 47 per cent in 2013. The OECD (2008) claims that the recently introduced rural policy measures have influenced the increase in part-time farming as well as the trend towards industrialisation and urbanisation.

Figure 2.8 Full time and part-time farm households in Korea, 1970-2013 (%)

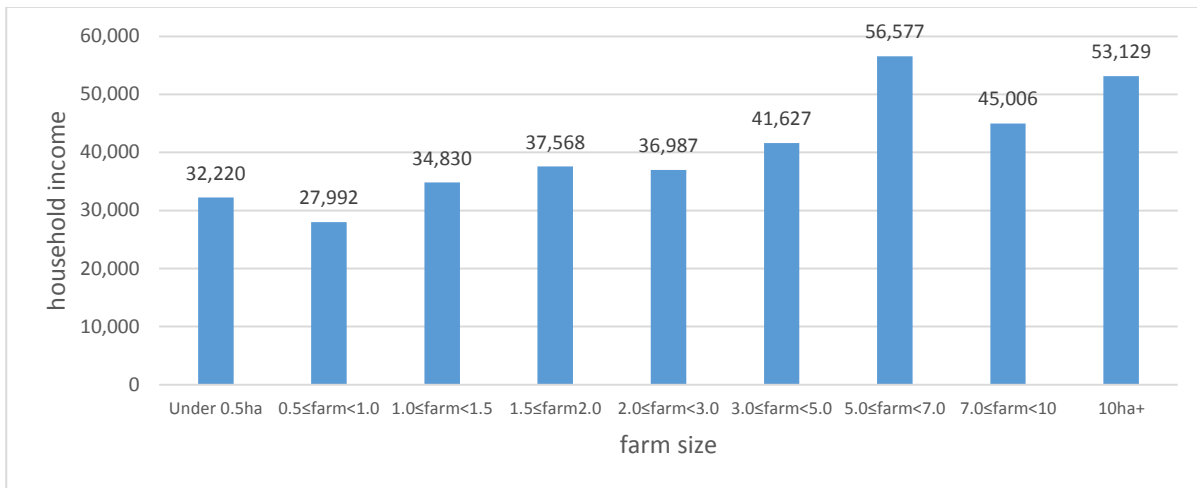


Type1: farm income /total income \geq 50%, Type2: farm income/total income <50%. Source: Korea National Statistical Office (www.kosis.kr)

Farm income is linked to farm size. Figure 2.9 shows an overall increase in average farm household income as farm size increases (with the exception of the figure for the under 0.5

hectare group, where farm activities are very much part-time compared to bigger farms). The farm households who have 5-7 hectares have the highest farm household income across farm households. Moreover, farm size may be related to the non-farm activities of farm households. The OECD (2008) claims that farm households who have a large farm size are more dependent on farm income than smallholders.

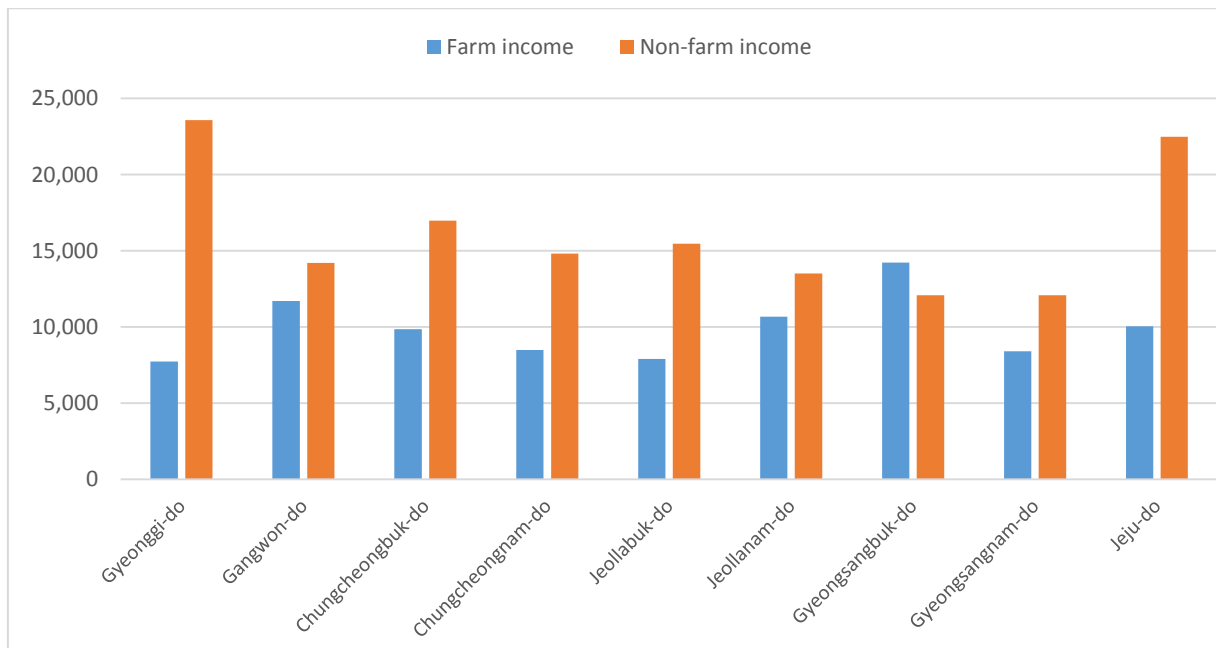
Figure 2.9 Farm size and average household’s income in Korea, 2013 (Thousand KRW)



Source: Korea National Statistical Office (www.kosis.kr)

Figure 2.10 shows that the proportion of farm and non-farm income differs between the nine Dos. Farm income accounts for 28 per cent of household income, on average, whereas non-farm income makes up 46 per cent of total household income. Gyeonggi-do, which is more urban in character, has the lowest farm income and the highest non-farm income. Apart from Gyeongsangbuk-do, the proportion of non-farm income is higher than farm income.

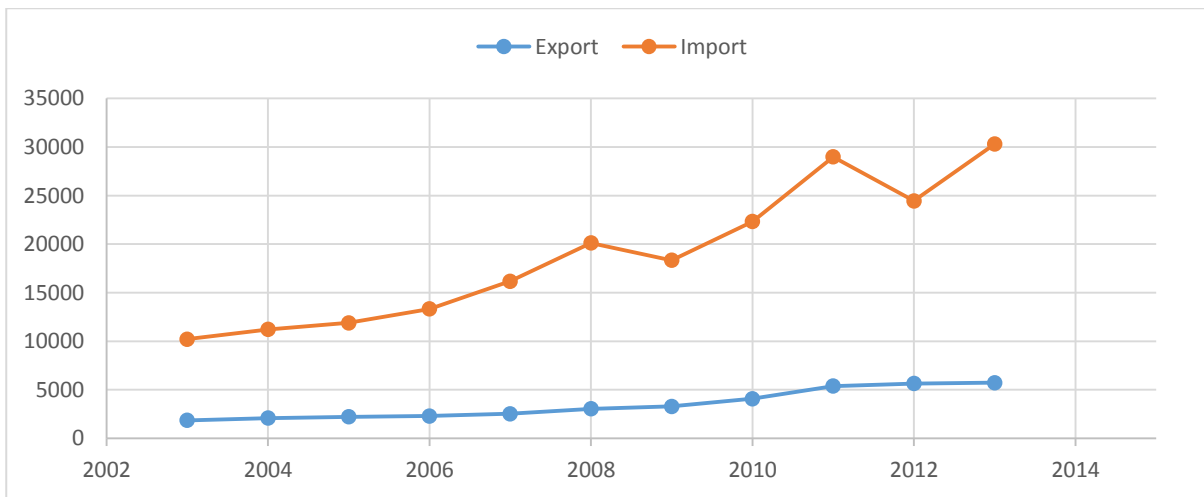
Figure 2.10 Farm and non-farm income of farm households in nine Dos of Korea, 2013 (Thousand KRW)



Note: Transfer income and Irregular income were not considered. Source: Korea National Statistical Office (www.kosis.kr)

In addition, with the opening up of agricultural markets, many cheap agricultural products have been imported, leading to a decrease in the price of agricultural goods. Figure 2.11 shows the nominal value of exports and imports. The trade in imported agricultural products has increased following trade liberalisation. The increase in agricultural products is of concern for Korean farm households and the Korean government. The increase in imports has a negative influence on farm household income because the imports inhibit increases in the price of agricultural products. Also, domestic agricultural products has to compete with imported agricultural products which are normally lower in price. Figure 2.11 demonstrates the increasing gap between imports and exports of agricultural products since the 2000s. The OECD (2008) claims that, in particular, imports from Chile have increased since the FTA with Chile in 2004.

Figure 2.11 Exports and Imports of Agricultural Products in Korea, 2003-2013 (Million \$, Nominal terms)



Source: Food, Agriculture, Forestry and Fisheries Statistical Yearbook (MAFRA, 2014a)

In summary, increasing the competitiveness of agriculture is a major challenge given the fact that the majority of Korean farmers are smallholders and a high proportion of them are older farmers. Now that the market has been further opened up, farm households' real income from farming is in decline. In addition, the income gap between farm and urban households has also been a key problem that the Korean government policy-makers need to address. Under the current Korean agricultural and rural conditions, non-farm income and rural policy measures that aim to boost non-farm income have become even more important to farm households and the Korean government. In order to sustain farm household income and develop rural industries, the Korean government has become more interested in rural policies. The number of rural policy measures that aim to increase non-farm income and develop rural industries has increased, particularly since the mid-2000s.

2.5 Conclusion

This chapter explored Korean rural policy, agriculture, and Korean farm households. Korean farm households have farms that are small in size and farming is mainly conducted by family members. With increased market liberalisation, in particular since the UR, farm households have experienced a reduction in farm income. Over the last 30 years, Korean agricultural and rural policy has had to face the challenge of market liberalisation. In order to address these problems, the Korean government has implemented a series of comprehensive agricultural and rural plans, including rural policy measures with an emphasis on boosting non-farm

income. In particular, non-farm income has become increasingly important as a means of maintaining household income.

In Korea, there are differences between the rural policy measures that were implemented before the 2000s and those introduced since. The rural policy measures implemented since the mid-2000s follow the Korean Block Grant System and they are characterized by partnership and a bottom-up approach. Few studies have researched the impacts of recently introduced rural policy measures. This chapter explored rural policy measures and, in particular, the background to their introduction, together with an evaluation of the Korean literature. The rural policy measures that will be the focus of the present study will be narrowed down by means of a survey (in Chapter 5) and key informant interviews (in Chapter 6). This chapter also assists with the design of the questionnaire in Chapter 5. In the next chapter, the present study explores the main findings, and methodology employed within the income diversification literature.

Chapter 3: Literature Review

3.1 Introduction

The purpose of this literature review is to identify issues relevant to income diversification into non-farm activities in farm households. In particular, this chapter focuses on income diversification and rural policy measures that aim to stimulate non-farm activities. By reviewing the findings of previous work, this study can gain an overall view of the various aspects of income diversification in farm households. In addition, this chapter seeks to identify useful methods for examining the impacts of rural policy measures that aim to boost non-farm activities.

Over the last twenty years, numerous studies have examined farm households' participation in non-farm activities. Some studies of income diversification were directly linked to rural policy measures, while others were not. In addition, rural non-farm activities have been a topic of interest in both developing and developed countries. Many studies of non-farm activity in developing countries have sought to identify the main factors that influence participation in non-farm activities, while similar studies in developed countries tend to be less interested in those determinants and to have a greater focus on the links between policy and the development of non-farm activities or contributions of business in rural areas.

This review is concerned with what previous studies have identified and how those studies addressed research objectives and research questions that are similar to those proposed in Chapter 1. This review focuses primarily on: (1) why farm households diversify; (2) what causes farmers or farm households to participate in non-farm activities; (3) the effect of non-farm activities in farm households; (4) how households vary in the impacts of diversification; and (5) which methods and approaches have been employed to investigate those impacts.

3.2 Definitional Issues

The present study has identified some variation in the literature in the terminology used to discuss non-farm activities. Inconsistent terminology has been source of confusion in the

literature relevant to the non-farm economy (Barrett and Reardon, 2000; Barrett *et al.*, 2001b). Thus, it is necessary to clarify the different use of terminology in order to understand and compare what other studies have done.

The terms “income diversification” and “pluriactivity” have both been used to refer to farmers engaging in multiple activities (Reardon *et al.*, 2006). In some cases they have been used more narrowly to denote “farm diversification” or “multi farming”, while in others, they have been used to describe those farmers engaging in multiple activities either on the farm or not. Ellis (1998) claims that “income diversification” is used to refer to households that are engaged in portfolios of activities. *“Livelihood is more than just income and livelihood diversification is the process by which rural families construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standard of living”* (Ellis, 1998, p. 4). Although livelihood diversification is not synonymous with income diversification, many economic studies of diversification focus on different income sources and their relationship to income level, income distribution, assets, farm output and other variables (Ellis, 1998). Ellis (1998) further points out that most studies into income diversification employ households as the unit for empirical investigation because the household is a social group which resides in the same place and makes joint or coordinated decisions over resource allocation and income pooling.

In addition, “pluriactivity” has been used to describe *“the phenomenon of farming in conjunction with another gainful activity at either on-farm or off-farm”* (Fuller, 1990; Mackinnon *et al.*, 1991). Meanwhile, “pluriactivity” has been also used to mean the generation of income additional to that gained from primary agriculture, by any member of the farm household (Shucksmith *et al.*, 1989; Bateman and Ray, 1994; Moxnes Jervell, 1999). With a very similar meaning, “multiactivity” has been used to indicate households that participate in more than one sector (Berdegué *et al.*, 2001).

Meanwhile, “off-farm”, “non-farm”, and “non-agricultural” appear in seemingly synonymous ways in the literature (Barrett and Reardon, 2000; Barrett *et al.*, 2001b). In some studies off-farm work has been used to refer to non-agricultural work (Bateman and Ray, 1994; Yang, 1997). Bateman and Ray (1994) categorise employment into (i) farm work on the farm, (ii) non-agricultural work on the farm, (iii) work on other farms, and (iv) off-farm employment. Meanwhile, Ellis (1998) treats off-farm income as wage or exchange labour on other farms. Barrett *et al.* (2001b, p. 318) describe the components of rural household income using a so-

called “*three-way classifications of earned income by sector (e.g. farm vs. non-farm), function (wage vs. self-employment), and space (local vs. migratory)*”. They argue that “*the most basic classification of activities follows the sectoral distinctions of national accounting systems*³⁴: *primary (agriculture, mining, other extractive), secondary (manufacturing), and tertiary (services)*”. It leads to the distinction between “agricultural” or “farm income” and “non-agricultural” or “non-farm income”. Non-farm income is the income of farm households outside the agriculture sector, regardless of location and function (Ellis, 1998; Barrett *et al.*, 2001b). In addition, Barrett *et al.* (2001b) claim that the most common error is classifying agricultural wage employment income as non-farm income rather than as agricultural (sector) and off-farm (location) income. Meanwhile, non-farm income can be categorised into non-farm rural wage employment, non-farm rural self-employment, property income, urban-to rural remittances and international remittances (Ellis, 1998).

To sum up, it is necessary to be clear about the definitions used in this study because there can be ambiguity in the use of terms such as non-farm income. The present study adopts the classification of Barrett *et al.* (2001b) and defines non-farm income as the additional income earned outside the agricultural sector. Income diversification will be used to refer to the behaviour of farm households that participate in non-farm activities and earn non-farm income.

3.3 Importance of Diversification into Non-farm Activity

Few studies of the rural economy in the developing world have addressed non-farm-activities and the rural policies and programmes that support them. In contrast, many studies of the rural economy (e.g. Shortall, 1994; Ray, 2000; Shucksmith, 2000) in the developed world have examined how rural policies and programmes support non-farm activities. Most research in developing countries of individuals with low incomes have focused on non-farm activities as a means of moving out of poverty, while in developed countries diversification in such activities is usually a strategy adopted to maintain income levels.

³⁴ The Korean government follows sectoral distinction regarding non-farm income. The national statistic for non-farm income is made according to the sectoral distinction.

Because of the differences in terms of both motivation and the importance of non-farm income, the literature review first examined studies of developing countries before focusing on those of the developed world.

Income diversification of farm households is a common phenomenon and is not confined to rural areas, nor to developing countries (Ellis, 1998). Income diversification is also a survival strategy for urban dwellers in developing countries and is prevalent among farm families in developed countries (*ibid.*).

Non-farm activities have become a major topic for researchers, not only because non-farm activities are important for individual farm households, but also because they contribute significantly to local economies. Many studies in both developing and developed countries³⁵, have investigated the non-farm activities of farm households. However, there may be different motives for income diversification in developing and developed countries. Studies in developing countries (e.g. Adams, 1994; Ellis, 2000; Canagarajah *et al.*, 2001; Escobal, 2001; Reardon *et al.*, 2006) have often emphasised non-farm activities as a way out of poverty and some have sought to describe the distributional impacts of non-farm activities. In addition, whether and under what conditions rural non-farm employment increases or decreases overall rural inequality is a critical issue in many developing countries because inequality causes or worsens social tension and instability (Reardon *et al.*, 2000). In contrast, studies in developed countries (e.g. Bateman and Ray, 1994; Ahearn *et al.*, 2006; Bosworth and McElwee, 2014) have been more focused on questions of economic viability and farm household income. For example, Ahearn *et al.* (2006) investigated non-farm activities because non-farm employment played a significant role in stabilising the number of farms and in providing the major source of income for the majority of farm households.

Many studies in developing countries (e.g. Adams, 1994; Ellis, 2000; Canagarajah *et al.*, 2001; Escobal, 2001; Reardon *et al.*, 2006; Beyene, 2008; Mat *et al.*, 2012) explored the determinants of participation in non-farm activities and the barriers to participation that exist

³⁵ There is no established convention for the designation of “developed” and “developing” countries or areas in the United Nations system. In common practice, Japan in Asia, Canada and the United States in northern America, Australia and New Zealand in Oceania, and Europe are considered “developed” regions or areas. In international trade statistics, the Southern African Customs Union is also treated as a developed region and Israel as a developed country (UN, 2015). Meanwhile, IMF (1998) divides the world into three major groups: advanced economies (28 countries), developing countries (128 countries) and countries in transition (28 countries). The World Bank uses the IMF classification, which is based on a country’s Gross National Income (GNI) per capita per year. Countries with a GNI of US\$ 11,905 and less are defined as developing. Countries in transition have the transitional state from a centrally administered system to one based on market principles.

for poorer farm households. In contrast, fewer studies in developed countries (e.g. McNally, 2001; Chaplin *et al.*, 2004; McNamara and Weiss, 2005) have addressed the determinants of participation in non-farm activities. Meanwhile, many studies in developed countries (e.g. Benjamin, 1994; Ahearn *et al.*, 2006; Midmore *et al.*, 2008a; Mishra *et al.*, 2009; Corsi and Salvioni, 2012) have dealt with the impacts of policies that aim to boost the non-farm activities of farm households and benefit the rural economy. For example, redistribution of Common Agriculture Policy (CAP) support could significantly influence rural community development and household welfare in some EU countries (Rizov, 2004; Rizov, 2005). Rizov (2004) claims that rural development can be strengthened by achieving diversity of economic activities in rural areas, as rural communities benefit from diversity, e.g. reduced vulnerability to adverse trade shocks, positive agglomeration effect, and improved quality of life, adding up to higher income and welfare (*ibid.*). CAP funding for Pillar 2³⁶ contributed not only to maintaining levels of employment in the farming sector but also as a regional stimulus package in the non-farming sector (Mattas *et al.*, 2008). In addition, McAreavey (2010) points out that tourism has been one of the fastest growing global industries and that tourism has been an important contributor to sustainable rural development.

Non-farm income is important as a source of income and as a potential pathway out of poverty (Reardon, 1997; Barrett *et al.*, 2001b; Haggblade *et al.*, 2010). As Reardon (1997) points out, the share of non-farm income as a percentage of total household income increased between the 1970s and 1990s and in developing countries accounted for 35-50 per cent of rural farm households' income. Haggblade *et al.* (2010) claim that non-farm activities are important, particularly in developing countries because of high non-farm income shares, growing employment and low capital requirements. Rural non-farm activities can provide opportunities to the poor to work in the rural non-farm sector (Reardon, 1997) and can contribute significantly to both employment and rural income growth (Haggblade *et al.*, 2010).

Haggblade *et al.* (2010) argue that non-farm activity is important because it is a more productive income source than farm income. Non-farm income is approximately 20 per cent higher than the comparable farming employment in Africa, Asia and Latin America (*ibid.*). In addition, some studies (e.g. Reardon, 1997; Babatunde and Qaim, 2010) claim that non-farm activities have positive impacts on food security and farm investments in Africa. For example,

³⁶ Rural development policy is reinforced and confirmed in the second pillar of the Common Agricultural Policy. This reform is intended to make the agriculture sector and forestry more competitive, strengthen links between the primary activity and the environment, improve quality of life in rural areas, boost cooperation and innovation and promote diversification of the economy in rural communities.

income from non-farm activity helps farm households to obtain more food and to invest on agriculture (Babatunde and Qaim, 2010).

Reardon (1997) claims that income diversification is also important because the distributional impacts of non-farm income are different between farm households and regions, which can influence rural inequality. The causes and effects of income diversification are different according to location, demography, vulnerability, income level, and education (Ellis, 1998). Recognition of this heterogeneity emphasises the importance of local contexts (*ibid.*). Policies are important because they can reduce constraints to diversification and widen its possibilities (*ibid.*).

3.4 Patterns of Income Diversification

It is critical for policy-makers to understand the nature and patterns of income diversification in households and to distinguish the factors that drive households into non-farm activities so that they can use this knowledge to inform programmes and policies in the rural economy (Reardon *et al.*, 2006).

Barrett and Reardon (2000) found that non-farm income makes a considerable contribution to farm household income, around 45 per cent on average in Africa. Income diversification through rural non-farm activities is common and has been increasing steeply since the 1990s (Reardon *et al.*, 2006). Meanwhile, Reardon *et al.* (2006) claim that non-farm wage income is more important than rural non-farm self-employment earnings in Latin America. In Brazil, Chile, Colombia and Nicaragua, the share of non-farm income from wage employment is on average much higher than that from self-employment (*ibid.*). In contrast, in Ecuador, Honduras, and Peru, self-employment is more important than non-farm wage employment, particularly in poorer zones. These differences can also be observed over different areas within a given country (*ibid.*). Non-farm wage income is much higher than self-employment income in the northern region of Honduras near towns that are linked to better infrastructure and in zones with a higher density of rural towns (*ibid.*). In contrast, in the southern zone, where infrastructure and town density are lower, self-employment is more important (*ibid.*). Meanwhile, Senadza (2012) found that income from non-farm self-employment is higher than from other non-farm income types in Ghana.

Non-farm income was also larger than income from farm wage labour in Africa (Reardon *et al.*, 2006). The non-farm income of farm households exceeds agricultural wage earnings by a factor of 5 to 1 in Latin America, 4.5 to 1 in India and by 20 to 1 in Africa. This reflects the observation that farm wage labour has the lowest entry barriers and the lowest returns of all activities (*ibid.*).

In addition, income from the service sector is often found to be more important than income from rural manufacturing (Reardon *et al.*, 2006). In poorer regions and poorer households, labour intensive household-based manufacturing dominates, e.g. beer brewing in Africa, the production of straw products in Andean zones, and weaving in Northeast Thailand (*ibid.*). Meanwhile, within any sector, specific activities and technologies differ according to household investment capacity, education and labour mobility (*ibid.*).

Several studies observe geographical patterns in the importance of non-farm income to farm households. For example, Canagarajah *et al.* (2001) claim that farms in the coastal and forest belts of Ghana had higher non-farm incomes compared to those in the savannah belt because they had better access to markets. Similarly, Berdegue *et al.* (2001) argue that while richer zones and households had the greatest potential for non-farm employment and development, income from non-farm employment was particularly important to increase households' income in poorer zones and households in Chile. In addition, in remote regions where physical access to markets is very costly leading to market failure, households diversify their production patterns to satisfy their own demand for some diversity in terms of their own consumption (Barrett and Reardon, 2000). Lanjouw (2001) also found geographic variation in El Salvador in terms of the significance of the rural non-farm sector. In the Central regions, nearly 50 per cent of the economically active population is employed in the non-farm sector, while, about 23 per cent of population participate in non-farm activities in the East (*ibid.*).

Reardon *et al.* (2006) claim that in poor regions households participate in both farm and non-farm activities, while households in richer regions specialised in purely farm or non-farm activities (*ibid.*). Furthermore, the impacts of education on access to non-farm activities were greater in the richer regions compared to the poorer regions (Smith *et al.*, 2001). Although a diverse range of livelihood diversification exists, most people are engaged in only a few low entry-barrier activities (*ibid.*).

3.5 Motivations for Income Diversification

It is important to understand why farm households diversify into non-farm activities. Reardon *et al.* (2006, p. 116) argue that the “*household wants to maximise its earnings subject to constraints imposed by its limited resources and in trade-off with its desire to minimize risk*”. In addition, Bryceson and Jamal (1997) claim that in Africa wealthier households often have “profit maximisation” as their motivation for participation in non-farm activities, while low-income households emphasise “risk minimization” and “income stabilisation”. The motives for income diversification can be divided into “diversification for survival” and “diversification for accumulation” (Hart, 1994), that is diversification as a matter of survival in contrast with diversification as a matter of choice and opportunity (*ibid.*). Larger landowners diversify to accumulate wealth, while the landless and near-landless diversify in order to survive (Ellis, 1998). Accumulation may become the motive for diversification once survival and risk loom less large on the horizon of the rural households (*ibid.*). Further, Ellis (1998) argues that reducing income instability is also an important motive for income diversification and is often associated with seasonality of income. Returns to labour in both on-farm and non-farm labour markets vary during the year and this causes seasonal changes in employment as labour time is moved from lower to higher return activities (*ibid.*). Similarly, Haggblade *et al.* (2010) argue that farm households undertake income diversification not only to raise income levels but also to stabilise household income over time.

On a related theme, several studies (e.g. Barrett *et al.*, 2001b; Deininger and Olinto, 2001; Escobal, 2001; Reardon *et al.*, 2006) have categorised motivations for income diversification into so-called “push factors” or “pull factors”. These factors may also be linked to whether or not the diversification behaviour is involuntary or voluntary (Ellis, 1998) and whether it is a reaction to external factors or based on a desire for growth (Bosworth and McElwee, 2014). The push factors are related to necessity (e.g. poverty, lack of assets, vulnerability, disaster), while pull factors involve proactive household strategies for improving living standards (Ellis, 1998).

Some farm households are pushed to diversify into non-farm activities to cope with external shocks (Escobal, 2001; Reardon *et al.*, 2006). From the push factor perspective, “*income diversification is driven by limited risk-bearing capacity in the presence of incomplete or weak financial systems that create strong incentives to select a portfolio of activities in order*

to stabilise income flows and income consumption, by constraints in labour and land markets, and by climate uncertainty” (Barret *et al.*, 2001b, p. 316). The theme of income diversification as a risk management strategy is also raised by Reardon *et al.* (2006). The seasonality of incomes, the risks inherent in agriculture, market failure, erosion of assets, land constraints, and natural disasters can all be considered as push factors (Barrett *et al.*, 2001b; Reardon *et al.*, 2001).

Meanwhile, households are pulled into non-farm activity because it has better returns than farming (Escobal, 2001; Reardon *et al.*, 2001; Reardon *et al.*, 2006). The pull factors include the higher earnings and lower risks associated with rural non-farm activities (Reardon *et al.*, 2001; Reardon *et al.*, 2006). From the pull factor perspective, local engines of growth such as commercial agriculture or proximity to markets create opportunities for income diversification (Barrett *et al.*, 2001b; Reardon *et al.*, 2006).

In developed and developing countries, both push and pull factors relating to income diversification influence farm households’ decisions to undertake non-farm activities. Farmers in developing countries are more likely to be motivated by push factors, such as poverty and seasonality of income, whereas farmers in developed countries are more motivated by pull factors, such as the desire for growth.

Barrett *et al.* (2001b) claim that households and individuals may have multiple motives for participating in non-farm activities. They suggested that farm households’ diversification into non-farm activities can be the result of some combination diminishing or time-varying returns to labour or land, from market failures (e.g. for labour, land, credit, or insurance) or frictions (e.g. for mobility or entry into high return niches), from *ex ante* risk management, and from *ex post* coping with adverse shocks (ibid.).

As Barrett *et al.* (2001a) note, policies can affect income diversification and its distributional consequences because rural development policies can influence motivations and capacity to diversify along with the constraints that they face. However, policies are rarely designed with smallholder diversification behaviour in mind (ibid.). Because the motives and situations of households may differ greatly, policies promoting non-farm employment may need to take account of differences across regions and social-economic groups (Berdegué *et al.*, 2001). Also, Lastra-Bravo *et al.* (2015) argue that understanding the motivation of farmers who participate in non-farm activities and rural policies is important for policy-makers designing

rural programmes.

3.6 Determinants of Non-farm Income Diversification

Reardon *et al.* (2006) argue that understanding the motives of farmers has been the main focus of much of the literature on income diversification, with less emphasis given to what determines whether or not farm households can diversify. Measures of human, social, financial, organisational, and physical capital can help to explain why those farm households that wish to diversify their incomes are able to undertake non-farm activities (*ibid.*). As Barrett *et al.* (2001b) point out, understanding households' capacities, livelihood strategies and the feasible set of strategies available to them is critical because this offers important insights regarding the kinds of government intervention that might be effective in reducing poverty.

Many studies (e.g. Adams, 1994; Ellis, 2000; Berdegúe *et al.*, 2001; Canagarajah *et al.*, 2001; Escobal, 2001; Reardon *et al.*, 2006; Beyene, 2008; Mat *et al.*, 2012) have investigated farm households' capacity for income diversification. Rural non-farm activities differ widely in the types and levels of capital that they require (Barrett *et al.*, 2001b; Reardon *et al.*, 2006). Berdegúe *et al.* (2001) claim that the lower the households' endowment of assets, the fewer the options that are available to them in terms of non-farm activity.

Some studies (e.g. Reardon *et al.*, 2001; Meert *et al.*, 2005; Reardon *et al.*, 2006; Jin and Deininger, 2009) point out that the human and social capital of farm households influences participation in and the success or otherwise of non-farm activities. Ellis (1998) argues that often a combination of several factors will be required to take an opportunity for livelihood diversification, while on occasions a single factor may dominate. For particular activities, such as skilled jobs, particular assets such as education are important (Escobal, 2001).

Many studies categorise potential factors that influence participation in non-farm activities. Bateman and Ray (1994) use so-called internal and external variables to explain pluriactivity in farm households in Wales. Internal factors may explain any causal relation; however, they will also interact with the socio-economic environment external to the households (*ibid.*). In addition, Benjamin (1994) classifies determinants into four classes of variables such as individual characteristics, family characteristics, farm characteristics, and location

characteristics.

Similarly, Lanjouw *et al.* (2001) categorise various determinants of non-farm activity using four sets of explanatory variables which correspond to different levels of aggregation: (1) individual level (e.g. age, gender, education); (2) household level (e.g. farm size, non-land asset, education of household head, seasonality, risk strategies, credit market failure, family size); (3) village level (e.g. infrastructure, public asset, distance to cities); and (4) regional level (e.g. agro-climate, population density, local market size, regional land productivity).

In addition, Escobal (2001) categorises the factors that influence income diversification into (i) human capital variables (e.g. family size, age, gender and education); (ii) public assets (e.g. access to electricity and roads, distance to market); (iii) agriculture-specific assets (e.g. land and cattle); (iv) nonagriculture-specific assets (e.g. wage labour experience); (v) financial assets and (vi) locational variables (e.g. regional land productivity and local market size). Also, many other studies in developing countries (e.g. Taylor and Yúnez-Naude, 2000; Barrett *et al.*, 2001a; Canagarajah *et al.*, 2001; Corral and Reardon, 2001; Deininger and Olinto, 2001; Deininger *et al.*, 2007; Jin and Deininger, 2009) have identified similar determinants to those used by Lanjouw *et al.* (2001) and Escobal (2001).

The Sustainable Livelihood approach uses assets or capital³⁷ to explain the main factors that influence a farm household's diversification strategy (DFID, 1999). Assets are the resources on which people draw in order to carry out livelihood strategies (Farrington *et al.*, 2002). These resources include a broad range of financial, human, social, physical, and natural capital. No single category of assets on its own is sufficient to yield livelihood outcome, because poor people, in particular, have very limited access to any given assets (DFID, 1999; Farrington *et al.*, 2002). Meanwhile, in practice, not all assets are owned by, or are fully in the control of, people who are attempting to use them in their livelihoods strategies (Farrington *et al.*, 2002). Some cannot by definition be owned by individuals or even households, and others, such as social capital, cannot be owned, but imply a negotiated relationship (*ibid.*). Farm households need some assets of their own to use in non-farm activities, while they may need access to public infrastructure to participate in non-farm activities (*ibid.*).

The potential factors that influence participation in non-farm activities can be broadly

³⁷ Although not all the assets are capital stocks in the strict economic sense, assets and capital are used with the same meaning in much of the literature on sustainable livelihood (DFID, 1999).

categorised into households' asset (i.e. human capital, social capital, financial capital, agriculture specific assets, non-agriculture assets), public infrastructure (e.g. road, water, electricity) and locational variable (e.g. remote to market, remote to city, land productivity, agro-climate). The following sections review each of these factors.

3.6.1 Human capital

Human capital represents the skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives (Carney, 1998; Scoones, 1998; DFID, 1999). At a household level, human capital is related to the amount and quality of labour available, household size, skill levels, leadership and health status (Scoones, 1998; DFID, 1999). Human capital is highly dependent on adequate nutrition, health care, safe environmental conditions, and education (Farrington *et al.*, 2002). As well as its intrinsic value, human capital (e.g. knowledge and labour), is required in order to make use of any other types of assets (DFID, 1999).

Abdulai and Delgado (1999) found that age is associated with participation in non-farm activities in Northern Ghana, with the probability of undertaking non-farm work decreasing for older people. Also, Lanjouw *et al.* (2001) found that self-employment earning and non-farm wage income rise with age up to a turning point of around 40 to 42 years in Tanzania. In contrast, a farmer's age was found to have a negative impact on the probability of earning non-farm income in South Korea (Hwang and Lee, 2015).

Education is a key source of human capital and plays a positive role in income diversification (Escobal, 2001; Lanjouw, 2001; Beyene, 2008). Education can provide farm households with opportunities for higher earning non-farm activities, while a lack of education is a barrier to higher-return non-farm activities (Barrett *et al.*, 2001b; Escobal, 2001; Janvry and Sadoulet, 2001; Yúnez-Naude and Edward Taylor, 2001; Reardon *et al.*, 2006). Reardon *et al.* (2001) claim that education determines participation and success in non-farm employment and incomes. Higher levels of education help individuals to access a greater range of non-farm wage employment opportunities in high-productivity, remunerative areas (*ibid.*). The more educated individuals tend to avoid farm wage employment and prefer non-farm wage employment (*ibid.*). Also, the openness of farmers towards accessing information and a professional attitude are important factors for the development of non-farm income diversification (Meert *et al.*, 2005).

Human capital in general therefore is found to have a strong effect on participation in and returns from non-farm activities (Reardon *et al.*, 2006). Education offers a potentially important route to higher-return non-farm opportunities, while less educated households rely on low-return farm wage employment or very low-productive non-farm activities (*ibid.*). For example, in Ghana unskilled and uneducated farm households depend largely on lower-paid casual wage labour (Senadza, 2012).

Meanwhile, Corral and Reardon (2001) argue that the influence of education could vary depending on the type of non-farm activities. They found that higher education had a strong positive relationship with non-farm wage employment in Nicaragua. In contrast, education did not have a significant effect on self-employment in the non-farm sector in Nicaragua because the products of these firms were made using traditional methods and reflect traditional consumption tastes (*ibid.*).

3.6.2 Social capital

Social capital reflects the ability of actors to secure benefits by virtue of their membership of social networks or other social structures (Portes, 1998). Social capital was originally a concept used at an individual level (e.g. Bourdieu, 1985; Coleman, 1988) but has gradually expanded to incorporate the community level (e.g. Putnam, 1993). Many studies (e.g. Putnam, 1993; Portes, 1995; Falk and Kilpatrick, 2000; Shucksmith, 2000; Shortall, 2004) have explored social capital in the context of communities, cities, and even nations rather than more narrowly as a property of individuals and families.

Improvements to social capital provide a less costly, non-economic solution to major social problems, and this has been recognised at a practical level by development organizations as well as at the theoretical level by academics. For example, the World Bank discussed social capital as the missing link in economic development (World Bank, 1997).

In the context of the Sustainable Livelihood approach, social capital refers to social resources (networks, membership of groups, relationships of trust, access to wider institutions of society) upon which people draw in pursuit of their livelihood objectives (Carney, 1998; Scoones, 1998; DFID, 1999). Social capital develops from networks and connectedness, and through memberships of more formalised groups (Carney, 1998). Mutual trust and reciprocity

lower the costs of working together and thus have a direct impact upon other types of capital (DFID, 1999). For example, social capital can help increase people's incomes by improving the efficiency of economic relationships and can be effective in enhancing the management of common resources (natural capital) and the maintenance of infrastructure (ibid.). Social capital can make important contributions to people's sense of well-being through honour and belonging (ibid.). In addition, the strength of social capital is one of the important success factors of income diversification (Meert *et al.*, 2005). McAreevey (2010) argues that for rural communities, trusting and meaningful relationships are important in facilitating collaboration, cooperation and adaptation.

Similarly, Reardon *et al.* (2006) claim that organisational and social capital can be critical in reducing transaction costs and risks for engaging in rural non-farm activities. Social capital, such as membership of an organisation or local connections, generally has significantly positive effects on participation and success in the non-farm activities (ibid.). Lanjouw *et al.* (2001) argue that some types of social connections and trust can be more important than others. Kinship and tribal affinities, and time devoted to communal activities are less related to business activity and non-farm employment, while trust in officials and public servants and strong heterogeneous village associations are helpful in encouraging non-farm activity (ibid.).

Social capital is a valuable and critical resource for poor people, especially during times of crisis and socio-economic change (Moser, 1996). The existence of informal social networks can significantly reduce the likelihood of poor people perceiving their households' food, economic or housing conditions as insecure (ibid.).

Ashley (2000) claims that policy measures to enhance tourism have increased the social capital of households within their communities because people have had to undertake joint actions that enhanced social cohesion across all participants. Several individuals have gained status and a sense of belonging within their community through their own participation as leaders or entrepreneurs in tourism (ibid.). Meanwhile, social change as a result of tourism can be negative as well as positive, with evidence that in some cases it has given rise to conflict both within and between communities (ibid.).

In addition, partnership can offer great potential for collective income, employment and sales opportunities and strengthening capacity (Ashley, 2000). However, effective partnership working involves much time and effort by local residents and ineffective partnership can

exacerbate existing conflicts within the community resulting in no development at all (ibid.).

3.6.3 Agricultural assets, natural capital and financial assets

Farm households' landholdings are potentially one of the most important determinants of non-farm activities because they influence the motivations and the capacity of households and individuals to participate in non-farm activities (Reardon *et al.*, 2006). The greater the landholding, the greater the participation in non-farm activities in Southern Mali (Abdulai and CroleRees, 2001). Similarly, Rahut and Micevska Scharf (2012) claim that landholding has a significant effect on participation in non-farm activity in Cambodia, especially if farm households earn a low income from landholdings. In addition, McNally (2001) argues that large farms can use land more easily for recreational activities, such as shooting and riding. For the most part, diversification activities are much more likely on large farms in England and Wales (ibid.).

By contrast, Corral and Reardon (2001) found that landholding is negatively correlated with the relative importance of income diversification in Nicaragua. The landless earn 65 per cent, the medium farmers earn 30 per cent, and the large farmers earn only 10 per cent of their income from the non-farm sector. Similarly, van de Walle and Cratty (2004) found that landholding negatively affects income diversification in Vietnam.

Meanwhile, Reardon *et al.* (2006) point out that the effects of landholding on non-farm activities are often mixed. Some farm household might be more able to participate in non-farm activity because land can serve as collateral to invest in the physical capital needed for more remunerative non-farm work (ibid.). Landholding can also be the key that allows farm households to join organisations or groups and to accumulate the social capital that facilitates their involvement in rural non-farm activities (ibid.). Conversely, farm households may have less incentive for income diversification if they achieve a higher income from their land. In this case, there is negative relationship between landholding and non-farm activities (ibid.).

Farmers involved in more seasonal or less intensive farming enterprises might have more time to devote to participation in diversification activities but farmers in the more labour intensive farm types, such as horticulture and livestock, may have less time to participate in non-farm activities (McNally, 2001). Income diversification is associated with less specialised farm types. All types of diversification apart from tourist-related enterprise are less likely if the

farm is in a less favoured area (ibid.).

Natural capital refers to natural resources stocks such as land, water, biodiversity and other environmental resources (Carney, 1998; Scoones, 1998; DFID, 1999). There are wide variations in the resources that make up natural capital, from public goods such as the atmosphere and biodiversity to divisible assets used directly for production (DFID, 1999). Good levels of natural capital (e.g. clean air and water and fertile soils) are very important to those who derive all or part of their livelihoods from resource-based activities such as farming (ibid.).

In addition, financial capital such as cash, credit/debt, savings, and other economic assets are all important to achieve livelihood objectives (Carney, 1998; Scoones, 1998; DFID, 1999). Although financial capital is normally one of the most important assets for the poor, it is also one of the most problematic features of poverty, preventing access to employment and credit (Farrington *et al.*, 2002).

3.6.4 Public assets and locational characteristics

Physical capital comprises public infrastructure (e.g. transport, shelter, energy and communications) and producer goods (e.g. housing, tools and equipment) which are both important to support livelihoods (Carney, 1998; DFID, 1999; Farrington *et al.*, 2002). Infrastructure commonly refers to public goods that are used without direct payment, while producer goods may be owned by an individual or group or accessed through rental or fee-for-service markets (DFID, 1999). Access to information and communications is essential aspects of infrastructure (ibid.).

Escobal (2001) found that access to public and private assets are important in explaining why some rural dwellers have good income sources. Public goods and services together with an adequate endowment of private assets can facilitate income through self-employment as well as through waged employment income (ibid.). Better infrastructure and denser population drive down transaction costs and boost investment in both the agricultural and non-agricultural sectors (ibid.). Increasing access to physical assets can help farm households to increase their self-employment and waged employment in the non-farm sector (ibid.). Access to public infrastructure such as road, markets, electricity and water supplies is important because it can significantly influence the ability to undertake non-farm activities, especially in

the case of poorer farm households (Corral and Reardon, 2001; Lanjouw, 2001). In a study in Sri Lanka, Deininger *et al.* (2007) found that improvements in basic public infrastructure in rural areas can help existing firms to be more productive and new enterprises to be established.

Barrett *et al.* (2001b) claim that public investment and policy are needed to help the poor to access the assets that would allow them to overcome the various entry barriers to non-farm employment. For example, infrastructure constraints were found to negatively affect participation in non-farm activities and the productivity of existing small enterprises in Sri Lanka (Jin and Deininger, 2009).

In addition, locational or geographical characteristics were found to be especially important in explaining non-farm activities in Ghana (Abdulai and Delgado, 1999). Public infrastructure and population density were found to positively and significantly influence non-farm income and the allocation of labour (*ibid.*). Lanjouw (2001) argues that remote areas in El Salvador provided fewer opportunities for non-farm employment because of poor infrastructure services. Lanjouw *et al.* (2001) found that the association between non-farm income and proximity to urban centres in Tanzania were often related to access to infrastructure (*ibid.*). Meanwhile, Canagarajah *et al.* (2001) argue that although location is one of the most significant determinants of non-farm activities in Ghana and Uganda, remoteness alone may be insufficient to discourage non-farm activities and overall regional infrastructure could be more influential. Oughton and Wheelock (2003) argue that it is important to understand the context of microbusiness enterprises because these are embedded within households and communities.

McNally (2001) found that in less favoured areas, all types of diversification are less likely than in other areas. Farms in less favoured areas find it more difficult to participate in diversification activities than other areas, because a low level of farm resources is a great disadvantage for farmers interested in pursuing such activities, while tourism is positively related to diversification because of the environmental attractiveness of farms in these areas (*ibid.*).

Summing up, participation in non-farm activities is generally influenced by individual and household characteristics (e.g. age, education), household assets (e.g. land, financial capital), public infrastructure and locational characteristics. In addition, the research cited above shows a diversity of results that reflect context, such as location and geography. Thus, it is necessary

to understand the generality and specificity of the research findings related to the determinants of non-farm activities because the results are diverse and often context specific.

3.7 Barriers to Income Diversification

Several studies (e.g. Barrett *et al.*, 2000a; Barrett and Reardon, 2000; Deininger *et al.*, 2007; Jin and Deininger, 2009; Haggblade *et al.*, 2010) have addressed barriers to income diversification. Based on simple revealed preference theory, the poor who cannot access the more remunerative non-farm activities must be somehow constrained by insufficient endowments of productive assets, poor access to information or markets, or lack of start-up financing (Barrett and Reardon, 2000). As Barrett *et al.* (2001a) argue, the impacts on income diversification can be different depending on households' endowments. Households with poor endowments are less able to respond to attractive non-farm opportunities because of the constraints that were placed on them (Reardon, 1997; Barrett *et al.*, 2001a; Rahut and Micevska Scharf, 2012).

The concentration of non-farm income in the upper-income quartile of rural households implies high entry barriers and capital requirements for rural non-farm activity that the poor are simply not equipped to overcome (Corral and Reardon, 2001). In addition, poor households often remain in the low-productive, low-growth market segments which offer few pathways out of poverty (Haggblade *et al.*, 2010).

The shortage of human capital hinders poor households from participating in growing segments of the rural non-farm economy (Haggblade *et al.*, 2010). Educational attainment proves one of the most important factors in influencing non-farm income, especially in more remunerative employment (Barrett *et al.*, 2001b). Lack of skills and education serve as substantial entry barriers to high-paying non-farm employment or self-employment in rural Africa (*ibid.*).

Some studies (e.g. Barrett *et al.*, 2000; Rahut and Micevska Scharf, 2012) have claimed that low levels of endowments of productive, non-labour assets (e.g. land, livestock) commonly force poorer households to participate in low wage unskilled labour markets, especially if they also lack education or special skills (*ibid.*). Barrett *et al.* (2000) argue that constraints do not only impede some forms of diversification, but can also compel diversification into low-

return activities. Substantial entry and mobility barriers to high return working exist in the rural non-farm economy (Barrett *et al.*, 2001b). These entry barriers tend to leave the poor with less diversified assets and income portfolios, forcing them to lower their expected returns and experience higher variability in income (*ibid.*). This can result in an asset poverty trap of low-return activities from which the poor have difficulty in breaking free, typically being able to engage in only low-return activities where entry and exit are reasonably frictionless. At the same time, the wealthy are able to diversify into more lucrative activities (*ibid.*).

In resource-poor regions, poorer households have a high incentive but a low capacity to diversify into non-farm activities (Berdegúe *et al.*, 2001; Reardon *et al.*, 2006). The poorer households remain in low-paying and low-productivity jobs in the non-farm sector (*ibid.*). Meanwhile, poor distribution implies significant entry barriers and market segmentation (Reardon, 1997). Also, small farms, especially in less favoured areas, find it more difficult to pursue income diversification so that government assistance needs to be carefully targeted to make an impact on the survival of those farm household (McNally, 2001).

There exist significant barriers to entry into remunerative non-farm opportunities in rural Africa (Barrett *et al.*, 2001b). Non-farm opportunities may provide opportunities for income growth and improvement in other welfare indicators (*ibid.*). With enough time, the benefits of rapid growth among the wealthy will be likely to trickle down to the poor households, which are initially excluded from the more lucrative non-farm sector, through increased demand for hired labour and an increased supply of a wider range of goods and services (*ibid.*). However, the rural non-farm economy seems unlikely to generate substantial poverty reduction for the current generation since relatively few of the poor, unskilled and uneducated from more remote areas are likely to participate (*ibid.*). Barrett *et al.* (2001b) argue that policy needs to make non-farm income opportunities accessible to the majority of rural Africans who lack the education, skills, or financial or social capital to get into many lucrative niches available across the continent.

In addition, policy-makers need to help the poor to gain access to growing market niches because pro-poor rural non-farm growth does not occur automatically (Haggblade *et al.*, 2010). Rural households and policy-makers need to invest in rural education and health in order to improve the existing human capital stock of the poor (*ibid.*). Also, policy-makers need to remove existing economic and social barriers that limit entry by the poor into lucrative non-farm work (*ibid.*). To overcome barriers, a greater amount of public and private

investment needs to be provided to areas of low potential for agricultural development that may find a path to revitalisation in non-farm activities (Reardon *et al.*, 2001). As Barrett *et al.* (2001a) argue, policy needs to improve poorer farmers' access to education, information, financial capital, and infrastructure because in the absence of well-targeted interventions, support of the rural non-farm economy is likely to bypass most of the poorest rural Africans. Smallholders can be helped to overcome entry barriers, through policies that relieve those constraints and expand poorer households' opportunity sets, allowing them to develop more attractive livelihood strategies (*ibid.*).

3.8 Policy Measures and their Impacts on Income Diversification

Policy measures can influence farm households' decisions to participate in non-farm activities because policy measures may help increase households assets that are required for non-farm activities and because the measures help farm households to overcome entry barriers to income diversification (Barrett *et al.*, 2001a; Reardon *et al.*, 2001).

A range of studies has examined the relationship between policy measures or policy reforms and their influence on income diversification, employment and income. Hwang and Lee (2015) found that the effect of the Rural Theme Village programme in South Korea was positive on both income diversification and non-farm income.

Benjamin (1994) examined the impacts of Common Agricultural Policy (CAP) reform³⁸ in 1992 and concluded that, due to changes in the support given in cereal prices, it would lead to an increase in the probability of participation in non-farm activities. In particular, empirical results showed that the reforms would increase the likelihood of farmers-wives' participation in non-farm activities (*ibid.*). The impact of CAP reform on non-farm income diversification was found to be higher for those wives who did not have high school diploma than for those who did (*ibid.*).

A policy shift to more decoupled agricultural payments following the passage of the 1996 Federal Agriculture Improvement and Reform Act³⁹ did not have a different impact on farm hours worked compared with the traditional coupled payment (Ahearn *et al.*, 2006). Although

³⁸ This consists of support price cuts and mandatory acreage set-aside for compensatory payment.

³⁹ With the 1996 Farm Act, the United States introduced payments that were designed to be "decoupled".

the rate of participation in non-farm activities of farmers increased, the observed increase in non-farm participation of farm households that received the payment was found not to be the result of a change to more decoupled payments. Government payments, whether coupled or decoupled, were argued to have a negative effect on non-farm labour participation of farmers (ibid.).

Mattas *et al.* (2008) claim that local multiplier effects from both Pillar 1 and Pillar 2 CAP funding are positive for the rural economy. Regarding Pillar 2 impacts on non-farm employment, although the limited multiplier effects that had occurred were difficult to disentangle from the effects of other policies, the strongest effects were on tourism, with some female employment opportunities (ibid.).

Rural development policy measures in Europe have tended to emphasise the development of a rural area's capacity to support itself through capacity building, community-based initiatives and partnerships (Shortall, 1994; Ray, 2000; Shucksmith, 2000).

3.9 Impacts of Income Diversification on Farm Households

3.9.1 Impacts on income

The impact of income diversification is one of the most studied topics in the literature. Some studies address the impacts of policy directly, while others deal with the impacts of income diversification that are not directly related to policy. The impacts on income contribution, poverty reduction, economic growth are all popular research topics in the rural income diversification literature (e.g. Adams, 1994; Start, 2001; Ellis and Freeman, 2004; Lanjouw and Shariff, 2004; van de Walle and Cratty, 2004; Lay *et al.*, 2008; Haggblade *et al.*, 2010; Möllers, 2011; Mat *et al.*, 2012). Non-farm income in developing countries can contribute as a potential route out of poverty for poor households (van de Walle and Cratty, 2004).

Owusu *et al.* (2011) found that non-farm activities have a positive effect on household incomes in Northern Ghana. However, van de Walle and Cratty (2004) claim that while the growth of the rural non-farm economy is unlikely to serve as a primary motor of poverty reduction for the bulk of Vietnam's poor, rural-based, export-oriented manufacturing was found to contribute significantly to rural poverty reduction (ibid.).

In addition, income diversification influences farming income as well as the non-farm income of farm households. Several studies (e.g. Reardon and Crawford, 1994; Reardon *et al.*, 2000; Shah and Gupta, 2000) have identified the linkage effect between non-farm activity and agriculture. Reardon and Crawford (1994) argue that there are mixed results from the interaction between farm income and non-farm income. In northern Burkina Faso where agriculture is risky, households with more non-farm earnings invest less in farm capital, while in southern Burkina Faso where agro-climatic conditions are good, non-farm incomes are reinvested into farm capital. The rural growth linkages model, which originated in the mid-1970s, suggests that growth in agriculture itself provides the stimulus for the growth of the rural non-farm economy in developing countries (Ellis, 1998). This can be explained by the rising expenditure of farm households on: (1) locally produced non-farm commodities and services (expenditure linkages); (2) inputs and services to agricultural production (backward linkages); (3) processing and marketing services related to farm outputs (forward linkages) (*ibid.*). The primary focus of anti-poverty policy should be growth in farm output because the direction of causality in the growth linkage model is always from farm growth to non-farm growth, not the other way round (*ibid.*). Delgado *et al.* (1994) argue that unless farm yields and output increase steadily in African agriculture, the growth linkage multipliers will fail to occur and the non-farm rural economy will stagnate.

Meanwhile, Reardon *et al.* (2000) claim that one cannot tackle asset-poverty and inequality in the non-farm sector without addressing farm-side problems. The linkage between the farm and the non-farm sectors must be taken into account for rural development (Reardon *et al.*, 2000). In addition, impacts resulting from CAP reforms were expected to affect entire regional economies beyond the agricultural sector (Mattas *et al.*, 2008). The impacts on employment levels in farm activities influenced non-farm sector labour demand (*ibid.*).

However, MacInerey and Turner (1993) argue that diversification cannot be regarded as a general solution to falling farm incomes because if there is no market for the particular diversification product/service, or the market is small with little prospect for growth, it is difficult to make profits or succeed with that strategy.

3.9.2 Impacts on income distribution

The impacts that non-farm activities have on household incomes and inequality have been an

important issue in the literature. In Vietnam, participation in the rural non-farm market economy was found to be helpful as a means of increasing income for some but not all of Vietnam's poor farm households (van de Walle and Cratty, 2004). In addition, the impacts of rural policy on inequality⁴⁰ have been considered to be important because policies have different impacts on households (ibid.). In particular, rural non-farm employment is important because it may decrease overall rural inequality and cause or aggravate social tension and instability (Reardon *et al.*, 2000).

Meanwhile, Ellis (1998) argues that enabling poor farm households to earn enough income through income diversification is one thing, but decreasing income inequality between poor and rich farm households is quite another. Diversification may exacerbate inequalities in rural income distribution because rich farm households may gain more benefits from non-farm activities than poor farm households (ibid.). The better-off families are able to diversify in more favourable markets with their endowments, while poorer households that lack assets such as skills and education are excluded from more high-return labour markets (ibid.).

Income diversification has, however, been shown to have as a whole an equalising effect on rural incomes and in Pakistan diversification was found to raise the income of poor farm households relative to richer ones (Adams, 1994). However, not all sources of non-farm income have such a favour impact on income distribution (ibid.). Opportunities for non-farm unskilled labour were found to decrease income inequality, while non-farm government employment, which required higher entry costs such as education, increases inequality (ibid.). In addition, Barrett *et al.* (2001a) investigated the benefits of exchange rate reform, which accrued disproportionately to households that were richer prior to devaluation in Côte d'Ivoire because of entry barriers to high return non-farm activities.

However, some studies showed a slightly different view on the impacts of non-farm activities. Canagarajah *et al.* (2001) argue that while rural non-farm earnings may contribute to rising inequality, lower income groups also benefitted from a strong growth in non-farm earnings. Similarly, Elbers and Lanjouw (2001) argue that the growth of the non-farm sector in Ecuador was associated with a substantial fall in poverty, despite a corresponding increase in inequality.

⁴⁰ Many studies have used the Gini coefficient to compare incomes across farm households. If total-income Gini is higher when non-farm income is included, then this source increases income inequality.

Haggblade *et al.* (2010) suggest that the overall impact of non-farm earnings on rural income distribution was mixed. In some cases, aggregate non-farm earning improves rural inequality, while, in other cases, they exacerbate it. Reardon (1997) observed strong positive relationships between the share of non-farm income and total household income. However, in other low- and middle-income regions, such relationships were less common because entry barriers existed for households that could prevent them from participating in non-farm activities (*ibid.*). Therefore, Reardon (1997) argues that the important factors that determine the net distributional effects of diversification were the nature of barriers to entry and mobility within certain non-farm subsectors.

Some studies focused on the relationships between households' endowments and distributional impacts. Reardon (1997) claims that poor income distribution may, over time, lead to an increasingly skewed distributional of land and other household assets in rural Africa. Non-farm income positively influences economic growth but sometimes negatively impacts on income inequality (*ibid.*). Non-farm employment does not necessarily decrease rural inequality, because the distribution of assets such as education influences non-farm employment and income distribution (Escobal, 2001; Reardon *et al.*, 2001). Lay *et al.* (2008) argue that in Western Kenya, only a few farm households have the skills and assets to engage in high return activities and that engagement in low return non-farm activity does not decrease poverty. Haggblade *et al.* (2010) claim that non-farm economic growth cannot automatically solve poverty problems in many poorer regions of developing countries.

Ellis (1998) claims that a lack of education is a critical constraint inhibiting diversification and that education is a major factor contributing to the better off farm households' undertaking of income diversification activities compared to poorer farm households. Education and skills training for poor village households can have relatively large impacts on their ability to diversify into non-farm activities (*ibid.*). Barrett *et al.* (2001a) suggest that government intervention should aim to reduce the constraints around working capital, skills and market access for poorer households. Without government intervention, poorer households tend not to be able to take advantage of emerging opportunities and the patterns of inequality may be reproduced or magnified (*ibid.*). Reardon *et al.* (2001) argue that rural farm households and policy-makers need to invest in rural education and health in order to improve levels of human capital. In particular, Mat *et al.* (2012) claim that high-return, value-added non-farm activities need to be accessed by lower income households.

In addition, some studies (e.g. Barrett *et al.*, 2001b; Canagarajah *et al.*, 2001; Reardon *et al.*, 2001) have addressed the impacts of non-farm income on rural inequality across different employment types, such as self-employment and wage-employment. Canagarajah *et al.* (2001) argue that in rural Ghana and Uganda, non-farm income from self-employment contributes most to increases in income inequality (especially among women), while wage earnings contributed least (less even than agricultural income).

Several studies (e.g. Benjamin, 1994; Ahearn *et al.*, 2006; Midmore *et al.*, 2008a; Mishra *et al.*, 2009; Corsi and Salvioni, 2012) have dealt with the impacts of policies on non-farm employment and the rural economy. For example, Mattas *et al.* (2008) found that CAP reform (Pillar 1 and 2) not only led to the maintenance of employment levels in the farming sector but also in the non-farming sector, serving as regional stimulus package. In particular, funding under Pillar 2 of the CAP transmits employment benefits beyond agricultural sector and causes significant fund inflows to rural development activities that finally generate output, income, and employment for the whole region (*ibid.*).

In their study of Nicaragua, Corral and Reardon (2001) observed that rural non-farm income tended to be relatively concentrated towards areas that are denser in infrastructure and population and where rural households enjoy income levels towards the upper-quartile. This concentration implies high entry barriers and capital requirements for rural non-farm activities that the poor cannot simply overcome (*ibid.*). Berdegué *et al.* (2001) argue that policies and programmes promoting non-farm activities should differ by zone and socio-economic group because the motivation and situation of farm households in participating in such activities vary. In Chile, in Molina, the non-farm income share in total income was high because of dynamic growth in the non-farm economy, while in Portezuelo, the share was also high not because the non-farm economy is successful but because farm income are weak and stagnant (*ibid.*). Thus, different policies need to be implemented to promote equitable growth in the non-farm sector in different regions (*ibid.*).

In summary, previous studies show no general trends for the impacts of non-farm incomes on inequality. In terms of those impacts, much depends on the country and on the particular sets of conditions that are found there.

3.9.3 Impacts on households' livelihoods

Some studies (e.g. Benjamin, 1994; Ellis, 1998; Kinsella *et al.*, 2000; Smith *et al.*, 2001) emphasised non-farm activities as livelihood strategies. The Sustainable Livelihoods approach evaluates the impacts of policy on livelihoods in a holistic way (Ashley and Hussein, 2000). This approach can help practitioners to understand the impacts of rural policies and how they happen. Policies can have important influence on people's assets and livelihoods (Ashley and Hussein, 2000).

The Sustainable Livelihoods approach is a way of thinking about the objectives, scope and priorities for development, in order to enhance progress in poverty elimination. The approach aims to help poor people achieve lasting improvements against various indicators of poverty (Ashley and Carney, 1999). Livelihood refers to more than income, encompassing "...capabilities, assets (stores, resources, claims and access) and activities required for a means of living" (Chambers and Conway 1992, p. 6).

Ashley and Hussein (2000, p. 14) point out that, "*when it comes to impact assessment, this means that changes in measurable things (e.g. cash, yield) must be assessed not in their own right, but in terms of the contribution they make to livelihoods. That contribution may be direct (e.g. adding to income, health, food etc.) or indirect (e.g. affecting their assets, activities and options, and ability to cope with shocks). Changes both in the way people live their lives and what they achieve are considered within livelihood assessments.*"

The Sustainable Livelihoods (SL) approach has been employed as the conceptual framework in much of the non-farm economy literature (e.g. Ellis, 1998; Bryceson, 1999; Kinsella *et al.*, 2000; Smith *et al.*, 2001; Ellis and Freeman, 2004). Several studies (e.g. Ashley, 2000; Ashley and Hussein, 2000; Shah and Gupta, 2000; Turton, 2000) have investigated the impacts of non-farm activities or policy using the SL approach. A wide range of livelihood impacts that matter to local people has been identified.

Ashley (2000) assessed the wide range of impacts that tourism has on the livelihoods of rural residents in parts of Namibia. The development impact of tourism varies widely within and between communities and careful planning based on an understanding of local livelihoods can enhance the positive impacts of tourism (*ibid.*). It is as important to address negative impacts as to maximise positive ones and to address impacts on people's assets and existing activities.

In addition, McAreavey *et al.* (2009) point out that tourism in rural areas is important in terms of economic potential as well as its wide ranging impacts on environmental, social, human and cultural resources. They also argue that understanding the interrelationship between tourism, the environment and local communities is important (*ibid.*).

Summing up, as Ellis (1998) comments, generalisations concerning the causes and effects of livelihood diversification are neither desirable nor necessary in order to achieve an awareness of diversity to inform local policies. It is differentiated in its causes and effects by location, demography, vulnerability, income level, educational and many other factors. Policy needs to be understood and tailored to the local context and local circumstances (*ibid.*).

3.10 Methodological Issues

3.10.1 Determinants of and barriers to income diversification and methods

Many academic studies (e.g. Reardon, 1997; Canagarajah *et al.*, 2001; Start, 2001; Ellis and Freeman, 2004; Lanjouw and Shariff, 2004; Haggblade *et al.*, 2010; Möllers and Buchenrieder, 2011) have explored the importance of non-farm activities through surveys gathering information on the number of people who were involved in them, the time spent on those activities, participation rates, and the level of income contribution.

Many studies (e.g. Bateman and Ray, 1994; Benjamin, 1994; Abdulai and CroleRees, 2001; McNally, 2001; Beyene, 2008) have employed quantitative methods through surveys to identify the important factors that affect participation in non-farm activities. The resulting quantitative data were analysed using regression analysis⁴¹ to identify which factors are important for participation in non-farm activities. Regressions models such as the Probit model⁴², the Logistic regression model, and the Ordinary Least Squares (OLS)⁴³ model have

⁴¹ Regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analysing several variables, when the focus is on the relationship between independent variables and dependent variables.

⁴² Probit regression measures the relationship between the strength of a stimulus and the proportion of cases exhibiting a certain response to the stimulus. It is useful for situations in which you have a dichotomous output that you think might be influenced or caused by levels of independent variables and is particularly well suited to experimental data (IBM, SPSS statistics).

been employed for this purpose.

Bateman and Ray (1994) attempted to identify which combination of internal and contextual variables best explained income diversification using multivariate step-wise regression analysis. To do this, quantitative data were collected in a survey of 427 farm households in seven purposely selected areas of Wales in 1990 and 1991. Both internal factors such as farm size, farm type, tenure, indebtedness, household type, culture, and education, and contextual factors such as landscape, local job market, and population dynamics were collected.

Benjamin (1994) used quantitative data in a Probit model to identify the factors that lead French farmers to supply non-farm labour. To do this, 1,518 farm households were selected at random and surveyed in 1988. Beyene (2008) also employed quantitative data with a random sample survey of 681 farm households in Ethiopia in 1999. Data such as age, presence of children, health status, number of dependents, education of household's head, and location were collected. The Probit model was applied to account for the participation decisions of farm households.

Abdulai and CroleRees (2001) employed quantitative data to identify the determinants of income diversification. A survey of 120 farm households chosen by two-stage sampling was undertaken. The farm households were selected from 15 villages in the regions of Sikasso and Koutiala located in the Sudanian zone of Southern Mali between 1993 and 1996. Data were categorised into households' characteristics, farm characteristics, and location characteristics and were analysed using a logit model.

Meanwhile, several studies (e.g. Canagarajah *et al.*, 2001; Escobal, 2001; Lanjouw, 2001; Yúnez-Naude and Edward Taylor, 2001; Lay *et al.*, 2008) have employed more than one model to analyse data. The selection of regression models is generally related to the type of data available and to the modelling task. Lanjouw (2001) used two household surveys in El Salvador to assess the extent to which non-farm activity might be able to contribute to rural poverty reduction. Two surveys with 1,743 rural households in 1994 and 630 rural households in 1996 were conducted. Households were stratified by households' characteristics based on their main economic activities, i.e. self-employed, agricultural worker, and non-farm worker.

⁴³ Ordinary Least Squares (OLS) is a method for estimating the unknown parameters in a linear regression model, with the goal of minimizing the differences between the observed responses and the responses predicted by the linear approximation of the data.

Data such as household's size, gender, age, education, landholding, distance to road, and electricity connection were collected. In addition, Probit model and OLS model were employed. Participation in non-farm activity was used as the dependent variable in the former, while non-farm earnings were used as dependent variable in the latter.

Yúnez-Naude and Edward Taylor (2001) employed quantitative data to investigate the effects of education as well as other household assets on the choice of activities and income of rural Mexican households. A survey of 391 households with 2,960 members in eight rural areas was conducted between 1992 and 1995. Data were analysed through both Probit and OLS models. The dependent variable for the OLS model was the logarithm of household total net income. In their study Canagarajah *et al.* (2001) used quantitative data to ascertain which factors are important determinants of non-farm income. Their survey collected data on age, distance to market, education, coastal region and forest region. The quantitative data were analysed using an OLS model.

Escobal (2001)'s survey was conducted in Peru during 1985-97. The rural areas were first divided in segments, such as coast, highland and jungle. Furthermore, each segment was divided into clusters that were geographically continuous households. The Tobit⁴⁴ model was employed for regression analysis. Lay *et al.* (2008) used quantitative data to examine the relationship between different non-farm activities and agricultural productivity. A survey of 375 households was undertaken. Households were selected by two-stage sampling technique and the data were analysed using a multinomial logit model.

It is useful but difficult to use a survey to collect information on barriers to income diversification (Barrett and Reardon, 2000). Barriers can be investigated by asking "*are there restrictions on access to particular sorts of asset, especially restrictions that affect some people but not others, thereby creating an uneven playing field and privileging a particular subpopulation's access to relatively lucrative activities?*" (ibid., p. 25). Barrett *et al.* (2000) conducted regression analyses on the share of each income source on a range of incentives and constraint variables that jointly determine labour supply behaviour.

Summing up, the determinants of income diversification have mostly been investigated using quantitative techniques. Most studies employed quantitative data to investigate determinants

⁴⁴ The Tobit model can identify the relationship between an independent variable and non-negative dependent variable.

of income diversification following a survey. The quantitative data were analysed through various forms of regression analyses. The specific models employed differed according to the focus of the study.

3.10.2 Impacts of income diversification and methods

The impacts of non-farm activities and of rural policy that are related to non-farm activities have been investigated using both quantitative and qualitative techniques. The impacts of policy on employment can be examined by qualitative or quantitative data. The quantitative data can explain changes to structure, while the qualitative data can answer questions on how and why policies have those impacts. In their study, Mattas *et al.* (2008) employed three separate methodologies to investigate policy effectiveness. These included a case study methodology based on in-depth semi-structured interviews of representatives of different interest groups to explore their perspectives on policy issues.

Midmore *et al.* (2008a) also employed a case study method to explore employment impacts of the reformed East Wales Rural Development Programme. Rather than simply identifying effects on rural employment, the study sought to explain how Pillar 2 of the CAP interacted with the structure and performance of the local rural economy (*ibid.*). Midmore *et al.* (2008b) claimed that “*traditional techniques for evaluating deadweight, substitution and displacement effects only measure the extent to which policy measures fulfil intended policy objectives, but fail to deal with more important questions for policy development, such as how and why they operate in the way they do.*” (*ibid.*, p. 2).

In addition, income inequality has been addressed using quantitative data. Many studies (e.g. Adams, 1994; Reardon and Taylor, 1996; Elbers and Lanjouw, 2001; Lay *et al.*, 2008; Mat *et al.*, 2012) have used the Gini coefficient to examine the impact of non-farm activity on income inequality. There are two ways to investigate the equity effect of income from a given source based Gini coefficients. One is called the Gini comparison method and the other is the Gini decomposition method (Reardon *et al.*, 2000).

Various studies have employed qualitative methods to investigate the livelihood impacts of non-farm activities such as tourism (e.g. Ashley, 2000; Shah and Gupta, 2000) and of rural policy measure (e.g. Ashley and Hussein, 2000).

Several other studies (e.g. Lanjouw, 1999; Deininger and Olinto, 2001; van de Walle and Cratty, 2004) have used income and consumption data as an indicator of welfare, with the Probit and OLS models used for regression analysis. In survey of 1,000 rural households in Colombia, Deininger and Olinto (2001) measured welfare using expenditure, employing the Probit model for analysis. Meanwhile, van de Walle and Cratty (2004) used household's consumption expenditure as a welfare indicator and analysed their data using a Tobit model.

To sum up, different studies have dealt with different issues. Quantitative and qualitative methods or mixed methods have all been employed in various studies. In particular, research questions on the determinants of income diversification mostly have been answered by quantitative method based on survey data. Some studies have employed quantitative methods to investigate the impacts of policy, while other studies have used qualitative methods such as case studies and interviews that are more focused on why and how policies operate. The qualitative approach to investigate the impacts of policies collected qualitative data. Qualitative data were analysed through methods such as content analysis, where data were firstly coded and then themes and patterns were identified. However, many studies have employed quantitative data to explore the effects of different income sources on income inequality.

The present study will use a qualitative approach to reflect its research objectives and to explore how and why policies operate. Survey data will be used to make a preliminary exploratory study. Like other studies, this research will employ a combination of methods to investigate the impacts of rural policy measures on farm households. These will be discussed in the next chapter.

3.11 Conclusion

This chapter reviewed the main findings of the non-farm economy literature. Diverse factors that are related to farm households were investigated in terms of the potential determinants of non-farm activities. The determinants of non-farm activities are found to vary between continents and between countries. By and large, regarding the determinants of participation in non-farm activities, landholding and participation show an inconsistent relationship. Education is an important factor of income diversification into non-farm activities. In particular, lack of education is an entry barrier to higher productive non-farm activities. In

addition, access to infrastructure has a positive relationship with non-farm activities in particular for poor households. Also, village and regional differences influence participation in non-farm activities. Although non-farm activities are found to have contributed positively to poverty reduction and economic growth, income inequality problems were identified in some empirical studies.

There are studies investigating the determinants of non-farm activities and other studies that look at the impacts of individual non-farm activities or businesses. However, few studies have been conducted regarding the impact of rural policy measures that aim to support community businesses. This study aims to fill this gap, while exploring the impacts of non-farm activities and related rural policies across farm households and regions.

This chapter has also identified a range of methodologies that have been employed in the literature on income diversification, with particular reference to farm households. Many studies on the determinants of income diversification have employed quantitative methods. Meanwhile, the impacts of non-farm activities and rural policy have been studied through qualitative, quantitative or mixed methods. The specific methods of this study will be reported in the next chapter.

Chapter 4: Research Methodology

4.1 Introduction

This chapter explains the methodology of the present study. This study adopted a mixed methods approach to explore the impacts of rural policies on farm households. First, an exploratory online survey was conducted to identify helpful rural policy measures that support non-farm activities across regions in South Korea and the factors that influence farmers' participation in non-farm activities.

Next, key informant interviews were undertaken to narrow down the most important rural policy measures and to gain an insight into the perspectives of key informants on the impacts of these measures. These interviews were conducted nearly concurrently with the survey. Finally, in-depth interviews with farm households were conducted to further investigate the impacts of Korean rural policy measures.

4.2 Research Aims and Methodology

This study explores the impacts of key rural development policy measures on income diversification and the impacts that this has on the farm households. As shown in Chapter 3, previous studies have dealt with various issues regarding income diversification and policy evaluation using a variety of quantitative and qualitative methods. Some studies (e.g. Mattas *et al.*, 2008; Midmore *et al.*, 2008a; Midmore *et al.*, 2008b) have argued that a qualitative evaluation is useful to understand how and why rural policies work. As Bryman (2012) points out, qualitative techniques can help to answer the 'how?' and 'why?' type of research questions. Midmore *et al.* (2008b, p. 2) point out that the question of "*how and why policies operate in the way they do*" can be best investigated through in-depth interviews because deep insights can be achieved through qualitative data. Thus, qualitative methods should be useful in addressing the research objectives of this study.

In addition, quantitative methods can be employed to identify the determinants of income diversification. Some studies (e.g. Adams, 1994; Ellis, 2000; Canagarajah *et al.*, 2001;

Escobal, 2001; Reardon *et al.*, 2006; Beyene, 2008; Mat *et al.*, 2012) have employed quantitative data from surveys to investigate the determinants of farmers' participation in non-farm activities. Hence, research question 'b' 'What are the main factors that influence farm households to diversify into non-farm activities?' can therefore perhaps be better examined using quantitative approaches rather than qualitative methods. The remaining research questions in Chapter 1 can be best tackled using qualitative methods because most of these questions are more related to how and why policies operate.

Thus, this study uses a combination of quantitative and qualitative techniques because no single method can answer all of the research questions posed in Chapter 1. Mixed methods are typically used when a single method is insufficient. As Creswell and Plano Clark (2011) and Bryman (2012) point out, mixed methods can provide a more complete answer to research questions and can help to answer questions that cannot be answered by qualitative and quantitative approach alone. Several studies (e.g. Ashley, 2000; Ashley and Hussein, 2000; Smith *et al.*, 2001) have used mixed methods to investigate the impacts of rural policy on farm household income and livelihoods. Smith *et al.* (2001) employed both quantitative and qualitative methods to explore the issues of livelihood diversification in households and at the intra-household level. They employed a household questionnaire to address variations in activities and problems cross-correlated with wealth, gender, age, education and social circumstance variations at the household level (*ibid.*). Also, they employed semi-structured interviews to understand different business activities undertaken by individuals.

This study also employed key informant interviews, similar to those used by Midmore *et al.* (2008a) to explore perspectives on the impacts of Pillar 2 of the CAP on rural employment in rural areas of East Wales. In that study, key informants were drawn from policy-makers, policy implementers, large and small business managers, regional NGO officers, and LEADER group managers, who were presented with qualitative data on how CAP reform affected farm families and farm workers (*ibid.*). In addition, Smith *et al.* (2001) employed key informant interviews to investigate the perceptions of attitudes, meaning and values of livelihood strategies and to understand various business activities undertaken by group enterprises. Here, key informant interviews are used to identify the main rural development policy measures that are designed to boost non-farm activities and non-farm income.

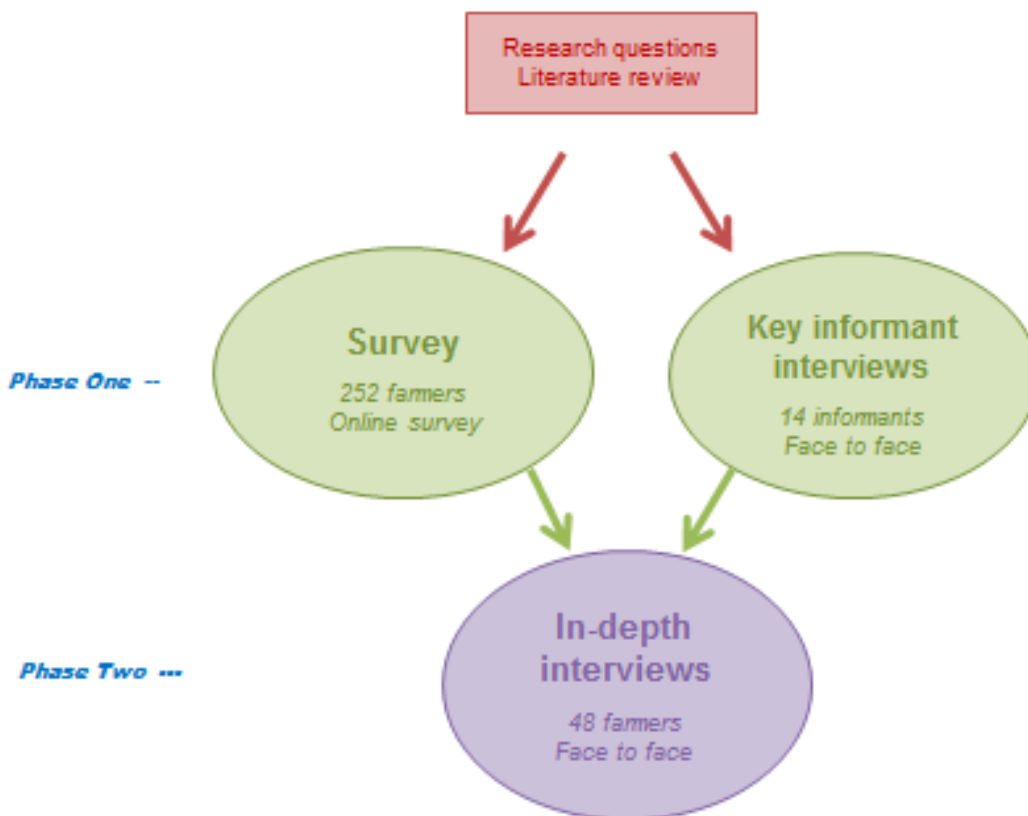
Although both qualitative and quantitative methods are employed in this study, qualitative methods need to play a more important role because the research objectives of this study are

more related to an account of the process that delivers the impacts of rural policies.

4.3 Research Design

In this study, the quantitative farmer survey and key informant interviews were implemented before the in-depth interviews that are the main method of data collection. Methodological triangulation, using more than one method for gathering data, is a useful approach to obtaining different but complementary data on the same topic to answer research questions (Creswell and Plano Clark, 2011; Bryman 2012). Figure 4.1 shows the design of the methods that this study employed.

Figure 4.1 Research design



The initial phase of the study helped to identify the potential impacts of key Korean rural policy measures before the in-depth interviews, as well as marking out some important regional differences in the usefulness of various rural policy measures.

An online survey was conducted with farm households to explore Korean rural policy. This study needed to examine any potential regional differences in non-farm activities and the efficacy of different policy measures because many studies (e.g. Corral and Reardon, 2001; Escobal, 2001; Lanjouw *et al.*, 2001; Lee and Kim, 2011) have pointed out that regional or locational characteristics are among the most important variables in income diversification. Furthermore, the study could only focus on a small number of the nine Dols in South Korea for in-depth interviews, so it was important to ensure that it covered some of the variation that existed between them in terms of rural policy. The survey helped to identify the most important rural policy measures in different areas. It was also useful in exploring some of the determinants of income diversification (related to research question 'b' in Chapter 1). Although the survey was unlikely to identify all of the determinants of income diversification, the data could help to identify some important factors that influence farmers' participation in non-farm activities.

Along with the survey, key informant interviews were undertaken nearly concurrently and independently. The key informant interviews were also used to identify key rural policy measures designed to boost non-farm activities and the non-farm income of farm households as well as exploring expert views on the impacts of rural policy measures on farm households. Respondents in the key informant interviews were all experts in their fields, offering useful insights into the impacts of rural policies (Patton, 1987; Patton, 2002). These individuals were not farmers themselves, but as Mattas *et al.* (2008) note, key informant interviews with representatives of different interest groups can be useful for exploring the broader impacts of policy.

Following the online survey and the key informant interviews, a series of face-to-face semi-structured in-depth interviews with farmers was conducted. Qualitative research like this can be particularly useful where more detail and depth about a phenomenon is needed (Ritchie *et al.*, 2014). The interviewees were different from those in the first phase of the research. The online survey sampled farmers irrespective of whether or not they had non-farm income or whether or not they participated in any rural policy measure. By contrast, the in-depth interviews were conducted with farmers who had participated in a rural policy measure that aimed to boost the non-farm income of farm households. These interviews provided useful and plentiful data to address the research objectives of the study.

Although this study was primarily focused at the household level, it also took into account the

individual and the broader community levels. As pointed out by Ellis (1998), many studies on income diversification have used households as the unit for empirical investigation because the household is a social group that lives in the same location and makes joint decisions over resource allocation and income pooling. In-depth interviews with farmers in this study were used to gather information on both households and individual farmers. Table 4.1 summarises the research methods used in the present study.

Table 4.1 Summary of research methods

Method	When	With whom	Where	How
Survey	November 2013	Farmers, irrespective of participating in rural policy measure	Nine Dos in South Korea	Online (Conducted by KREI)
Key informant interviews	November and December 2013	Academia, central government officer, local government officer, policy implementer, etc.	South Korea	Face-to-face semi-structured interviews
In-depth interviews	July and August 2014	Farmers who participated in rural policy measures	Three Dos in South Korea	Face-to-face semi-structured interviews

4.4 Data Collection

4.4.1 Survey: Design of question, sampling and implementation

This part of the study focused on identifying the relationships between age, farm type, location and income diversification linked to rural policy measures. It was necessary for the questionnaire to identify the policy measures found to be most helpful in this respect and to explore any regional differences between them (See Appendix A). The policy measures listed in section 2.3.4 of Chapter 2 were presented and questions were included, such as “Which rural policy measures help you to increase non-farm income in your areas (Do)?” and “Fill in the important rural policy measures in order based on following policy lists.” In addition, questions about farmers’ participation in non-farm activities, their main non-farm activities and the proportion of non-farm income out of total household income were added. Additional questions covered the farmer’s age, farm type, and location.

The Korea Rural Economic Institute (KREI)⁴⁵ was commissioned to implement the online

⁴⁵ KREI is “a government-funded research organization. In 1978, KREI was established by the Korean government to play an important role in developing sound agricultural and forestry policies aimed at the balanced development of urban and rural areas. Our research covers agricultural economics, marketing of agricultural products, rural development, agricultural outlook and international agricultural trade negotiations.

survey discussed above. The sampled farmers were all members of an existing KREI panel⁴⁶ of 3,000 farmers who live in rural areas (Si or Gun) across the country. Out of 3,000 farmers, the 1,200 farmers who use email were all invited to participate in the online survey and asked to complete a questionnaire which was presented on the KREI homepage.

This survey was conducted without a pilot because the questionnaire was considered by KREI as not difficult for farmers to answer and because they have experiences of participation in similar surveys. The online survey was implemented during November 2013. Two hundred and fifty two farmers from nine Dos answered the questionnaire.

4.4.2 Key informant interviews: Design of question, sampling and implementation

A semi-structured interview guide was developed for the key informant interviews (See Appendix B). Questions in a semi-structured interview should provide opportunities to discuss perceptions at length with interviewees (Bryman, 2012). Based on the perspectives of key informants, the main rural policy measures that aimed to boost non-farm activities and non-farm income were narrowed down to a short list that would be the focus of the subsequent in-depth interviews. To identify the key rural policy measures, respondents were asked, “Which rural policy measures that support non-farm activities for farm households are important?” and “Which rural policies work well? and which rural policy measures do not work well?”

In addition, the interviews addressed four broad categories of questions: (1) the importance of and motivations for income diversification (e.g. Is non-farm activity important for farm households?), (2) determinants of and barriers to income diversification (e.g. What are the main determinants of non-farm activity of farm households in your view? Do you know any barriers preventing farm households from diversifying into non-farm activities?), (3) implementation of rural development policy measures (e.g. How does government support for non-farm activities help to increase farm households?) and (4) the impacts of rural policy measures (e.g. How do rural policies influence income, employment and quality of life of

The purpose is to contribute to the nation's economic development and the enhancement of public welfare by conducting comprehensive surveys and research on the agricultural and forest economy and rural community development” (<http://www.krei.re.kr/web/eng/foundation>)

⁴⁶ KREI has a farmer panel to identify research demands about agriculture and rural issues in rural areas. The number of farmers in the panel was about 3,000 across nine Dos in 2013.

farm households?). Questions relating to both financial and non-financial impacts were also included. In particular, questions about how rural policy measures influence farm households were emphasised.

The present study identified informants who were likely to have key information on the impact of rural policy on farm households. Representatives of different interest groups were identified in order to allow for variation in knowledge across relevant sectors. The potential key informants were grouped into five categories: academics, central government officers, local government officers, policy implementers and farmers' representatives. The reasons for the choice of these sample categories are as follows. Academic researchers have knowledge of rural Korea and rural policies. They are often involved in the evaluation of these policies. They sometimes give advice on rural issues to central and local government. Central government officers in the Ministry of Agriculture, Food and Rural Affairs (MAFRA) manage and oversee rural policies. Local government officers also participate in planning and implementing rural policies. Policy implementers who have been working for the Korea Rural Community Corporation (KRCC) deliver goods and services that are related to the rural policy measures. Most rural development policy measures have been implemented through this corporation. Three university academics and two researchers from KREI were chosen in the first category and were supplemented by three central and two local government officers. Three KRCC staff were interviewed to represent policy implementers. Finally, one representative from the Korean Advanced Farmer's Federation (KAFF) was interviewed.

A pilot interview was conducted to test questions in the key informant interviews. Following the pilot, the researcher decided that it was necessary to define his understanding of non-farm activity at the start of the interview. Several questions were simplified or clarified to improve respondents' understanding. In addition, a summary of questions was sent to the interviewees by email two weeks in advance to give some idea about the kinds of questions that would be asked.

The face-to-face key informant interviews were carried out between November and December 2013. The researcher visited interviewees' offices for their convenience and to put them at their ease during the interviews. The interview questions were adjusted slightly to take account of the interviewees' backgrounds and careers. As Bryman (2012, p. 471) suggested, the interviews were conducted with flexibility.

“Questions may not follow on exactly in the way outlined on the schedule. Questions that are not included in the guide may be asked as the interviewer picks up on things said by interviewees.”

All interviews were conducted in Korean and recorded using a voice recorder with the permissions of each interviewee. The confidential nature of the data was explained to interviewees. The researcher took notes of important points during the interviews. All interviews were transcribed. A copy of the transcripts was sent by email to the interviewee to allow them to check factual content. All 14 key informant interviews were undertaken, with a combined duration of 13 hours and 38 minutes. Interviews took, on average, about one hour, resulting in a total of 135 pages of interview transcripts.

4.4.3 In-depth interviews with farmers: Design of question, sampling and implementation

A semi-structured interview guide was developed for the interviews with farmers based on the study's research objectives and research questions (See Appendix C). The questions were similar to those of the key informant interviews, but asked for more detail regarding the impacts of rural policies. The questions can be broadly categorised as follows: (1) the importance of and motivations for income diversification; (2) determinants of and barriers to income diversification; (3) implementation of rural development policy measures; and (4) impacts of rural policy measures (e.g. Which non-farm activities do rural policy measures help with and how? How have the non-farm activities changed things for your households? What impact have non-farm activities had on your household? Has this resulted in you changing any of your activities?)

Here, the questions were directly related to the impacts of rural policy, while in the key informant interviews they dealt more with perspectives and opinions of informants. In addition, general details on the farm household were sought, along with information on the non-farm activities and their reasons for undertaking them. Regarding the impacts of rural policy, questions were included relating to any impacts they had on income, quality of life, individual opportunities, agricultural production and rural communities.

These in-depth interviews adopted a purposive sampling approach to gain access to as wide a range of farm households relevant to the research questions as possible. The interviewees

were selected to be different from the previous survey. The sample mainly comprised farmers which currently or previously participated in non-farm activities that were supported through rural policy measures over the last three years. This provided a means of investigating the process and mechanism of participation in rural policy measures as well as exploring the outcomes of such participation.

Some sampling criteria were employed to ensure that the sample contained sufficient diversity⁴⁷ (Patton, 2002; Mason, 2010) so that the impacts of the characteristics concerned could be explored (Ritchie *et al.*, 2014). In practice, the process of designing a purposive sample is as follows: identifying the population for study; choosing the purposive selection criteria; prioritising the selection criteria; deciding on the location of the study; designing a sample matrix; and setting quotas for selection (*ibid.*).

The present study needed to consider a range of selection criteria because the causes and effects of income diversification related to rural policy can vary across demographic characteristics and regions (See Chapter 3). The sample population for this study are farmers who have participated in one of the four main rural policy measures that aim to boost non-farm incomes. The criteria for purposive selection were the age of farmers, farm size, geographical location, rural policy measures, and major farm types. Meanwhile, following the guidance of Ritchie *et al.* (2014), this study prioritized certain criteria rather than giving them all the same weight. Table 4.2 presents the criteria used for purposive selection. The age of farmer and farm size of the farm household were assigned as primary criteria because the literature review identified them as important factors in terms of participating in non-farm activities.

Farmers were divided into those aged under 50 and those 50 and over, while farm size was divided into those above and below 1.5 hectares, the average farm size of farm household in South Korea. This study also considered secondary and tertiary criteria for sampling. Geographical location was used as secondary criteria for sample composition. Distance from the farm to an urban centre was considered. A distance of greater or less than 15km to the nearest urban centre was used as a criterion because this is in the middle range of proximity to urban centres. Lastly, rural policy measure, the number of Si and Gun, and major farm type

⁴⁷ This is one of several approaches to purposive sampling. Heterogeneous samples or maximum variation sampling is a deliberate strategy to include cases which vary widely from each other (Patton, 2002; Bryman, 2012; Creswell, 2013). The aim is to identify central themes which cut across the variety of cases (Ritchie *et al.*, 2014).

were used as tertiary criteria. These tertiary criteria were not used in the sample selection but were monitored to check diversity in their coverage (ibid.). The key informant interviews (discussed in Chapter 6) suggested that non-farm income is not important to large rice farms. Thus, the proportion of large rice farms in the sample was lower than that observed on in the population.

Table 4.2 Purposive sampling criteria

Primary criteria	Secondary criteria	Tertiary criteria
<ul style="list-style-type: none"> • Age (Age < 50, Age ≥50) • Farm size (<1.5ha, ≥1.5ha) 	<ul style="list-style-type: none"> • Geographical location (Distance to city centre < 15km, ≥ 15km) 	<ul style="list-style-type: none"> • Rural policy measure • Major farm type • Number of Si or Gun

Qualitative studies are almost invariably confined to a small number of geographical locations (Ritchie *et al.*, 2014). The present study selected three out of nine Dos in South Korea because of time and cost limitations. To ensure regional variation, this study selected one Do in the northern area, one in the central area, and one in the southern area. The regions were selected on the basis of the distance to Seoul and their non-farm income profiles. According to the key informant interviews, the distance from Seoul, the capital city, is important when participating in non-farm activities because 50 per cent of the Korean population live in the metropolitan region that consists of Seoul and Gyeonggi-do. Gangwon-do is a very mountainous area in the north of the country, where only 6.5 per cent of the land is farmland. This area was selected for the study because it offers some very different characteristics to the other Dos in terms of the potential to earn non-farm income. The other two Dos selected were Chungcheongnam-do in the central area and Gyeongsangnam-do in the south. These were chosen because non-farm incomes in these Dos were around the national average. Table 4.3 provides some background for the three selected Dos and Figure 4.2 shows their geographical locations.

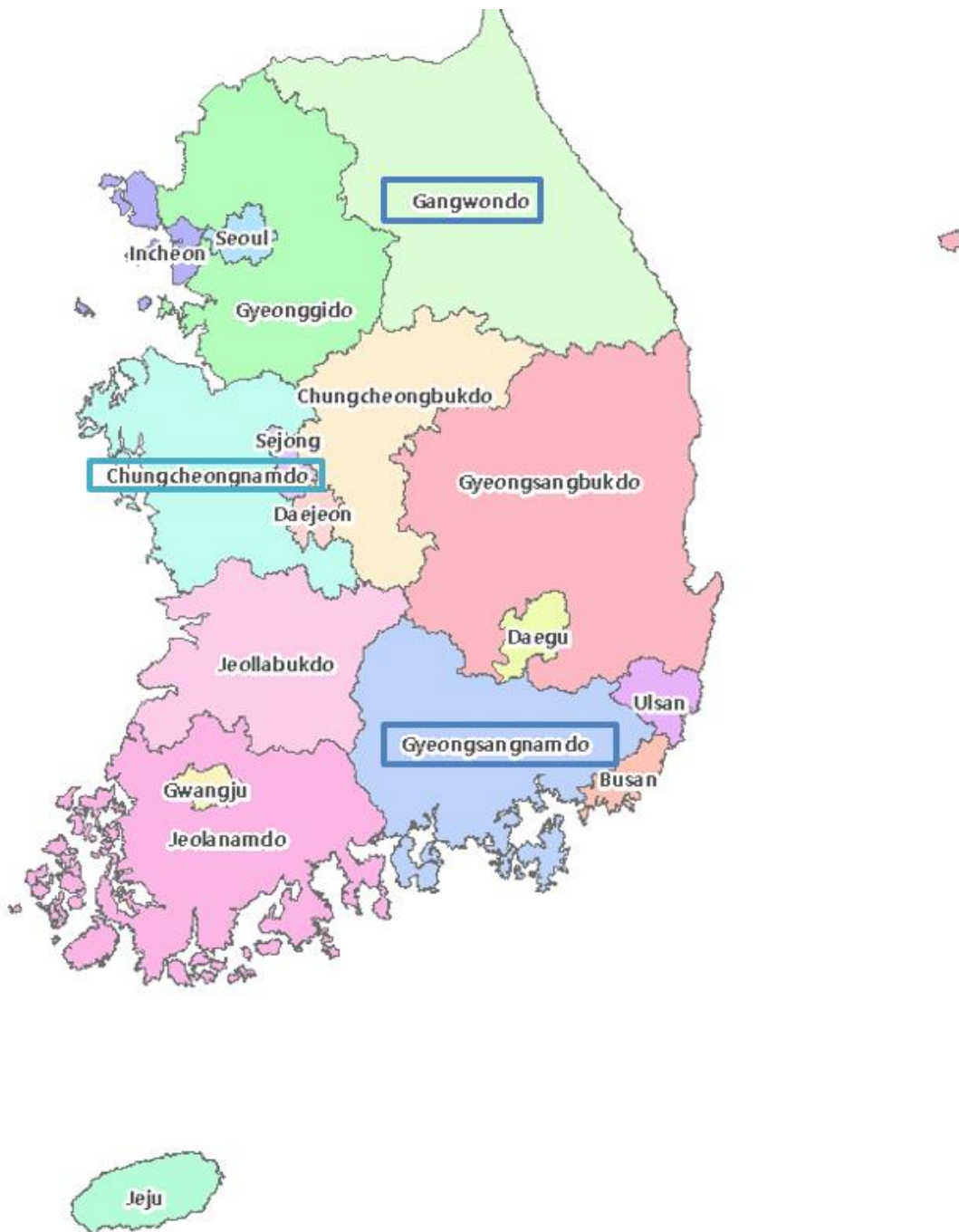
Table 4.3 Comparison of agricultural background of three Dos, 2013

	Gangwon-do	Chungcheongnam-do	Gyeongsangnam-do
Geographic context	<ul style="list-style-type: none"> • Near to Seoul • Very mountainous area • Proportion of farmland in total Do land is 6.5 % (paddy field 36.9%, upland 63.1%). 	<ul style="list-style-type: none"> • Near to Seoul • Proportion of farmland in total Do land is 26.9% (paddy 71.2%, upland 28.8%). 	<ul style="list-style-type: none"> • Remote from Seoul • Proportion of farmland in total Do land is 14.9% (paddy field 61.2%, upland 38.8%).
Agricultural context	<ul style="list-style-type: none"> • The percentage of farm income in total household income is 33.2%, while that of non-farm income is 38.2%. 	<ul style="list-style-type: none"> • The percentage of farm income in total household income is 23.3%, while that of non-farm income is 44.1%. 	<ul style="list-style-type: none"> • The percentage of farm income in total household income is 36.1%, while that of non-farm income is 41.7%.

Farm type	<ul style="list-style-type: none"> • Wild vegetables • Rice is rare 	<ul style="list-style-type: none"> • Rice and fruits 	<ul style="list-style-type: none"> • Rice and fruits
Transport	<ul style="list-style-type: none"> • These days, transportation is good but in the past, transportation was bad because it is a mountainous area. 	<ul style="list-style-type: none"> • With development of transportation, it is easy to get to Seoul. 	<ul style="list-style-type: none"> • Industries have developed early compared to other Dos except Seoul. • Transportation is good with a highway to Seoul.

Note: Average annual farm household proportion of non-farm income is 43%. Source: Korea National Statistical Office (www.kosis.kr)

Figure 4.2 Three sampled Dos in South Korea



Once the sampling locations have been decided, the most useful way to convert decisions about the remaining criteria into a sample design was to draw up a sample matrix (Ritchie *et al.*, 2014). This study developed a sampling matrix that shows the target sample sizes for each of the sampling criteria shown in Table 4.4. For convenience, the target sample size for each criterion is specified as a range. Once the sampling matrix was completed, it was possible to devise the quotas that needed to be met for sample selection (Ritchie *et al.*, 2014). The age distribution of the sample reflected the age distribution⁴⁸ of South Korean farmers, i.e. there are twice as many farmers over the age of 50, compared with those under the age of 50. Table 4.5 shows the distribution of total 48 sampled farmers.

Table 4.4 Sampling matrix for sampling

		Farm size	
		Farm size < 1.5ha	Farm size ≥ 1.5ha
Age of farmer	Age < 50	5-10	5-10
	Age ≥ 50	10-20	10-20
Geographical location (Distance to city centre)	< 15km	Min. 9	Min. 9
	≥ 15km	Min. 9	Min. 9

Table 4.5 Sampled farmers

		Farm size		Total
		Farm size < 1.5ha	Farm size ≥ 1.5ha	
Age of farmer	Age < 50	8	7	15
	Age ≥ 50	14	19	33
Geographical location (Distance to city centre)	< 15km	13	13	26
	≥ 15km	9	13	22

Figures 4.3 to 4.5 show the sampled farmers by Si or Gun across the three Dos. In each Do 16 farmers were sampled. Each of these households had engaged with one of the key rural policy measures as follows: Green-tourism Village programme (9), General Rural Village Development programme (11), Local Industry Development programme (16), and Complex Industrialisation of Rural Resource programme (12).

⁴⁸ The percentage of farmers who are over 50 years old was about 68 per cent in 2013 (MAFRA, 2014).

Figure 4.3 Farmers sampled in Gangwon-do

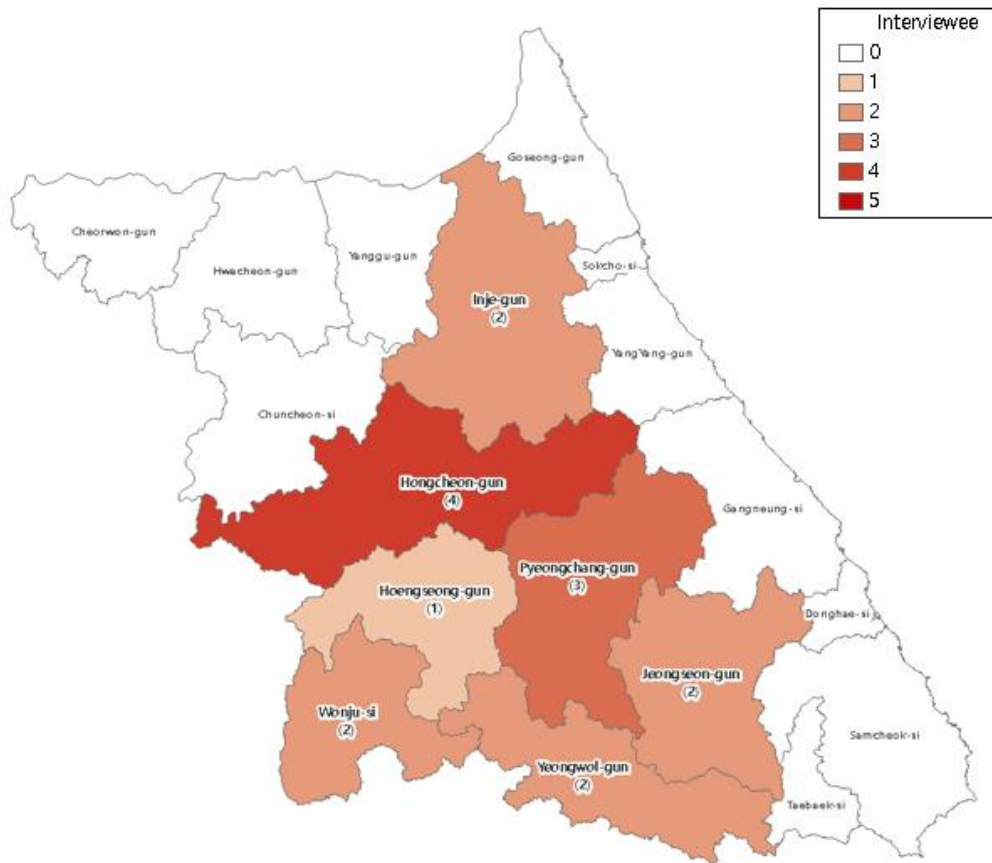


Figure 4.4 Farmers sampled in Chungcheongnam-do

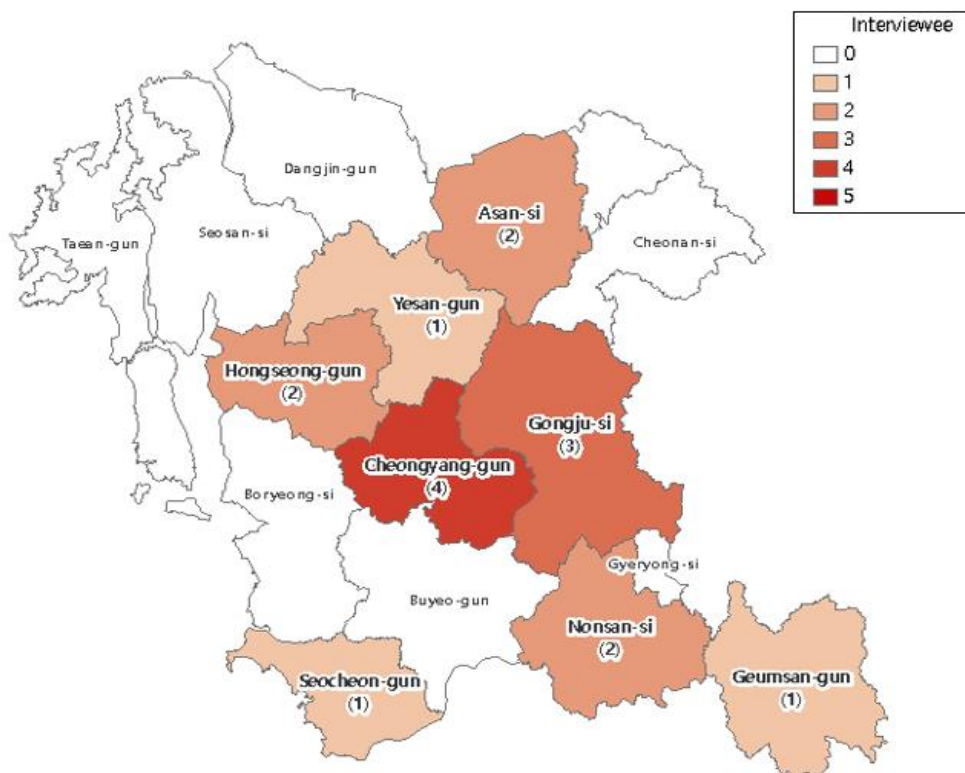
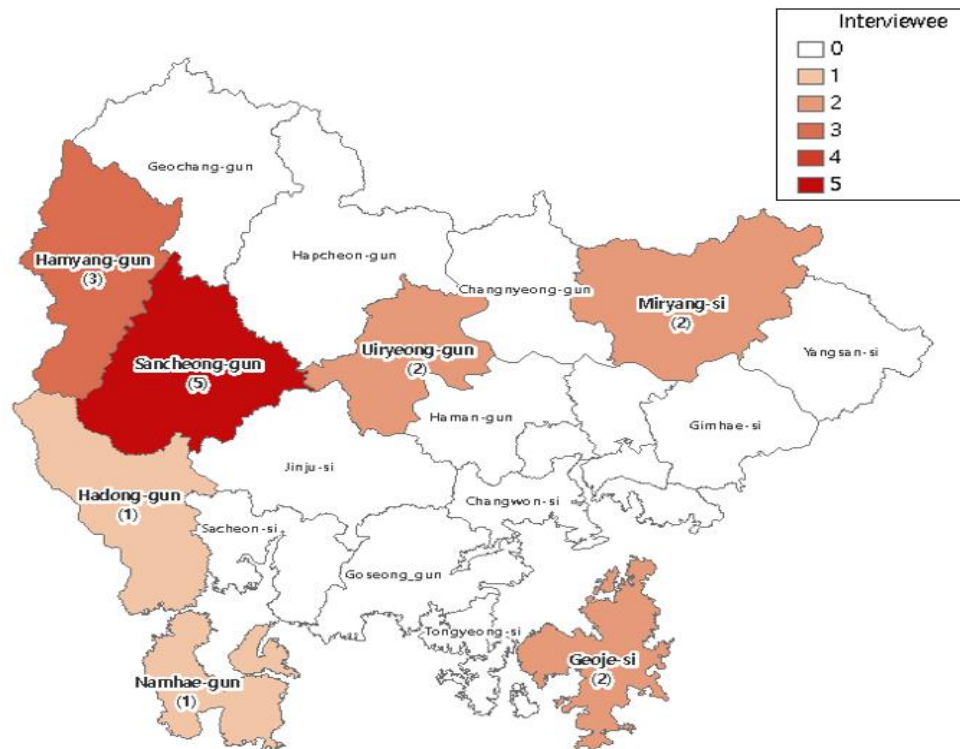


Figure 4.5 Farmers sampled in Gyeongsangnam-do



Pilot interviews were conducted with two farmers. The researcher identified whether or not interviewees knew which policy measure they participated in. Through the pilot interviews, the researcher identified whether or not farmers could link policy measures and benefits. It was found that farmers could distinguish the impacts of policy measures so there were no changes to the related questions in the interview guide. However, the researcher found that the questions needed to be asked using simpler language. The interviews need to be conducted flexibly to obtain the interviewee's active participation. In addition, the researcher sent a summary of questions in the form of bullet points to farmers in the sample to give them some ideas about what kind of questions would be asked. This was done either by email or by telephone.

Face-to-face in-depth interviews with farmers were carried out in July and August 2014. The researcher visited interviewees' houses or offices for their convenience and to ensure a more informal atmosphere. Like the key informant interviews, farmers had a great deal of flexibility in their responses. For example, interviewees were allowed to give their opinions with limited interruption from the researcher. Also, some interviewees could choose to give short answers or skip questions that were of little relevance to them.

The confidential nature of the data was emphasised and verbal or written consent was

obtained from each interviewee. All interviews were conducted in Korean and were recorded using a voice recorder with the permission of each interviewee to enable accurate recollection and analysis of the response. The researcher also took notes of important points during the interviews. All interviews were transcribed. Forty-eight in-depth interviews took a combined duration of 38 hours (an average of 48 minutes each). This resulted in a total of 289 pages of interview transcripts.

4.4.4 Ethical consideration

Following the guidance given in ‘Ethics in Newcastle University’, the present study received full ethical approval from the Faculty Ethics Committee. The University requires all projects to receive ethical approval before commencement. The University has a two-stage Ethical Review Process as follows:

The first stage is a preliminary review. This is a simple questionnaire that assesses whether your project is high risk and which directs you to the appropriate internal or external committee for further review if it is required. All projects whether unfunded or funded student course should go through this preliminary process before any work at all begins. If the preliminary form directs you for further review by one of the University Committees (Animal Welfare Ethical Review Board or faculties) then you will need to provide some additional information through the University Full Form. (Newcastle University)

According to ‘Ethics in Newcastle University’, the present study applied for and received firstly preliminary ethical approval and then full ethical approval. The study received ethical approval in terms of “participant details, participant information, participant consent, participant debriefing, potential risk to participants and risk management procedures, and data management plan”. The present study was conducted according to the terms of the ethical approval process.

The survey was conducted online. Sampled farmers gave their consent to participate in survey following the KREI code of ethics. Participants were informed that all information collected would be treated as confidential and would be anonymised in order to protect the identity of the participants. They also were informed that the data would only be used for research purposes.

Key informant interviews and in-depth interviews were also undertaken according to University ethical procedures. The same protocol was applied to key informant interviews and in-depth interviews. The consent to participation in the interview was given verbally or through written consent. Many farmers preferred to give verbal rather than written consent.

In addition, the researcher provided a participant information sheet to each participant. This sheet included information about the purpose of research, interview procedure, potential risks and benefits, participants' rights and how to access the research findings. To be specific, the researcher first explained that the purpose of this study was to examine the impact of rural policy measures and that the interview was carried out as a part of an independent PhD research project at Newcastle University in the UK. Consent to participate in the research was to be given written or verbally; the interview would be recorded if the participant agreed for later transcription; if the interviewee did not agree to the recording being made, the researcher would take notes. The researcher explained that there were no risks associated with participating in the research and that participants were free to withdraw interview consent and discontinue participating at any time during the interview. The interviewees were informed that all information collected would be confidential and would be anonymised in order to protect the identity of the participants. The researcher explained that all the data collected would only be used for academic and research purposes. The researcher assured participants that no names or other personal details would be used or made public in any subsequent work. The interviewees were informed that the results of the research would be made available when all the work relating to the research was completed. The contact details of the researcher were given to interviewees.

4.5 Data Analysis

4.5.1 Analysis of quantitative survey data

“The analysis of quantitative data consists of statistically analysing scores collected on instruments, checklists, or public documents to answer research questions or to test hypotheses.” (Creswell and Plano Clark, 2011, p. 6). The survey was designed to identify regional differences regarding the rural policies that farmers found helpful and to explore the relationships between certain factors and income diversification. Quantitative data from the survey were analysed statistically. To investigate any statistical relationships between the

mainly categorical data generated from the questionnaire (Field, 2013), this study employed a combination of Pearson's chi-square tests and logistic regression analysis. Chi-square tests were used because they can test whether or not there is an association between two categorical variables. In addition, logistic regression was employed to investigate the direction and magnitude of the relationships between key categorical variables revealed by the chi-square tests.

4.5.2 Analysis of qualitative data from interviews

“The analysis of the qualitative data (words or text or images) typically follows the path of aggregating the words or images into categories of information and presenting the diversity of ideas gathered during data collection.” (Creswell and Plano Clark, 2011, p. 6). The ultimate aims of analysis of qualitative research are description, explanation, or theory (Ritchie *et al.*, 2014). Just naming and classifying what is out there is usually not enough. It is important to understand the patterns, the recurrences and the ‘whys?’ that underpin them (Ritchie and Spencer, 1994). Ritchie *et al.* (2014, p. 275) claim that *“explanations in qualitative research are conjectures about why something happened rather than invariable laws.”*

The present study analysed qualitative data from the key informant interviews and the farmer interviews using a combination of content and thematic analysis. Patton (2002, p. 453) notes that *“content analysis sometimes refers to searching text for recurring words or themes which is the core meaning found through content analysis.”* As Ritchie *et al.* (2014, p. 271) point out, *“both the content and context of documents are analysed and themes are identified in content analysis”*. Based on content analysis, this study then conducted thematic analysis. Thematic analysis involves discovering, interpreting and reporting patterns and clusters of meaning within the data (Braun and Clarke, 2006; Ritchie *et al.*, 2014). Thematic analysis typically involves inspecting coded or summarised data and combining elements to yield categories or higher-level classes that capture conceptual differences in the data (Ritchie *et al.*, 2014).

The researcher coded the qualitative interview data and implemented coding through two stages (Ritchie *et al.*, 2014), i.e. data management (first cycle coding) and abstraction and interpretation (second cycle coding). At the first stage, data were arranged according to an initial theme framework. These themes were related to the research questions of the study

(Bryman 2012). This study established initial themes, i.e. motivations for income diversification, determinants of and barriers to income diversification, implementation of rural policy, and impact of rural policy. The data that are related to these themes were highlighted. At the second stage, coding was implemented in a more interpretive way. For example, codes were changed from participants' own words to more abstract terms (Ritchie *et al.*, 2014). Codes were classified into categories and themes. The codes were categorised and classified to describe the form or nature of any social phenomena, such as circumstances, events, attitudes, beliefs, norms, systems and so on (Ritchie *et al.*, 2014). While some qualitative studies complete their analysis at the categorisation stage and produce rich descriptive accounts, others like this study begin to search for patterns of association in the data, i.e. between a set of phenomena and between phenomena and particular subgroups. The former relate to connections between different sets of phenomena identified by separate strands of thematic analysis, while the latter is about links between sets of phenomena and particular subgroups, which include demographic and geographic characteristics. This study used a matrix based on an Excel spreadsheet containing a row for each participant and a set of columns for subgroup characteristics and analytic themes from transcripts. Qualitative data were analysed by consistent testing of evidence and explanatory hypotheses were re-evaluated and refined (Mattas *et al.*, 2008; Midmore *et al.*, 2008a). Views emerged with regard to the impact of rural development reforms on the rural economy.

The emergence of a particular social pattern, should not be seen as simple cause and effect but as something that might be worthy of further investigation (Ritchie *et al.*, 2014). Meanwhile, less recurrent or even unique connections can be of equal interest, if they help the analyst to understand what is going on. The identification of patterns can be important clues to a fuller understanding of the subject under study (*ibid.*). The analysis of qualitative data is based on conjectures about why something comes about rather than being an account of deterministic causes (*ibid.*).

Transcripts were coded both manually and by using the Nvivo10 qualitative analysis software. At the first stage, transcripts were coded manually because Nvivo10 does not fully support the Korean language in some functions such as word frequency. Analysis proceeded by exploring patterns within the data which provided support for explanations of the causal relationships that were being investigated (Midmore *et al.*, 2008a). Coded transcripts were analysed through iterative reading to establish patterns of causality. Nvivo10 software was useful in identifying the relationships between phenomena and subgroups. Functions such as cross-

tabulation were used to examine any relationship between phenomena and subgroups. Table 4.6 shows the themes and subthemes of the study from the key informant interviews and in-depth farmer interviews. The main themes are as follows:

1. Motivation for income diversification (related to research question a, c);
2. Determinants of and barriers to income diversification (related to research question b, c);
3. Rural policy measures and their impacts on diversification (related to research question d-h); and
4. Impacts of income diversification on farm households (related to research question d-h).

Table 4.6 Themes and subthemes for the thematic analysis (Appendix D)

Themes	Subthemes	Categories	Codes
1. Motivation for income diversification	1.1 Importance	Income, non-financial benefit	Income, quality of life, livelihood, village development, rural development
	1.2 Motivation	Push factors, pull factors	Risk hedge, income, added-value
2. Determinants of and barriers to income diversification	2.1 Determinants	Determinants	Assets, organisation, institution, government, NGO, policy, context
	2.2. Barriers	Barriers	Shortage of assets, regulation, institution, context, budget system, law
3. Rural policy measures and their impacts on income diversification	3.1 Participation and partnership	Participation	Organisation type (agricultural corporation association, agricultural corporation company), match-funding
		Partnership	Planning, bottom-up approach, voluntary, partnership, leadership, decision-making, conflict
	3.2 Impacts on income diversification	Support from rural policy measures	Physical assets: physical capital, financial capital, natural capital Support services: human capital, social capital (education, consultation, training, empowerment)
		Changes of assets	Human capital (Leadership, education, training, technical skill, knowledge, business mind, age, consultation), Physical capital (information, infrastructure), Social capital (organizing, system, empowerment, community sense) Natural capital, Financial capital (seed money, self-financing), Location (link to infrastructure and natural resource), Leadership (link to human capital, social capital)
		Income diversification	Income diversification, employment, livelihood strategy
4. Impacts of income diversification on farm households	4.1 Performance of community business	Successful factors	Partnership, assets, strategy, profit distribution
	4.2 Impacts of rural policies	Financial benefits	Increased income, stable income, employment creation, income inequality
		Non-financial benefits	Quality of life, community benefits, social capital, social networks
		Differential impacts across farm households	Across farm households (age, farm size, farm type, educational level, employment type) Across regions (close to capital city and large cities, remote areas, mountainous areas)

In addition, Table 4.7 shows the interviewee and naming convention, which was used in data analysis.

Table 4.7 Interviewee and naming convention

	Category	Interviewee & Naming Conventions	No. of interviewees
Key informant interviews	Academia	Academic #1-5	5
	Ministry of Agricultural, Food and Rural Affairs officer	MAFRA officer #1-3	3
	Local Government officer	LG officer #1-2	2
	Korea Rural Community Corporation participant	KRCC participant #1-3	3
	Korean Advanced Farmers' Federation representative	KAFF representative	1
	Sub-total		14
In-depth interviews	Gangwon-do	Gangwon #1-16	16
	Chungcheongnam-do	Chungnam #1-16	16
	Gyeongsangnam-do	Gyeongnam #1-16	16
	Sub-total		48

4.6 Conclusion

This chapter described and explained the design and implementation of the methods employed in this study. A mixed method approach was adopted based on a combination of an exploratory questionnaire survey, key informant interviews and in-depth interviews. In this study, qualitative methods played the most important role in exploring the impacts of rural policy measures because the study focuses on how and why rural polices operate in the way they do. The online exploratory survey and face-to-face key informant interviews helped to identify the main rural policy measures that were helpful to farm households in different regions. The findings of the survey also helped in the design and implementation of the face-to-face in-depth interviews with farmers (Section 5.6 of Chapter 5). The key rural policy measures that will be focus on in this study were narrowed down through key informant interviews (Section 6.2 of Chapter 6). Also, various perspectives on the impacts of rural policy measures were examined. The key rural policy measures then became the focus of the subsequent in-depth interviews with farmers (Chapter 7) and the impacts of these policy measures on farm households were explored. The results of these approaches will be reported in the next three chapters.

Chapter 5: Findings from the Exploratory Survey

5.1 Introduction

This chapter presents findings from an exploratory online survey of South Korean farmers conducted in November 2013. The survey helped to provide a better understanding of which rural policy measures and non-farm activities were of greatest assistance to farm households in South Korea. The main purpose of this survey was to explore the key rural policy measures that support the adoption of non-farm activities among farm households. In particular, regional differences in the most important rural policy measures were investigated. As pointed out in Chapter 3, regional and locational characteristics may be important in supporting income diversification in rural Korea. The survey investigated farmers across nine Dos, and subsequently in-depth interviews with farmers would be implemented in a sample of Dos. In addition, the survey investigated the factors that may influence the adoption of non-farm activities by farm households, linking directly to research question ‘b’: What are the main factors that influence farm households to diversify into non-farm activities?

Section 5.2 describes the sample of farmers in the survey; sections 5.3 and 5.4 explore the rural policy measures that assist non-farm activities; and section 5.5 details factors that influence participation in non-farm activities of farm households. Section 5.6 describes how the findings from this survey informed the design of the in-depth interviews with farmers.

5.2 Description of the Sample

As explained in Chapter 4, the Korea Rural Economic Institute (KREI) was commissioned by the author to implement a short online survey of farmers in South Korea. KREI has a panel to identify research demands about agriculture and rural issues in rural areas. In 2013 the number of farmers in the panel, which is representative of Korean farmers in general, was about 3,000 across nine Dos. Out of 3,000 farmers, about 1,200 farmers who use emails (but regardless of their participation in non-farm activities or their involvement in rural policy

measures)⁴⁹ were all invited to participate in the online survey and asked to complete a questionnaire (Appendix A) which was presented on the KREI homepage. Overall, 252 farmers across nine Dos responded to the survey, a response rate of 21 per cent⁵⁰.

As shown in Table 5.1, the distribution of respondents across the nine Dos was found to be similar to the distribution of Korean farm households across the country. The largest number of respondents came from Gyeongsangbuk-do (GBD), with the lowest from Jeju-do (JD). It must be remembered, however, that farmers who use email may have higher levels of human capital than other farmers, so their responses may not be representative of the population as a whole. This point will be considered in the interpretation of the results.

Table 5.1 Number of respondents in nine Dos

Dos	Survey data		National data*
	Respondents	% of respondents	% of farm households in Do among total farm households in Korea
Gyeonggi-do (GGD)	29	11	13
Gangwon-do (GWD)	27	11	7
Chungcheongbuk-do (CBD)	23	9	7
Chungcheongnam-do (CND)	30	12	13
Jeollabuk-do (JBD)	24	9	10
Jeollanam-do (JND)	37	15	15
Gyeongsangbuk-do (GBD)	55	22	18
Gyeongsangnam-do (GND)	23	9	13
Jeju-do (JD)	4	2	4
Total	252	100	100

*National data are the data of 2013 (MAFRA, 2014a).

Table 5.2 shows the ages of respondents. Excluding two respondents who did not reveal their ages, the remaining 250 farmers were divided into four groups. While the sample proportion closely corresponded to the population proportion for farmers under 50 years of age, the sample over-represented farmers in the 50-59 age group and under-represented farmers aged over 60. These results probably reflect the fact that all respondents were email users (a non-random sample).

⁴⁹ This is not necessarily a representative sample (total population of Korean farmers who have email is unknown) but a non-random exploratory survey.

⁵⁰ This response rate was lower than that of a postal survey with panel members by Seong and Song (2007). They conducted a postal survey to investigate perspectives of farmers on amenity resource in rural areas with 600 farmers out of a panel of 1,942 farmers. During one and half months, 371 farmers responded to the KREI's postal survey, a response rate of 62 per cent.

Table 5.2 Age of respondents

Survey data			National data*	
Age	Respondents	% of respondents	Age	% of farmers (of age) in total farmers
20-49	62	25	20-49	27
50-59	104	42	50-59	23
60-69	73	29	More than 59	50
More than 69	11	4		
Total	250	100		100

Note: Farm households' members under 20 years old are excluded.

*National data are the data of 2013 (MAFRA, 2014a).

Table 5.3 shows the main farm types of respondents. The most common group of respondents listed rice growing as their main enterprise. As described in Chapter 2 (use of farmland⁵¹), the growing of rice, which is a staple food in Korea, is the main enterprise in 48 per cent of farms in Korea. Many farm households, whose main farm crop is not rice, still grow rice for their own consumption. A quarter of respondents named fruits as their main crop, while nationally fruit growing accounts for only nine per cent of farms. This may reflect the observation that the earnings from fruits may be higher than other farm types such as rice, vegetables and speciality crops for the same area of the farmland. The rest have vegetables (7 per cent), livestock (10 per cent), horticulture (12 per cent) or specialty crop (13 per cent) as their main enterprises.

Table 5.3 Farm types of respondents by enterprise

Survey data			National data*	
Farm type	Respondents	% of respondents	Land usage	Percentage (%)
Rice	67	27	Rice	48
Fruits	64	25	Fruits	9
Vegetables	18	7	Vegetables	12
Livestock	25	10	Barley and Grain	6
Horticulture	30	12	Green house crop	5
Specialty crop	33	13	Specialty crop	4
Other	14	6	Other**	16
Total	251	100	Total	100

*National data are the data of 2013 (MAFRA, 2014a).

**Other category in national data includes pulses, potatoes, other tree crops, etc.

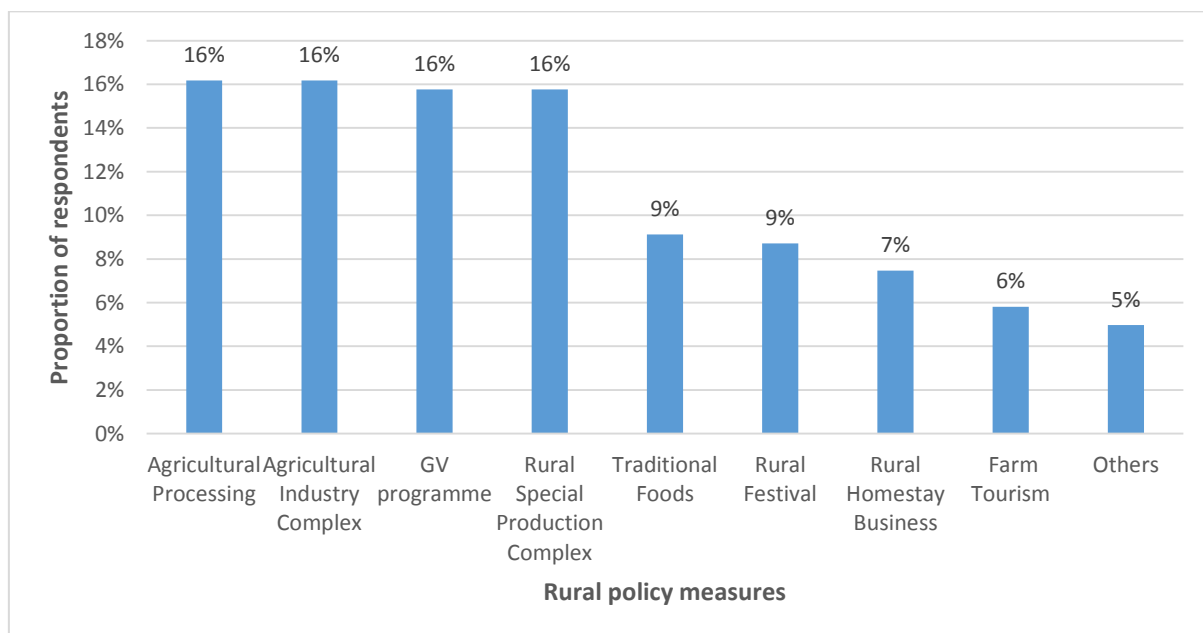
⁵¹ Data on the percentage of main farm type are not recorded in the national statistics for Korea. However, use of farmland is surveyed nationally.

5.3 Rural Policy Measures that Assist in Increasing Non-farm Income

No single policy measure was identified as being noticeably the most attractive in terms of financial assistance to all farm households. This is understandable, as farmers are likely to have different perspectives about which policy measures are most helpful to them, according to their circumstances. Figure 5.1 shows that the four most attractive were the Agricultural Processing (AP), the Agricultural Industry Complex (AIC), the Green-tourism Village (GV) programme, the Rural Special Production Complex (RSPC).

The AP and the AIC were identified as the most important rural policy measures (16.2 per cent) for increasing non-farm incomes. These were followed by the GV programme and the RSPC (15.8 per cent). Other policy measures based around the themes of traditional foods, rural festivals, rural homestay businesses, and farm tourism were also identified by some farmers as being helpful. Three of the most cited rural measures (i.e. AP, GV and RSPC) are relatively generous in terms of financial support they offer. The exception is the Agricultural Industry Complex. Meanwhile, the other policy measures (e.g. Farm Tourism and Rural Festivals) offer relatively less financial support, some only offering loans.

Figure 5.1 Rural policy measures offering most assistance for increasing non-farm income



Respondents=241

Table 5.4 reveals that there are differences between regions in terms of the measures viewed as being most important in supporting non-farm incomes. For example, across the nine Dos, Farm Tourism was perceived to be important in GGD, while Traditional Foods was cited by the highest number of respondents in GBD. However, statistical tests are required to investigate whether or not the differences between Dos are statistically significant (See section 5.4).

Table 5.4 Regional comparison of the policy measures offering the most assistance in increasing non-farm incomes

Dos	Agricultural Processing	Agricultural Industry Complex	GV programme	Rural Special Production Complex	Traditional Foods	Rural Festival	Rural Homestay Business	Farm Tourism	Others	Total
GGD	6	4	6	3	0	1	0	6	2	28
GWD	6	3	4	3	3	3	2	1	1	26
CBD	5	4	3	5	1	3	1	1	0	23
CND	3	8	4	4	0	3	2	3	2	29
JBD	5	2	6	1	3	2	2	1	2	24
JND	2	5	6	10	2	4	2	1	3	35
GBD	9	8	3	8	9	5	7	0	2	51
GND	3	5	4	4	4	0	1	0	0	21
JD	0	0	2	0	0	0	1	1	0	4
Total	39	39	38	38	22	21	18	14	12	241

Respondents=241

Farmers were also asked to identify their main sources of non-farm income and if any of these policy measures contribute to supplement it (Table 5.5). Table 5.5 also shows other income sources, such as spouse's income, pension, transportation or real estate that are not directly related to rural policy measures. Among the remaining income sources, Agricultural Processing and GV programme were perceived as important contributors to increasing non-farm income.

Table 5.5 Main sources of non-farm income across nine Dos

Dos	Agricultural Processing	Agricultural Industry Complex	GV programme	Rural Special Production Complex	Traditional Foods	Rural Festival	Rural Homestay Business	Farm Tourism	Others	Total
GGD	2	0	4	1	0	1	0	0	12	20
GWD	6	0	3	0	1	1	3	2	5	21
CBD	2	0	4	0	3	2	0	0	4	15
CND	5	0	2	0	2	2	1	0	14	26
JBD	4	0	3	0	2	0	2	0	8	19
JND	5	0	4	0	1	0	2	0	13	25
GBD	8	3	1	0	1	1	1	1	20	36
GND	1	0	2	0	2	0	0	0	10	15
JD	1	0	1	0	0	0	0	0	1	3
Total	34	3	24	1	12	7	9	3	87	180

Respondents=180

5.4 Differences between Rural Policy Measures that Assist in Increasing Non-farm Incomes

The Statistical Package for Social Scientists (SPSS Version 22) was used in data analysis. Pearson's chi-square test was used to analyse the relationships between the age of farmers, farm type and regions with what had been identified as the most helpful rural policy measure (section 5.4.1). Although the test is useful to identify an association between two categorical variables (Field, 2013), it cannot show the direction of association between variables. Hence, to explore this issue, logistic regression was used to explore the causality of the relationships between variables (section 5.4.2). Table 5.6 lists the variables that were employed in the tests reported in the following two sections. To facilitate analysis, some new variables were constructed from existing data, for example, the dummy variable DOLG20 which takes the value of 1 if more than 20 per cent of land in a Do is farmland, and zero otherwise.

Table 5.6 Description of variables

	Variables	Description	Ref.
Policy	POL	Most helpful rural policy measure	C
	TOURPOL ⁵²	Most helpful rural policy measure is related to tourism (=1), Otherwise (=0)	D
	PROPOL ⁵³	Most helpful rural policy measure is related to processing (=1), Otherwise (=0)	D
Non-farm income	NFI	Farm household has non-farm income (=1), Otherwise (=0)	D
	NFIG20	Non-farm income $\geq 20\%$ of total farm household income (=1), Otherwise (=0)	D
Dos	DOS	Do where farm household live	C
	DOLG20 ⁵⁴	Farmland is $\geq 20\%$ of total Dos area(=1), Otherwise (=0)	D
	DONSEOUL ⁵⁵	Dos that are near to Seoul (=1), Otherwise (=0)	D
Farm type	FARM	Main farm enterprise of farm household	C
	RICE	Main farm enterprise is rice (=1), Otherwise (=0)	D
	FRUIT	Main farm enterprise is fruit (=1), Otherwise (=0)	D
	HORT	Main farm enterprise is horticulture (=1), Otherwise (=0)	D
	VEG	Main farm enterprise is vegetables (=1), Otherwise (=0)	D
	LIVE	Main farm enterprise is livestock (=1), Otherwise (=0)	D
	SPECI	Main farm type is specialty crop (=1), Otherwise (=0)	D
Age	AGE	Age of farmer	C
	AGEG50	Farmer's age ≥ 50 years old (=1), Otherwise (=0)	D
	AGEG60	Farmer's age ≥ 60 years old (=1), Otherwise (=0)	D
	AGE5059	Farmer's age is between 50 and 59 years old (=1), Otherwise (=0)	D
	AGE6069	Farmer's age is between 60 and 69 years old (=1), Otherwise (=0)	D

D: Dummy variable, C: Categorical variable excluding dummy variable

⁵² Tourism policies: GV programme, Farm Tourism, and Rural Homestay Business

⁵³ Processing policies: Agricultural Industry Complex, Rural Special Production Complex, Traditional Foods, and Agricultural Processing

⁵⁴ Dos that have at least 20 per cent of farmland out of total Dos area are Chungchongnam-do, Jeollabuk-do, Jeollanam-do, Jeju-do. Dos that have less than 20 per cent of farmland are Gyeonggi-do, Gangwon-do, Chungcheongbuk-do, Gyeongsangbuk-do, Gyeongsangnam-do.

⁵⁵ DONSEOUL are Gyeonggi-do, Gangwon-do, Chungcheongbuk-do, and Chungcheongnam-do. DORSEOUL are Jeollabuk-do, Jeollanam-do, Gyeongsangbuk-do, Gyeongsannam-do, and Jeju-do.

5.4.1 Pearson's chi-square tests

Pearson's chi-square tests⁵⁶ were conducted to identify any relationships between the regions where farmers live, the main farm enterprise, farmer's ages and the most helpful policy measures in increasing non-farm income. These are all categorical variables and as reported earlier some of them have been converted into dummy variables to investigate particular relationships between variables. Table 5.7 shows the results of chi-square tests on relationship between most helpful policy measures and some variables.

Table 5.7 Relationship between most helpful policy measures and some variables

Variables	Chi Square	Cramer's V*	Significance
A1 Association between age of farmers and the rural policies found to be helpful	31.64	0.21	0.131**
A2 Association between age of farmers (≥ 50) and the rural policies found to be helpful	7.09	0.17	0.527
A3 Association between age of farmers (≥ 60) and the rural policies found to be helpful	11.21	0.22	0.190
A4 Association between age of farmers (between 50 and 59) and the rural policies found to be helpful	14.00	0.24	0.082
A5 Association between age of farmers (between 60 and 69) and the rural policies found to be helpful	9.86	0.20	0.275
B1 Association between main farm type and the rural policies found to be helpful	65.70	0.21	0.043**
B2 Association between main farm type (rice) and the rural policies found to be helpful	21.20	0.30	0.007
B3 Association between main farm type (fruits) and the rural policies found to be helpful	9.33	0.20	0.315
B4 Association between main farm type (horticulture) and the rural policies found to be helpful	16.71	0.26	0.032**
B5 Association between main farm type (specialty crop) and the rural policies found to be helpful	4.23	0.13	0.839**
C1 Association between regions and the rural policies found to be helpful.	76.66	0.20	0.127**
C2 Association between regions that are near to Seoul and the rural policies found to be helpful	16.32	0.26	0.038
C3 Association between regions with $\geq 20\%$ of farmland and the rural policies found to be helpful	8.61	0.19	0.377

* Cramer's V shows the strength of the association between the variables. ($0 \leq V \leq 1$ (strongest))

** indicates Monte Carlo significance⁵⁷. If more than 20% of the cells have expected values (counts) of less than five, Monte Carlo significance can be used instead of asymptotic significance.

⁵⁶ The chi-square test is used to examine where there is an association between two categorical variables. If the significance value is small enough (conventionally the significant level must be less than 0.05) then the (null) hypothesis that the variables are independent can be rejected and we gain confidence in the (alternative) hypothesis that they are related. If the chi-square value is significant ($p < 0.05$), this indicates that one variable has a significant effect on the other variable (Field, 2013).

⁵⁷ Monte Carlo significance can be used instead of asymptotic significance (p value) when the sample size is small in chi-square tests. If more than 20 per cent of the cells have been expected values (counts) of less than five, Fisher's exact and Monte Carlo significance can be used (Mehta and Patel, 2012). This study used Monte Carlo significance for convenience.

Chi-square tests of the null hypothesis (i.e. there is no relationship between the pairs of variables specified in Table 5.7) were undertaken. For A1-A5, the null hypothesis cannot be rejected because the results of the chi-square tests were not statistically significant at the 0.05 level. Thus, there was no evidence of an association between farmer's ages and what they perceived as the most helpful rural policy measures.

By contrast, the results of the chi-square tests show that the null hypothesis can be rejected for B1, B2 and B4 because the result is statistically significant at the 0.05 level. Thus, there does seem to be an association between some farm types (i.e. rice and horticulture) and what are perceived as the most helpful rural policy measures. In comparison, the results of chi-square tests provided no evidence of an association between fruits or speciality crop farms and most helpful rural policy measures.

The results of the chi-square test for C1 provided no evidence of an association between the region where the farmers lived and what they found to be the most helpful rural policy measures. However, there was sufficient evidence to reject the null hypothesis (C2) that there was no association between regions that are near to Seoul and most helpful rural policy measure. This suggested that some rural policy measures were perceived by farmers as being more or less effective in the regions nearest to Seoul. Regional differences such as distance to capital city may influence the most helpful rural policy measures. The huge population in Seoul may be related to the impacts of rural policies and helpful rural policy measures. However, no association was found between those regions with more farmland and what were seen by farmers who lived in them as the most helpful rural policy measures (C3).

In summary, some associations between certain farm types or geographical characteristics and the policy measures perceived by farmers to be most effective in supporting non-farm incomes were identified. However, the tests used do not give any indication of the direction of the association between variables. Thus, in the next section binary logistic regression was used to identify the direction of specific relationships.

5.4.2 Binary logistic regression

Binary logistic regressions⁵⁸ were conducted to test the null hypotheses that there are no associations between regions, farm types, ages of farmers and the rural policies found to be most helpful in promoting non-farm income. The categorical variables relating to the rural policies that farmers found most helpful were grouped into ‘tourism policies’ (i.e. GV programme, Farm Tourism, Rural Homestay Business) and ‘processing policies’ (i.e. Agricultural Industry Complex, Rural Special Production Complex, Traditional Foods, Agricultural Processing). A binary dependent variable was specified according to the type of policy that was perceived by the respondent as most helpful (i.e. tourism policies =1, processing policies=0)⁵⁹. The binary logistic regression was then used to identify the direction and strength of the association between various independent variables and rural policy measures. Table 5.8 shows that DOLG20 and most helpful rural policy measures (tourism=1, processing=0) have a significant and negative relationship. This implies that farm households in Dos with large areas of farmland (over 20 per cent of total land) do not think that tourism policies are the most important for improving non-farm incomes.

⁵⁸ Binary logistic regression can be applied when there are two categorical outcomes. When there are more than two outcomes, multinomial logistic regression can be applied. Logistic regression can be used to investigate the relationship between independent (predictor) variables and dependent (outcome) variables. Logistic regression investigates the relationship between more than two variables, while the chi-square test identifies any relationship between two categorical variables (Field, 2013).

⁵⁹ In the binary logistic regression, other policies (Rural Festivals, etc.) were not included because few respondents rated them as important.

Table 5.8 Logistic regression⁶⁰ (dependent variable: most helpful rural policy)

Variables	B	Significance	Standard Errors	95% Confidence Interval for Odds Ratio		
				Lower	Odds Ratio	Upper
DOLG20	-1.001*	0.009	0.381	0.174	0.368	0.775
DONSEOUL	-0.342	0.325	0.347	0.359	0.710	1.404
AGEG50	-1.309	0.148	0.904	0.046	0.270	1.590
AGEG60	0.665	0.143	0.455	0.798	1.945	4.741
AGE6069	1.864*	0.021	0.807	1.328	6.453	31.353
FARM ^a (specialty crop)		0.003				
FARM (rice)	-1.258*	0.044	0.624	0.084	0.284	0.966
FARM (fruits)	0.637	0.240	0.542	0.653	1.890	5.466
FARM (vegetables)	1.359	0.053	0.702	0.984	3.894	15.404
FARM (livestock)	0.734	0.241	0.626	0.611	2.083	7.099
FARM (horticulture)	0.814	0.189	0.620	0.669	2.256	7.607
Constant	-1.861	0.154	0.604		0.423	
Nagelkerke R Square ⁶¹	0.220					
Number of cases	208					

^a FARM: categorical variable. The ‘other’ category in farm types was excluded. Specialty crop is the reference category.* indicates significant at the 5 per cent level. The dependent variable is whether the most helpful rural policies are tourism policies or processing policies (tourism policies=1, processing policies =0). Source: author’s calculations.

Meanwhile, there is a statistically significant and positive relationship between AGE6069 (Farmer’s age is between 60 and 69) and the statement that the most helpful rural policies are related to tourism. In addition, the results show that there is a negative and significant relationship between farming rice as a main enterprise and perceiving tourism policies as being the most important for improving non-farm incomes. By contrast, those farmers who specialise in specialty crops perceive that they benefit from tourism policies, perhaps because they can use their specialty crop to support a tourism enterprise. Meanwhile, rice farmers may benefit less from tourism policies because rice paddies are not attractive destinations for tourists.

Table 5.8 also shows the relationships between variables and processing policies. The results revealed that DOLG20 is positive and statistically significant at the 0.05 level, suggesting that being in a more agricultural area is a significant predictor for processing policies to be rated as helpful policies. Farmers in areas that have less farmland (e.g. mountainous areas) may have fewer incentives to process agricultural products, perhaps because they lack the

⁶⁰ For the logistic regression, this study employed the forced entry method (Tables 5.8, 5.9 and 5.10). Thus, all the independent variables are placed in the regression model in one block, and parameter estimates are calculated for each block (Field, 2013). In addition, this study checked multicollinearity between independent variables. Multicollinearity exists when there is a strong correlation between two or more independent variables in the regression model (ibid.). If a variance inflation factor (VIF) value is greater than 10 or a tolerance value (1/VIF) is less than 0.1, it indicates multicollinearity problem (ibid.). There was no multicollinearity in the binary logistic regression (Tables 5.8, 5.9 and 5.10.)

⁶¹ R square which has the theoretical maximum of 1 provides a substantive significance of the model (Field, 2013).

economies of scale that exist in regions with a higher proportion of agricultural land. Farm households in these areas may therefore get less benefit from rural policy measures that promote processing of agricultural products.

To sum up, the logistic regression analysis reveals some regional differences in what farmers see as the rural policy measures most helpful in non-farm income generation. Thus, farmers in more mountainous areas may benefit more from tourism related policies, while those in large areas of farmland may benefit more from processing related policy measures. In terms of demographics, older farmers (e.g. over 60 years old) are found to rate tourism policies highly, perhaps because they may require less human and physical capital. These individuals may be too old to work as an employee in a processing company or may have difficulties in adapting to a new processing enterprise. Furthermore, rice farmers have a lower rating for the importance of measures that support tourism than farmers who concentrate on specialty crops, perhaps because the latter can use their crop to promote tourism.

5.5 Determinants of Non-farm Activity

The questionnaire asked farmers about the share of non-farm income in their total household income. Only farmers with a non-zero income from non-farm sources were categorised as participating in non-farm activities. The relationships between regions, farm type, the age of farmers and participation in non-farm activities were then examined. The independent variables relating to age and region (i.e. Do) were used to derive dummy variables in order to test the statistical significance of any relationships (See Table 5.6). Meanwhile, farm type was used as categorical variable.

Table 5.9 reports the results of binary logistic regression, estimated with a dependent variable based on participation in non-farm activities. The model shows that DOLG20 and AGE60 are both significant indicators of participation in non-farm activities. The B (coefficient)⁶² of DOLG20 has a negative sign, suggesting that farm households in regions with larger areas of farmland may have fewer incentives to participate in non-farm activities. These households may earn sufficient income from farming, or they may have fewer opportunities to undertake non-farm activities.

⁶² In logistic regression, the value of B (coefficient) represents the change in the logit of the dependent variable resulting from a unit change in the independent variable (Field, 2013).

Meanwhile, positive coefficient for AGE60 reveals that farmers aged over 60 are more likely to participate in non-farm activities. Other age variables such as AGE50 and AGE609 were not found to have any significant impact on undertaking non-farm activities. No other variables in the model were found to be statistically significant in explaining participation in non-farm activities.

Table 5.9 Logistic regression (dependent variable: farm households' non-farm income)

Variables	B	Significance	Standard Errors	95% Confidence Interval for Odds Ratio		
				Lower	Odds Ratio ⁶³	Upper
DOLG20	-0.706*	0.043	0.348	0.250	0.494	0.976
DONSEOUL	-0.346	0.278	0.319	0.379	0.708	1.322
AGEG50	-1.364	0.146	0.938	0.041	0.256	1.608
AGEG60	0.997*	0.010	0.387	1.269	2.711	5.791
AGE6069	0.969	0.252	0.846	0.502	2.635	13.830
FARM ^a (specialty crop)		0.835				
FARM (rice)	-0.086	0.864	0.505	0.341	0.917	2.469
FARM (fruits)	0.305	0.554	0.515	0.494	1.357	3.723
FARM (vegetables)	0.092	0.894	0.687	0.285	1.096	4.211
FARM (livestock)	-0.259	0.665	0.597	0.240	0.772	2.487
FARM (horticulture)	-0.378	0.511	0.563	0.222	0.685	2.117
Constant	1.035	0.066	0.563		2.815	
Nagelkerke R Square	0.070					
Number of cases	252					

^a FARM: categorical variable. The 'other' category in farm types was excluded. Specialty crop is the reference category. * indicates significant at the 5 per cent level. The dependent variable is whether any non-farm income is recorded. (Yes=1, No=0). Source: author's calculations.

In order to investigate any differences in the determinants of high levels of non-farm income, an additional logistic regression model was estimated with the dependent variable NFI20 which equalled 1 when non-farm income accounted for at least a 20 per cent share of total farm household income, and zero otherwise. As shown in Table 5.10 only two variables DOLG20 and FARM (horticulture) were significant at the 5 per cent level, the former having a positive coefficient value, and the latter a negative. The coefficient value for DOLG20 was different from that reported in Table 5.9. This perhaps suggests that, while it may be less common for farmers in these more agricultural areas to engage in non-farm activities, when they do so, it is because these activities can generate relatively high levels of income. Farm households that concentrate on horticulture may have less opportunity to participate in non-farm activities because horticulture needs a large financial investment and is very labour

⁶³ The odds ratio is an indicator of the changes in odds resulting from a unit change in the independent variable. If the value is greater than 1 then it indicates that as the independent variable increases, the odds of the dependent variable occurring increase (Field, 2013).

intensive. In addition, horticultural products are generally sold without further processing and they are rarely used as resources in tourism. This finding is consistent with that of McNally (2001) who found that farm types such as horticulture were less likely to be related to any type of income diversification.

Table 5.10 Logistic regression (dependent variable: non-farm income share $\geq 20\%$ of total farm household income)

Variables	B	Significance	Standard Errors	95% Confidence Interval for Odds Ratio		
				Lower	Odds Ratio	Upper
DOLG20	0.718*	0.027	0.325	1.084	2.050	3.877
DONSEOUL	0.059	0.843	0.299	0.059	1.061	1.908
AGEG50	-0.836	0.298	0.803	0.090	0.433	2.092
AGEG60	0.644	0.085	0.374	0.915	1.904	3.964
AGE6069	0.733	0.278	0.712	0.537	2.165	8.734
FARM ^a (specialty crop)		0.022				
FARM (rice)	0.088	0.849	0.460	0.443	1.092	2.689
FARM (fruits)	0.330	0.474	0.461	0.564	1.391	3.433
FARM (vegetables)	0.768	0.219	0.624	0.634	2.155	7.325
FARM (livestock)	-0.722	0.217	0.585	0.154	0.486	1.530
FARM (horticulture)	-1.487*	0.025	0.661	0.062	0.226	0.827
Constant	-1.393	0.010	0.541		0.248	
Nagelkerke R Square	0.145					
Number of cases	252					

^a FARM: categorical variable. The ‘other’ category in farm types was excluded. Specialty crop is the reference category. * indicates significant at the 5 per cent level. The dependent variable is whether non-farm income is more than 20 per cent in household income. (Yes=1, No=0). Source: author’s calculations.

Summing up, the models reported in this section suggest that the proportion of farmland in the region, the age of farmers, and farm type all have some influence on participation in non-farm activities. In general, however, very few variables from the survey data were found to be statistically significant determinants of farmers’ participation in non-farm activities.

5.6 Insights for the Design of the In-depth Farmer Interviews

This exploratory survey informed the design and implementation of the in-depth interviews with farmers. Data from the survey suggested that regional characteristics may be important when exploring the differential impacts of rural policy. For example, proximity to Seoul may be important in explaining the influence of rural policy measures. In addition, the proportion of farmland in different regions may also influence whether or not rural policy measures impact on non-farm incomes. These issues were then considered in the design of the sample of in-depth interviews with farmers. Interviews with farmers were conducted in the north,

near to Seoul, in the south which is more remote from Seoul and in the central belt which lies between the other two areas. Within these areas, regions were selected that exhibited varying proportions of farmland.

Age, farm size and farm type also need to be considered in the sampling for the in-depth interviews with farmers because these variables were identified as having a link to the usefulness of rural policy measures and participation in non-farm activities. In addition, various types of policy, particularly those related to tourism and processing were shown to be particularly significant in some cases and worth further investigation in the in-depth interviews.

5.7 Summary and Limitations

This chapter used survey data to explore which rural policy measures are perceived as the most supportive measures to increase non-farm income in farm households. The Agricultural Processing, the Agricultural Industry Complex, and the Rural Special Production Complex were identified as being among the most important rural policy measures. The results showed that there were statistically significant relationships between regional characteristics and helpful rural policy measures. Tourism policies (i.e. GV programme, Farm Tourism, Rural Homestay Business) were found to be helpful in regions with a smaller farmed area, while processing policies (i.e. Agricultural Industry Complex, Rural Special Production Complex, Traditional Foods, Agricultural Processing) were perceived as being most helpful in areas with greater proportions of farmland. This leads to the observation that farm households in regions with a greater proportion of farmland may benefit more from processing policies than from policies based around tourism.

In addition, some farm types seem to be more important than others in determining participation in non-farm activities. For example, farmers whose main farm enterprise is rice seem less likely to engage in income diversification activities. These findings will be further explored in the in-depth interviews. Other insights from the survey will be considered in the design of the in-depth interviews.

While this survey was helpful, like any survey it has some limitations. First, a non-probability method of sampling was employed, so it is difficult to generalise the results

across the population of Korean farmers. Second, the survey does not identify all of the key policy measures that farmers may find helpful because the questionnaire concentrated on policy measures that have been implemented for some years, rather than on more recently introduced policies, which farmers are less familiar with. The key rural policy measures which will be the focus in this study will be narrowed down through key informant interviews. Therefore, although the survey provides some useful insights, further exploration is required and this will be conducted through interviews that will be reported in the following two chapters.

Chapter 6: Findings from Key Informant Interviews

6.1 Introduction

The purpose of this chapter is to use key informant interviews to begin to explore the impact of rural policies on farm households in South Korea. Face-to-face semi-structured interviews were conducted with 14 key informants between November and December 2013 in Korea. As explained at the end of Chapter 5, the key informant interviews helped to narrow down the range of rural policy measures to be the main focus of the in-depth interviews with farmers (reported in Chapter 7). Moreover, these interviews sought key informants' perspectives on the impact of various rural policies. The key informants selected for this exercise had specialist first-hand knowledge concerning the relationship between non-farm activities and rural policies, and comprised five academics, three central government officers, two local government officers, three policy implementers⁶⁴ and one farmers' representative. Only one farmers' representative was included at this stage because farmers' interviews were planned for the following phase of the study. All respondents had experience of developing, delivering, researching or evaluating rural policies.

The data from the key informant interviews were analysed using thematic analysis. Four major themes were identified, and these were linked to the eight research questions. Section 6.2 discusses the most important rural policy measures as identified by the interviewees, while sections 6.3 to 6.6 focus on the main themes as resulting from the key informant interviews.

6.2 Key Rural Policy Measures in South Korea

As explained in Chapter 5, the survey included a list of well-established rural policy measures, in order to make it easier for farmers to distinguish between them. However, since the introduction of the new budget system in 2010, some of the policy measures listed in the questionnaire have been integrated into and form part of other rural policy programmes. For

⁶⁴ The policy implementers worked for the Korea Rural Community Corporation (KRCC), which is financed by central government and is involved in many rural policy measures. They play a main role in implementing rural policy measures. The government commissions the KRCC to implement many rural policy measures. The Corporation manages the rural policy measure budgets to ensure that they are spent as planned.

example, the Agricultural Industry Complex, Traditional Foods, and Agricultural Processing have all been integrated into so-called the Complex Industrialisation of Rural Resource (CIRR) programme. In addition, the Rural Special Production Complex has been wound down and what remains has been integrated into the CIRR programme. Meanwhile, Farm Tourism, Rural Homestay Business and Rural Festival measures each exist separately without being integrated into a package of rural policy programmes or measures. The Green-tourism Village (GV) programme was also integrated into the CIRR programme between 2010 and 2011, but from 2012, it became part of the General Rural Village Development programme. Table 6.1 shows specific rural policy measures that were used in the survey and relevant rural policy programmes.

Table 6.1 Rural policy measures identified in Chapter 5 and rural policy programmes

Rural policy measure (in survey)	Period	Relevant rural policy programme (or measure)
Green-tourism Village (GV) programme	2002-to date	GRVD programme
Agricultural Industry Complex	1984-to date	CIRR programme
Farm Tourism	1984-to date	Farm Tourism
Rural Homestay Business	1991-to date	Rural Homestay Business
Rural Special Production Complex	1967-finished	CIRR programme
Traditional Foods	1993-to date	CIRR programme
Agricultural Processing	1993-to date	CIRR programme
Rural Festivals	2008-to date	Rural Festivals

Source: government document (MAFRA, 2013d; MAFRA, 2013e) and interviews with policy-makers

The key informant interviews helped to identify which rural policy measures were most important in supporting the non-farming element of farm household incomes. Informants could choose among various rural policy measures that have been implemented. The 14 key informants held diverse opinions about which rural policy measures were important in this respect. However, certain rural policy measures were judged to be more important than others (i.e. Green-tourism Village (GV) programme, General Rural Village Development (GRVD) programme, Local Industry Development (LID) programme, and Complex Industrialisation of Rural Resource (CIRR) programme) and the main reasons given for this were discussed as follows.

Five informants out of 14 shared the view that the GV programme was one of the most important rural policy measures. Following its introduction in 2002, there are now many Green-tourism villages across the country and the programme is associated with a high level of satisfaction among farm households. The programme has no requirement for participants to

gain match-funding. Although, as already pointed out, the GV programme has been part of the GRVD programme since 2012, this study deals with GV programme as one key policy measure because it has been implemented as a separate programme since 2002. Although the financial support offered to any given village over the study period through this policy measure is relatively small (maximum 0.5 billion KRW per village for a year, equivalent to some GBP 270,000 at 2013 prices) compared to other rural policy measures such as the LID and CIRR programmes, the GV programme helps farm households to increase their non-farm income through tourism. In addition, the GV programme influences success in securing funding from other rural policy measure. If villages have good results from the GV programme, this positively influences the government's decision to allocate funding from other rural programmes. For example, villages that participated in GV programmes are more likely to participate in other rural programme because their experience can be a strong factor when the government decides on the allocation of rural policy measures. This view was reflected in the following comment:

"I think the GV programme has settled down as a policy measure. [...] If the programme works well, people in the village have more chances of obtaining other support from the government such as GRVD and LID programmes. If a village gains fame as tourism village, this will be to the advantage of their applications to other programmes. There are many examples of villages, which have become well known because of rural tourism activities supported by the GV programme who then benefit from other rural policy measures." (Academic #2)

Nine informants emphasised that the GRVD programme can help farm households to participate in non-farm activities at the village level. Clusters of 3-5 neighbouring villages can receive GRVD funds. This community-based programme was argued to have become well established. The GRVD programme has several objectives, but its main purpose is the development of the village. Increasing income of farm households is one of its objectives, offering 80 per cent government funding, while other objectives of the programme are supported by 100 per cent government support. Academic #2 mentioned that although the income supporting measure of the GRVD programme is not compulsory, central government recommend it in terms of sustainable rural development. Generally, this income supporting measure relies on the use of local agricultural products or local resources to underpin the agro-processing or tourism enterprises that have been found to be the most popular types of income-generating measures under this programme. However, conflict often arises over the allocation of financial support within villages because villages compete with each other to

gain support. Each village wants to have more government support than its competitors. For example, if clusters of villages are competing to build tourist accommodation, then each village wants this accommodation to be located there. This often leads to conflict between villages.

Five informants mentioned the LID programme⁶⁵ as another important rural policy. The budgets for the LID programme are relatively large (e.g. maximum 3 billion KRW per community business for 4 years, equivalent to some GBP 1.5 million at 2013 prices) compared to other programmes such as the GV programme. One academic stated that the size of the budget matters because the impact of rural policies is related to the money available to support them. The LID programme supports *inter alia* new or existing local enterprises which use regional resources including agricultural products. Generally, it is easy for existing enterprises to participate in the LID programme because they have a high level of assets. The programme can fund a wide range of developments, e.g. physical assets (e.g. facilities) and support services (e.g. marketing, education, training, consultation and R&D). For example, participants who want to start agro-processing can access facilities and consultancy with the help of government funds. The LID programme is implemented at the municipal (Si and Gun) level, and both farmers and non-farmers can participate in it. Meanwhile, another academic suggested that, while the impact of the LID programme has generally been good, there are cases where the impact on farm households has been smaller than expected because the programme supports relatively large plan of enterprises, meaning that many farm households receive few or no benefits because they have difficulty in raising match-funding to participate. Entrepreneurs can more easily participate in this programme than farmers. Generally, the non-farm activity is related mainly to local resources such as crops or fruits, and non-farm activities can include tourism, processing, or both. The level of match-funding (e.g. about 30 per cent) required from participants in the LID programme is higher compared to those of the GV and GRVD programmes. Some farm households may find it difficult to get match-funding.

Most (11) interviewees stated that the CIRR programme was particularly important for

⁶⁵ MAFRA (2012) stated that the objectives of this programme are to expand the rural economy through developing resources in rural areas and industrializing these resources. According to MAFRA (2013), LID programme implemented 200 projects between 2007 and 2014. The main industry categories are as follows: food (153), tourism (13), traditional industry (12), drinks (i.e. liquor) (7), fermented soy products (7), cosmetics (2), others (6). However, there are big regional differences regarding implementation. The number of projects implemented varies between eight in Gyeonggi-do and 41 in Jeollanam-do. Meanwhile, 17 out of 200 projects have been cancelled.

increasing non-farm income. By and large, the CIRR programme, which was introduced in 2010, is for both new and existing enterprises and helps fund both physical assets and support services. The budget for this programme is relatively large (e.g. maximum 5 billion KRW per community business for 3-5 years, equivalent to some GBP 2.5 million at 2013 prices), but specific budgets vary depending on the local authorities and specific community businesses because local authorities determine the match-funding and participants as well as the size of project. Also, some projects may be bigger than others. The community businesses that participate in this programme normally process agricultural products or offer tourism services using local natural environmental resources. Academic #5 expressed the following view:

“In particular, the CIRR programme is one of the most important policy measures that influence non-farm income of farm households. This policy measure, which was designed to use rural resources, helps to establish new enterprises and attract businesses into rural areas. This policy measure provides opportunities for income diversification of farm households. [...] These days, people try to add value to agricultural products rather than selling raw materials through this programme.”

In summary, the key informant interviews suggest that the most important rural policy measures in terms of increasing non-farm income are: the GV programme; the GRVD programme; the LID programme; and the CIRR programme. Although the Agricultural Industry Complex programme and the Development Regional Strategic Food Industry programme were referred to by one and two informants, respectively, these programmes were excluded from the analysis. The main reasons why the key informants thought that these four measures were important can be categorised in terms of the number of participants and the scale of benefits that they provide. These four measures support community businesses which are implemented through partnership and both farmers and non-farmers can participate. There are some differences between measures, so while many farm households can participate in the GRVD programme which is based on 3-5 villages, the GV programme is based only in a single village. The number of farmers who participate in the LID and CIRR programmes may be less than that in the GV and GRVD programmes, because farmers face higher financial barriers to participate in the former. Regarding benefits, there are possibilities that high budget grants may bring higher benefits to participants. Thus, the size of the associated budget can be linked to both scope and scale. These measures are well established, though the GV, GRVD and LID programmes have a longer history than the CIRR programme. Policy measures based around the use of local agricultural products may lead to the development of

both the farming and the non-farming sectors in rural areas. Table 6.2 summarises these four rural policy measures and the main reasons for their success as identified by the key informants. Each informant referred to more than one key rural policy measure and the policy measures in Table 6.2 were identified by informants in several categories. The LID programme was mainly referred to by academics and was not cited by the central government officers, who mentioned the other three measures.

Table 6.2 Summary of important rural policy measures based on key informants' views

Rural policy measure	Who benefits?	Indicators of success	Annual national budget*	No. of informants
GV programme	<ul style="list-style-type: none"> ▪ People in the village ▪ Many farm households 	<ul style="list-style-type: none"> ▪ High satisfaction of farm households ▪ Long history and well-established ▪ 100 per cent government funding 	-	5
GRVD programme	<ul style="list-style-type: none"> ▪ People in 3-5 villages ▪ Many farm households, more than those of the GV programme 	<ul style="list-style-type: none"> ▪ Long history and well-established ▪ Large budget 	918 billion KRW**	9
LID programme	<ul style="list-style-type: none"> ▪ Both new and existing enterprises at municipal level 	<ul style="list-style-type: none"> ▪ Relatively quick impact ▪ Using local resources including agricultural products ▪ Large budget 	44 billion KRW	5
CIRR programme	<ul style="list-style-type: none"> ▪ Both new and existing enterprises at municipal level 	<ul style="list-style-type: none"> ▪ Related to the objective of the measure to increase non-farm income ▪ Using local resources including agricultural products ▪ Large budget 	210 billion KRW	11

* This is central government's annual allocation for the year of 2013 (MAFRA, 2014c). ** The average proportion of income supporting budget for the 56 GRVD programmes implemented between 2004 and 2010 was about 17 per cent (Yang, 2012).

The similarities and differences between these four rural policy measures were identified from the key informant interviews. They are all related to boosting community businesses, follow the Block Grant System and are all implemented through a bottom-up partnership approach. Farmers can participate in community businesses through self-employment, waged employment or both. Farmers' participation and the level of engagement are related to levels of household assets (e.g. financial and human capital). When it comes to self-employment, financial capital may influence the level of involvement of farmers. Academic #2 stated that the profit distribution in community businesses is based on the participants' financial investment. People providing high levels of match-funding obtain high profits, if the community business works well. Meanwhile, in waged employment, human capital such as

skills, education, and health may have more influence on the level of farmers' involvement and benefits than other household assets.

The four rural policy measures also differ in terms of the match-funding available from the government. Central government provides 100 per cent funding to the GV programme, while the other three programmes require match-funding from the participants. The level of match-funding in GRVD programme (income supporting measure) is about 20 per cent, while the LID and CIRR programmes require higher levels of match-funding from the participants (e.g. around 30 per cent). Academic #2 argued that the LID and CIRR programmes focus more on the farm households' profits than on the common interests across the community, while the GV and GRVD programmes have more community-based characteristics than the LID and CIRR programmes. In many cases, heads of villages⁶⁶ introduce these rural policy measures (i.e. GV and GRVD programmes) into their villages and they often become Chairs of the resulting projects. The GV, GRVD and LID programmes have coordinators who help community businesses supported by rural policy measures. Coordinators are employees who receive their salaries from the government and work for the community businesses during a fixed implementation period.

The four key rural policy measures described above will be the focus of the in-depth interviews with farmers. Their impacts across farm households will be explored in Chapter 7.

6.3 Importance of and Motivation for Non-farm Activities

The importance of non-farm activities can be explained in terms of income generation *per se*, non-financial impacts and developing rural communities. Most key informants believed that non-farm activities are important for Korean farm households, because these households find it difficult to increase their incomes from farming alone and because they can increase their income through participation in non-farm activities. Most key informants thought that increasing income was farm households' main motivation for income diversification. This is consistent with McNally's (2001) argument that income generation was the most important motivation for undertaking non-farm activities. MAFRA (Ministry of Agriculture, Food and

⁶⁶ A head of a village in South Korea is not a government worker. However, heads of villages do receive remuneration, although it is a small amount, and they may help local government. For example, the local government may ask a head of village to investigate something or to deliver information to farm households.

Rural Affairs) officer #3 stated:

“Farm households can obtain income from non-farm activities. Although income from non-farm activities is sometimes small, it can bring considerable happiness to farm households.”

Income diversification into non-farm activities is particularly important for Korean farm households because such households experienced a decrease in farm income following the liberalisation of agricultural markets. MAFRA officer #2 put forward the following view:

“Following the opening up of agricultural markets and increasing global competition, only competitive farmers can focus on farming. Meanwhile, less competitive farmers need to restructure. However, it is difficult for many farmers to change their jobs because they have been farming for their whole lives. Thus, less competitive farmers, such as smallholders, need to earn additional income outside farming. I think this trend will increase.”

Three informants (Academics #1 and #2, and MAFRA officer #3) also emphasised non-farm activities as potential stable income sources over the long term. Non-farm income is considered to be important because it may represent a more stable and reliable income source than farm income. It is difficult for farmers to expect income stability from farming alone, due mainly to agricultural price volatility and weather conditions. Farm households can reduce these fluctuations in farm income by diversifying their income streams into areas less vulnerable to changes in natural conditions and agricultural markets. Moreover, non-farm activities can make farm households' livelihoods more sustainable. For example, some farmers can have the option of processing some of their produce when prices for the raw products are low. Academic #2 commented that:

“There are limitations to [Korean] agriculture. [...] It is difficult to get enough income for living from farming alone. By processing their agricultural products, farmers can manage and sustain their income in the long-term. They can process their agricultural products and sell them over a long period. As a result, farmers can make their income more stable. For example, the price of apples in the market may not be good when the farm households harvest 100 tonnes of apples. They can decide to sell only 50 tonnes of apples in the market and to process the other 50 tonnes and sell them over a longer period.”

Meanwhile, both participant #1 from the Korea Rural Community Corporation (KRCC) and the Korean Advanced Farmers Federation (KAFF) representative thought that non-farm

activities are important in terms of both their non-financial and financial benefits. Non-farm activities may also influence farmers' quality of life (e.g. reducing loneliness) and community spirit. People in the city may visit rural villages that are supported by the GV programme so that farmers have opportunities to come into contact with young people. In particular, older farmers may have more opportunities to earn money and the associated activities can reduce the social isolation that some of them experience. KRCC participant #1 illustrated this as follows:

“Many farmers are old and only have small farms. [...] Many of them feel lonely, because there are few children and young people in the villages. With rural tourism, old people in rural area have the chance to meet many people and may feel less isolated. In the long term, participating in rural tourism helps rural society to be more sustainable. I think non-farm activities such as rural tourism can bring vitality to the farm households economically, culturally and psychologically.”

In addition, most informants thought that non-farm activities can play a critical role in developing strong rural communities and enhancing the rural economy. Many non-farm activities that are supported by rural policy measures are implemented through partnership and these activities may influence the development of rural communities. In particular, non-farm activities may help revitalise and sustain rural communities, as pointed out by Academic #2:

“Farm households that participated in the CIRR programme created and joined in agricultural associations. They had a meeting every Friday and discussed the running of their associations. Farmers participated in their community business actively. Those activities related to community business that are supported by CIRR programme seem to positively influence their communities.”

Non-farm activities can positively influence farm activity and farm income in rural areas because non-farm activities such as agro-processing and rural tourism use agricultural products and rural resources. For example, city people who come for rural tourism can consume agricultural or rural products in rural areas. As a result, non-farm activities can enhance the rural economy. LG officer #2 commented:

“When rural tourism works well in villages, people visit rural villages for tourism. Rural people may increase their consumption in rural areas or nearby to promote rural tourism services. Visitors may buy things such as water, snacks, meat, and petrol at the village or nearby. They also buy agricultural products to take back to their city homes. Thus, it is helpful to the rural economy

as a whole.”

Non-farm activities can bring vitality to a rural area. Some respondents mentioned that these opportunities can be motives to move into rural areas. Non-farm activities that are supported by rural policy measures can be an incentive for people to move into rural areas. Some young people move into rural areas to participate in rural policy measures. LG officer #2 mentioned that non-farm activities can be an incentive for people to move to rural areas.

There were different views about the impacts of non-farm activities on rural communities and some respondents stated that non-farm activities can have a negative influence on rural communities. When rural people with diverse backgrounds participate in non-farm activities, there is an increased risk of conflict because of their different interests. As a result, non-farm activities may negatively influence the development of rural communities. MAFRA officer #3 elaborated on the pros and cons of non-farm activities for the rural economy and for rural communities as follows:

“If farm households can get enough income from farming, I think this situation is better to create and enhance rural communities. If people from different background (e.g. farmers, processing entrepreneurs and non-farmers) participate in community business, it may lead to conflicts because of different interests. As a result, non-farm activities of people from different backgrounds may bring negative impacts to rural communities. However, overall I think that non-farm activities have positive impacts on the rural economy.”

In addition, three informants (Academic #1, MARA officer #2, and KRCC participant #3) mentioned the importance of non-farm activities in connection with rural policies. Non-farm income and related rural policy measures have become more important, especially since the role of agricultural policies was restricted following the Uruguay Round agreement in the 1990s. Thus, rural policies that support farmers' income diversification into non-farm activities have become instrumental to sustain rural livelihoods. Academic #1 noted that:

“The Korean government has implemented various rural development policy measures since the Uruguay Round. [...] In practice, there have been opportunities for earning income in rural areas through those policy measures. Recently, those opportunities through rural policy measures have increased because rural policy measures that support non-farm activities have increased.”

6.4 Determinants of and Barriers to Income Diversification

6.4.1 Determinants of and barriers to non-farm activities

Academics #2, #4 and #5 and MAFRA officer #1 emphasised that generally rural policy measures helped farm households diversify and increase household income. Rural policy measures enable households to increase the household assets (e.g. financial and human capital) required for participation in non-farm activities. In order to take advantage of these opportunities, participants require good information on the rural policy measures and what they entail. MAFRA officer #1 stated that:

“The government provides opportunities to farm households through rural policy measures. Rural policy measures from central government and local authorities influence farm households’ income diversification. Farm households may have difficulty in participating in non-farm activities without government support. Generally, with the help of government support, farm households can make decisions on participation in non-farm activities more quickly.”

Government regulations may, however, restrict the potential for some farm households to diversify. Regulations can prevent farm households, in particular those who have limited or inadequate financial or physical assets, such as facilities, from participating. For example, enterprises that focus on agricultural processing are required to have adequate facilities to guarantee food safety. Academic #3 commented that:

“Regarding agricultural processing, government regulations which require some facilities restricted many smallholders who did not have sufficient household assets to participate in non-farm activities. Government regulations can be constraints to income diversification.”

Most informants shared the view that human capital is an important factor that can influence non-farm activities. High levels of human capital may be required for participation in non-farm activities. Thus, farm households with insufficient human capital, for example in the form of education and training, skills and experience, may find it difficult to participate in certain activities. In particular, older farmers who have been farming all their lives may have difficulty in getting involved in non-farm activities. By contrast, young people can more easily learn the skills required and adapt to new activities. Farm households with many members may find it easier to participate in non-farm activities because of their greater

collective resources. This view was reflected in the following comment:

“I think human resources are important. If farm households have a large number of members, they can easily participate in non-farm activities. Skills and market prospects are also important for participation in non-farm activities. Farmers with insufficient financial and human capital have difficulty in investing their money on new activities although those activities may be expected to bring some financial benefits” (Academic #5)

There were slightly different views on the skills required to undertake non-farm activities. Some informants held the view that human capital such as skills is always important for households' income diversification, but one informant mentioned that high levels of human capital may not always be necessary for participation in non-farm activities, such as low-return employment or routine work. The level of human capital required can be different according to the type of non-farm activities. MAFRA officer #3 illustrated this view as follows:

“I think farmers' non-farm activities do not always require high levels of skills and experience, such as those required for an employee in tourism or agricultural processing. Many farm households do not need to have higher human capital for non-farm activities because non-farm activities in rural areas do not require a high level of human capital. Rather, I think that the lower number of opportunities in rural areas may prevent farm households from getting involved in non-farm activities.”

Most informants mentioned that many farm households struggle to take advantage of rural policy measures because of financial constraints. Financial capital is one of the most important barriers to participation in non-farm activities because many farm households find it difficult to raise match-funding and then invest a large sum of money in a new enterprise. In particular, access to financial capital and raising match-funding are important for participation in the LID and CIRP programmes because those programmes require higher match-funding from participants than other programmes. Thus, participation in secondary industries, such as agricultural processing, is a possibility for those with better access to capital because they can afford to match the funds required to support non-farm activities, while poor farmers may not overcome those financial barriers to income diversification. This view is reflected as follows:

“Some rural development policy measures require match-funding to participate in non-farm activities. However, many Korean [poor] smallholders cannot participate in non-farm activities

because they do not have money to invest. Meanwhile, it is easier for rich people to participate in non-farm activities supported by rural policy measures. I think that most rural policy measures may favour better-off people [...]" (Academic #1)

Academic #1 and MAFRA officers #1 and #2 thought that physical capital such as infrastructure is important for income diversification. Farm households may have a higher likelihood of income diversification when appropriate infrastructure is available nearby. Access to appropriate infrastructure is an important determinant for participation in non-farm activities. In terms of rural tourism and agricultural processing, public infrastructure such as access to roads and other facilities can be critical to permit participation in non-farm activities. This is reflected in the following:

"Non-farm activities that are related to rural policy measures have to be conducted in partnership and farm households that lack information on rural policy measures cannot participate in non-farm activities, or have fewer chances. Infrastructure such as processing facilities for common use can be helpful for farmer's establishing community businesses." (MAFRA officer #2)

6.4.2 The need for government support for income diversification

Most informants mentioned that the government needs to support non-farm activities and reduce the barriers to income diversification of farm households. The informants' views on the necessity of government support can be divided into theoretical and practical reasons. Theoretically, the government's support for non-farm activities can be linked to the need to support farming. The positive functions of farming, such as ensuring food security and sustaining the natural environment, are only available when people live in rural areas and continue farming. If people do not farm, those positive functions will not be fulfilled. Meanwhile, people may leave farming if they cannot earn enough money from it. Thus, support for non-farm activities will help farm households continue to farm by maintaining their incomes. As a result, supporting the non-farm activities of farm households contributes to the objectives of food security, the multi-functionality of rural landscapes and sustaining rural communities. Academic #4 illustrated this view as follows:

"Non-farm activities can be a means of sustaining farming. [...] If farm households cannot earn enough income from farming, the government needs to support non-farm activities. In particular, the government needs to support the non-farm activities of farm households that cannot compete in the global agricultural market. Rural policy measures may help people to continue farming and to

live in rural areas as well as participating in non-farm activities. As a result, supporting non-farm activities positively influences food security and the multi-functionality of agriculture and rural landscapes. These additional benefits resulting from such rural policy measures are important.”

In practice, the Korean government needs to support farm households which have experienced a decrease in farm household income and have difficulties in overcoming unfavourable circumstances. Six informants (Academics #1, #4 and #5, LG officer #2, KRCC participant #3 and the KAFF representative) mentioned that the government needs to support farm households because such households may lack the assets necessary to participate in non-farm activities. They thought that the government needs to help farmers who have difficulty in starting a new job, because they have been farming all of their lives and have had limited opportunities to gain other work-related skills and extend their human capital. This view is reflected in the following statement:

“It is difficult for many farm households to start non-farm activities without government support because many farmers lack the abilities and financial capital for participating non-farm activities. In particular, many old farmers and small scale farmers have difficulty in participating in non-farm activities because it is not easy for them to start new work with their limited assets.” (KRCC participant #3)

Academics #1 and #3 believed that farm households can participate in some non-farm activities with the help of appropriate rural policies. Rural policy measures can help farm households who have difficulties in achieving income diversification due to shortage of human and financial capital, participate jointly in non-farm activities. Rural policy measures can be incentives for new community enterprises to be developed because farm households may not otherwise be able to participate in those community businesses.

Most informants shared the view that, over the last 50 years, increasing non-farm incomes has been one of the main objectives of agricultural and rural policies in South Korea. However, one informant argued that, despite this policy focus, in the past, increasing non-farm incomes has not been a high priority compared to other agricultural policy objectives (e.g. increasing farm income and agricultural competitiveness), but in recent years, it has gained momentum:

“In the past, increasing non-farm income has been one explicit objective of rural policies. However, this was not necessarily a priority, because agricultural policies that aim to increase the competitiveness of [Korean] agriculture have been considered the most important issue. [...] At the

implementation stage, some non-farm activities were implemented in villages or small groups without integration with other farming or non-farming activities. Thus, the impact of non-farm activities on the rural economy was relatively restricted. But recently, rural policy measures may be more helpful to farm households and create synergies for the rural economy because they emphasise partnership.” (MAFRA officer #2)

6.5 The Implementation of Rural Policies and their Impacts on Farm Households’ Assets

Informants asserted that central government, local authorities and rural people each have their roles in planning community businesses and that rural people need to work in partnership to develop community businesses that can be supported by rural policy measures (e.g. the GV and GRVD programmes). Rural policy measures that support community businesses are planned following the Block Grant System. Central government sets broad guidelines, e.g. policy objectives, preferred organisational structures, what can be supported and what cannot be supported, and the percentage of match-funding across central government, local authorities and participants. Local authorities and rural people who want to participate in community business make their business plans based on these guidelines. Generally, rural people develop business plans with the help of specialists (e.g. academics and consultants) and then obtain government support which they use to set up a community business. MAFRA officer #1 mentioned that:

“Rural people develop their business plans following discussions between themselves. They decide what they need and how they will carry out the plan. However, farm households and villagers can have difficulties in drawing up plans that reflect what they want because they lack the ability and experience. Thus, they normally bring in consultancy expertise at the planning stage from academics or other specialists.”

The informants offered diverse views on the role played by central and local government in planning rural policy measures and related community businesses. The KAFF representative, however, thought that rural farm households cannot participate effectively in planning rural policy measures and community business because of limitations in human capital. Therefore, local authorities and specialists (e.g. academics and consultants) have to play an important role in planning the rural policy measures that support community businesses.

Academic #4 emphasised that the roles of local authorities and farm households have increased since the introduction of the Block Grant System and argued that the role of local government should be increased, because the uniform measures designed by central government may make it difficult to achieve the desired results in some areas because they may fail to take account of specific local conditions. By contrast, Academics #1 and #5 suggested that central government plays the most important role in planning rural policy measures, and that while its role has decreased, local authorities still follow central government's guidelines. Although the planning of rural policy measures is intended to involve a bottom-up approach, in practice things may be different due to limitations in the abilities of local officers or restrictions caused by local conditions. Seven of the informants believed that local government officers do not yet have the ability or opportunity to plan their own rural policy measures to support community businesses. Academic #5 commented:

“When central government gives guidelines to local authorities for community businesses, local authorities just follow the examples in the guideline. Farmers often ask local government officers to apply the rules in a flexible way, but local government officers normally just follow the examples in the guidelines rather than trying to apply the rules in a flexible way.”

Five informants (Academics #1, #2, #4, and #5, and KRCC participant #1) emphasised that partnership arrangements significantly influence rural non-farm activities that are supported by rural policy measures. Farm households can overcome barriers with the help of other members of their local community and can achieve economies of scale through partnership. Through cooperation, farm households may decrease their production costs (e.g. buying inputs together) and increase human capital by learning from other participants. Although farm households may lack financial assets, social networks and infrastructure, they can participate in a community business if they have help from other participants. Therefore, when farmers participate in community businesses, they may face fewer barriers to participation in non-farm activities than when they run their own individual businesses. Academic #1 noted that:

“Farm households participate in rural tourism and agricultural processing through cooperation. This cooperation can make their communities more solid with the advantage of economies of scale. When farm households are involved in non-farm activities, they need to cooperate with other sectors such as secondary and tertiary industries. I think the impacts can be very positive, if non-farm activities work well.”

MAFRA officer #2 argued that there were greater possibilities of success through the GRVD programme when people with experiences other than farming were involved. Such people may play an important role in community businesses because they have knowledge or experiences which they can employ in their community businesses.

Academics #2 and #3 mentioned that in the case of the GRVD programme, villages, where the Chairs of community businesses live, managed their facilities well, while, in other villages where the Chairs did not live such facilities were often idle. The informants also argued that conflicts between farm households can hinder participation in non-farm activities. If there are conflicts in the village, it may be difficult for households to successfully participate in non-farm activities. Social capital such as community goodwill and sharing goals are important to reduce the possibility of conflicts in community businesses. Academic #3 commented that:

“There is a high possibility of conflict if there is no community sense in the village or group. If there is consensus that community earning is more important than individual interests, there is less possibility of conflict in community businesses.”

Academic #2 and KRCC participant #2 suggested that conflicts sometimes happen because of poor partnership and local leadership. If Chairs place their own interests first rather than those of their community businesses, conflict can easily arise. If rural policy measures cannot increase the sense of community, it is difficult to produce good results from the community enterprise. While many rural people may initially participate in a community business, after a while many will lose interest. Academic #2 suggested that:

“If someone thinks that they will be a boss and play the main role in earning and distributing money to people in their communities, it is difficult to have good results in the rural community business. [...] People cooperate with each other in the early stages. In particular, farmers are encouraged to participate in community businesses and initially they may be very interested in participating in their community businesses. But later, some farm households tend to lose interest because they expect support such as physical assets for individual households but do not receive them.”

The KAFF representative argued that non-farm activities need to be conducted by individual farm households as well as community enterprises because community-based enterprises need a lot of time to deal with conflicts. Also, not all participants have the business abilities required for success.

Rural policy measures have the potential to provide a wide variety of support, including physical assets (e.g. facilities) and support services (e.g. marketing, education and training, and consultation). With the help of rural policy measures, farm households with low levels of financial and physical capital may be able to overcome financial and physical barriers. Policy programmes discussed in this chapter support secondary (e.g. agro-processing) and tertiary industries (e.g. rural tourism) rather than primary production.

6.6 Rural Policies and their Distributional Impact on Farm Households

6.6.1 An overview of the general impact of rural policies that support non-farm activities on farm households

Based on the perspectives of some key informants, it seems that some rural policy measures that aim to increase non-farm income have been less successful than expected. KRCC participant #3 and LG officer #2 argued that, judged in terms of their effectiveness, half of the programmes that have been implemented should not have been because while many community businesses worked well at the beginning, the required levels of participation and cooperation were not maintained.

“In my experience, only about 10 per cent of the GV programmes were successful [in earning income]. Gyeonggi-do is near to Seoul and has good infrastructure. In other Dos, it may be more difficult to succeed from rural tourism and the success rate may be less than 10 per cent.” (LG officer #2)

Three informants (one academic and two KRCC participants) mentioned that although farm households often wanted to participate in rural policy measures, they may not have enough support, e.g. in developing their business strategies. KRCC #2 commented that:

“There are many cases where rural policy measures are implemented in areas where farmers are

not well prepared for their community business. Although rural people can obtain financial support from rural policy measures, their community businesses often work less well than intended. I think that government support can be less effective than intended.”

Indeed, many informants shared the view that most farm households who participate in rural policy measures that boost farmers’ non-farm activities benefit from them. For example, rural residents, who lack the human capital can increase their capabilities with the help of rural policy measures and take advantage of opportunities to participate in non-farm activities. These households can improve their business awareness following appropriate education and training. In some cases, the resulting increase in household assets plays an important role in enhancing the livelihood strategies of farm households. Academic #1 commented that:

“During the process of implementing rural policy measures, farm households get education, training and advice from experts. The increased human capital influences other opportunities in the future. As a result, farm households that increased their assets may then earn more money by participating in non-farm activities with or without rural policy measures.”

The KAFF representative mentioned that farm households can add more value and income from non-farm activities than from farm activities. For example, there may be less seasonal variation in household income when tourist accommodation is provided. If agricultural processing operates all year round, this can add value and increase income which can be very positive for farm households.

Skills learned and experience gained through rural policy measures can be transferred to other farm households, which may influence their income and employment prospects. If someone else in the village is already participating in such activities, their example can increase the chances of other households following suit. Human and social capital can influence the performance of community businesses. Thus, villages and communities that have higher human and social capital may gain greater benefits because of their higher assets.

Local authorities have an incentive to implement rural policy measures because they may be helpful in developing their areas. In some cases, the willingness of farm households was identified as an important factor that influences the performance of community businesses. Rural policy measures will not achieve good results if farmers are not willing to participate in community businesses. Some people may participate more actively and benefit more, while

other people may participate reluctantly and only following encouragement from local government officers or the head of the village. However, if farm households are not well motivated, the business may work less well. This aspect has been captured by the KRCC participant #3 as follows:

“There is less competitiveness in community businesses that are supported by rural policy measures since the introduction of the Block Grant System. Before this system, there was competition to become a beneficiary at the national level, and this made farm households prepare for their community businesses relatively well. If they fail at the application stage, they have to prepare for another year or two and then reapply. However, since the introduction of the Block Grant System, the competition to become a beneficiary is lower because farm households compete at a local authority level [i.e. Si, Gun or Do]. Local authorities tried to implement as many rural policy measures in their areas as they could because those efforts could positively influence the election of the head (mayor) of the Si or Gun as well as economic development.”

If new enterprises supported by rural policy measures are not linked to a comprehensive and long-term plan for the region, then it is hard to prosper. Community enterprises may more readily gain support (e.g. for advertising) from local government when the community business is related to the regional long-term plan.

“One feature of successful farm households and villages is the increase in human capital. [...] Farm households and villages have good results when they conduct their non-farm businesses with the long-term objectives of their region in mind. Community business works well when the business follows their regional long-term plan.” (KRCC participant #2)

6.6.2 Impacts of rural policies across farm households

Most informants shared the view that farm households gain different benefits from rural policy measures. By and large, while young farmers are better adapted to new non-farm activities, farm households with high financial capital are likely to benefit more, because they find it easy to participate in them. If the amount of match-funding required from participants increases, many households would not be able to participate in the non-farm activities. For example, farm households benefit most from the GV and GRVD programmes because they can participate with little or no match-funding. In comparison, more agricultural processors and entrepreneurs than farmers benefit from the LID and CIRP programmes because they can afford to participate in these programmes. However, most farm households experience

difficulties in raising the required match-funding. This was reflected in the following comment:

“When a village or consortium seeks support from a rural policy measure, the government requires about 20 [or 30] per cent match-funding from participants. That is not a small amount of money to many farm households. Non-farm households or entrepreneurs have fewer difficulties in raising match-funding than [poor] smallholders.” (Academic #3)

In addition, the performance of community business is related to the abilities of people in such businesses. If there are people who have abilities in marketing, their community business may perform well. The level of knowledge and experience of participants therefore influences the performance of community business. In some cases, rural policy measures focused on developing physical capital and infrastructure without achieving a corresponding increase in human capital, such as the skills and knowledge required to exploit new activities. KRCC participant #3 commented that:

“Human capital is important for the success of community business. When people participate in rural policy measures, they have opportunities to increase their human capital. With the help of increased human capital, people can set a common goal and develop their community business according to their abilities.”

Rural households need to work collectively and create new associations that will be the vehicles through which they can participate in new community enterprises that are supported by rural policy measures. Informants emphasised that not only financial support from rural policy measures but also partnerships and leadership are important for good results. Partnership may also help to increase the human and social capital of community businesses.

There were contrasting views on the impact of policy measures in relation to farm size and farm type. KRCC #3 argued that farm households with high income from farming, such as large rice farms, have less interest in non-farm activities compared to other farm types. Academic #3 argued that large affluent farm households have more opportunities to be involved in non-farm activities, particularly those that rely on processing their products.

Academic #2 also argued that farm type influences the opportunities for income diversification. Farmers who mainly grow rice have fewer opportunities for non-farm activities through processing their products. In comparison, farmers who grow vegetables and fruit have

opportunities through processing their produce. Similarly, Academic #5 argued that the added value of fruits and vegetables can be increased through processing or using those products in tourism activities.

The benefits of community business can be different depending on the type of participation. Some farm households benefit because they gain new markets for their produce. Their income typically depends on their ability to supply more agricultural products.

Both Academic #4 and the KAFF representative believed that at the individual level, leaders, e.g. heads of villages or Chairs of agricultural associations, may gain greater advantages from government support than other residents. The heads or Chairs may have good relationships with local government officers and can access information more easily than other villagers. Access to information and social networking may provide opportunities and influence their participation and benefits from non-farm activities. Similarly, MAFRA officer #2 supported the argument that farmers with good relationships with local government officers may gain more benefits because they can more easily obtain useful information concerning rural policy measures from these relationships. Academic #2 thought that in some cases, the decision-making processes at local and central government levels are not transparent to all farm households.

Academic #2 and the KAFF representative argued that farm households that have experience of participation in rural programme are better placed to participate in non-farm activities. They may have already increased their households' assets through participation in previous rural policy measures. These experiences can help them to benefit from new rural policy measures. As the KAFF representative observed:

“There is a tendency for people who have experience of participation in [previous] rural policy programmes to have more opportunities than those who do not. Leaders in the village and wealthy people have more chances of government support because they normally have higher human and financial capital. Those experiences seem to help them to participate in another rural policy measure or non-farm activities.”

There may be differences in terms of types of employment, i.e. waged employment and self-employment. Participation in lower paid, unskilled waged employment may offer little benefit to farm households. However, farm households who are responsible for their own non-farm

activities may increase their income and other benefits. Academic #2 suggested that:

“Non-farm activities such as the agro-processing and rural tourism using rural resources can be helpful to households. Farm households that process their own agricultural products or use their raw material in tourism services gain more advantage from non-farm activities. However, farmers may not benefit much when they work as manual labour because they can have low income as employees. For example, routine jobs such as peeling chestnuts may not be very helpful to farm households.”

Five informants (Academics #2, #3, #4, and #5, and LG officer #2) felt that income sometimes becomes the cause of conflicts between people because the distribution of benefits may not be equal. The positive impacts of increased income can be offset by the conflicts that follow this distribution. Some farmers cannot participate in community business because of financial barriers, while those who do participate benefit from rural policy measures. There are also farmers who benefit little because they can only raise a small amount of match-funding. The benefit from rural policy measures may vary depending on households' assets. The distribution of profit in community business is often related to the financial investment of farm households. This view was reflected in the following comment:

“There is a high possibility that wealthy people gain more because they invest more money. The profit from a community business is usually distributed based on the financial investment of individual farm households. But the distribution of benefits can be a problem that leads to conflict between farm households.” (Academic #4)

Most informants shared the opinion that there is income inequality between rural and urban areas. Since the 1970s, the Korean government has focused on the development of secondary industries for national economic development and as a result the gap between rural and urban areas has increased. Non-farm activities in rural areas are seen as helping to decrease this inequality. However, most informants argued that non-farm activities may have a negative distributional impact on income inequality in rural areas because poor farm households have difficulties in participating in activities such as agro-processing which require financial investment.

“The Korean government had focused on secondary industries for development since the 1970s. As a result, rural households that work in the agricultural sector did not receive much benefit, while people in cities benefited not only economically but also non-economically. I think that non-farm

activity can help decrease the income gap between cities and rural areas.” (Academic #1)

6.6.3 Impacts of rural policies across regions

Informants held different views on whether or not there were regional differences in the impact of rural policy measures. Community businesses in urban centres have the advantage of better access to customers, while those in remote areas may have to pay higher marketing costs and may have difficulties in reaching potential customers. For example, there is a high possibility that farm households in villages near large cities can take advantage of the GV programme because of the proximity of potential customers. Academic #3 commented:

“Farm households that are close to the capital city or other large cities and their associated markets have more chances to benefit from non-farm activities than farm households located far away from cities. Group tourists such as secondary school students [which are one of the main customers of rural tourism] prefer to visit somewhere nearby because of time and costs.”

MAFRA officer #3 argued that villages in Gyeonggi-do have an advantage in GV programme because many people can easily visit them. In comparison, villages in Jeollabuk-do, Jeollanam-do, Gyeongsangbuk-do and Gyeongsangnam-do which are remote from Seoul may gain relatively few benefits from the GV programme.

By contrast, Academics #4 and #5 and KRCC participant #3 believed that the disadvantages of remoteness has been overcome in some non-farm activities such as rural tourism because of developments in transportation (e.g. more cars, buses and better and faster roads). They argued that some touristic areas near cities may have advantages, but this is not always the case. Academic #5 commented that:

“The influence of regional differences, e.g. the Do where farmers live, may be smaller because of improved transportation links and online selling. If there is something special about a remote rural area that will attract people, then distance may not be a problem.”

Academic #5, LG officer #2, and KRCC participant #3 held the view that the government tends to target many policy measures at the same areas (e.g. GV, GRVD, and LID) because those areas offer greater possibilities of success. KRCC participant #3 mentioned that there are differences between villages that become involved in non-farm activities and villages that

are not involved, where the latter seem to have less vigour. In comparison, people in areas where rural policy measures have been implemented may have more opportunities to benefit from non-farm activities and rural policy measures. The government needs to consider these regional differences when implementing rural policy measures:

“The policy measures of the government do not cover all rural areas. Therefore, farm households cannot gain the same benefits. For example, the GRVD programme was designed to be implemented in 1,200 Eup and Myeon of the total Si or Gun in South Korea. But this programme has been implemented in only 80 per cent of Eup and 30 per cent of Myeon.” (LG officer #2)

6.7 Conclusions

This chapter has helped to narrow down the main rural policy measures that will be the focus of in-depth interviews and which will be reported in the next chapter. These main policy measures are the Green-tourism Village programme, the General Rural Village Development programme, the Local Industry Development programme and the Complex Industrialisation of Rural Resource programme. These four programmes support community businesses that are operated through partnership between participants.

The main findings from the key informant interviews are as follows. The importance of non-farm activities was emphasised both theoretically and practically. Farm households participate in non-farm activities to increase household income as well as non-financial benefits. By generating additional revenue, non-farm activities help households to achieve more stable income levels, thus allowing them to face the future with greater confidence. Non-farm activities can have a positive impact on rural communities and the rural economy as a whole. The role of local authorities and local government officers in the process of planning and implementing rural policy has increased. However, there are gaps between the roles expected of local government officers and their abilities and working conditions. Rural policy measures help farm households to increase the levels of human and financial capital and to overcome barriers to income diversification. In this way, farm households can more readily participate in non-farm activities. However, many farm households have difficulty in raising the required match-funding to participate in some programmes. Most farm households that participate in rural policy measures can increase their household income and non-financial benefits. Most key informants thought that the impact of policy measures will differ between farm

households. People who have a high level of human and financial capital may gain more benefits from participating in a community business than others. People in favoured areas with better resources have more opportunities and benefits from rural policy measures than people in less favoured areas. People in regions that are near to Seoul may benefit more from rural tourism and related rural policy measures.

Drawing on the key informant interviews, this chapter has explored various perspectives on the impact of rural policies. The next chapter studies these impacts further drawing on in-depth interviews with farmers.

Chapter 7: Findings from In-depth Interviews with farmers

7.1 Introduction

This chapter presents the findings from in-depth interviews with 48 farmers concerning the impact of rural policy measures that aim to boost their non-farm activities. The interviews were carried out in July and August 2014 in South Korea. This chapter explores the impacts of four key rural policy measures (i.e. the Green-tourism Village (GV) programme, the General Rural Village Development (GRVD) programme, the Local Industry Development (LID) programme and the Complex Industrialisation of Rural Resource (CIRR) programme) that were identified in key informant interviews. All interviewees were involved in community businesses supported by key rural policy measures.

Specifically, this chapter examines how these rural policy measures work in terms of the objectives of increasing the non-farm activities and non-farm incomes of farm households. The data from the empirical work were analysed using thematic analysis. Four main themes, which are related to the research questions posed in Chapter 1, were identified. Section 7.2 provides basic feature of interviewees, while sections 7.3 to 7.6 present the main themes. Section 7.7 concludes this chapter.

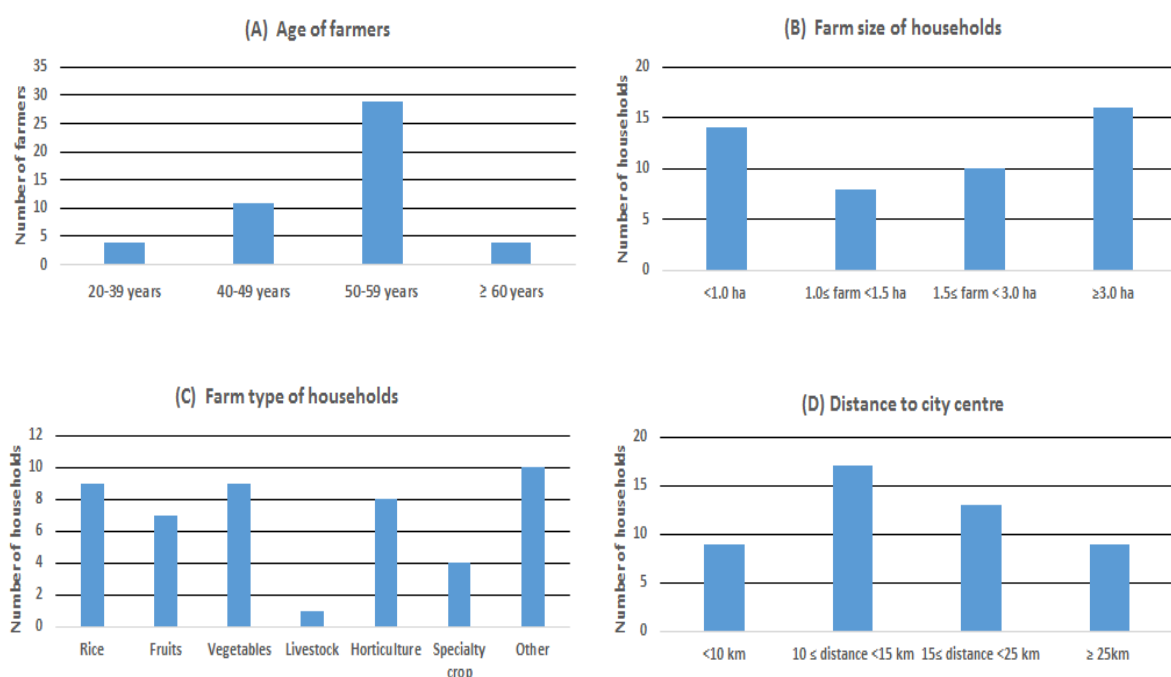
7.2 Basic Features of Responding Farmers

This study utilised face-to-face semi-structured interviews with farmers. As Meert *et al.* (2005, p. 87) point out, “A thorough discussion and interpretation of the empirical results requires a clear understanding of some basic features of households and farms, and the farmers’ relationship with their farms.” This study interviewed 48 farmers with specific demographic and geographical characteristics in order to explore the impacts of policy measures (See Appendix E). The sampled farmers were evenly distributed across three Dos (i.e. Gangwon-do, Chungcheongnam-do and Gyeongsangnam-do) which permitted an exploration of regional differences in the impacts of rural policy measures.

Figure 7.1 summarises the demographic (A), farm-related (B and C) and regional (D) characteristics of responding farmers. Although a diverse age range of farmers was included,

there were more farmers aged 50 or over than farmers aged under 50. Farm size was compared based on Korean average farm size (i.e. about 1.5 hectares in 2013) and the numbers of households farming under 1.5 hectares and over 1.5 hectares were similar. The main farm enterprises of respondents were diverse (e.g. rice, fruits, vegetables, livestock, horticulture, specialty crop) and the number of households for each enterprise type varied between four and nine except for the single livestock farmer. In addition, the distance to the nearest city centre was categorised as relatively near (less than 15km) and more distant (over 15km).

Figure 7.1 Basic demographic, farm-related, regional features of responding farmers



7.3 Importance of and Motivation for Non-farm Activities

7.3.1 Understanding of non-farm activities

The first topic covered in the interviews concerned the nature of the non-farm activities that farm household members engaged in. The terminology around non-farm activity and non-farm income⁶⁷ was not familiar to some farmers, although they had been or were currently involved in non-farm activities. There were also differences between farm households in their

⁶⁷ According to the official definition non-farm income is composed of income from manufacturing, construction, agricultural services (such as repairing farm machinery), restaurants, lodging services, wholesale and retail sales, rural tourism, forestry, fisheries, and the processing of agricultural products (Korea National Statistical Office).

understanding of non-farm activity and non-farm income. Non-farm income was understood to be income coming from non-farm activity and if rural people work and earn income from jobs in the city, that was understood as a non-farm activity. However, there were some differences in understanding of rural tourism and agro-processing. The understanding of interviewees of the meaning of non-farm activity could be put into three categories: in tune with the government's view, different from the government's view, and having no clear idea.

Half of the interviewees thought that they participated in non-farm activities such as tourism or agro-processing. These interviewees were more in tune with the government's view and stated that rural policy measures could help them to undertake non-farm activities. Meanwhile, a third of interviewees thought that rural tourism and agro-processing were farm rather than non-farm activities because they are related to their core business. They thought that they were not involved in non-farm activities, even though they participated in rural policy measures that aimed to support community businesses. In addition, a few respondents were not familiar with the term non-farm activity.

By and large, interviewees with higher levels of education were familiar with the term, while people with lower levels of education were not. The heads of villages and the Chairs of community businesses were more in tune with the government's views on non-farm activities than other people. In the GV and GRVD programmes, a head of village often acts as the Chair of the community business. These different understandings may be related to their human capital, their frequent contact with local government officers and their access to information about rural policy measures.

7.3.2 Importance of and motivations for non-farm activities

Many interviewees (27 out of 48) shared the view that non-farm activities are an important source of farm household income at a time when many farms in South Korea are experiencing a decrease in their income and returns from farming are insufficient to make a living. The interviewees felt that it had now become more challenging for them to live on farm income alone, hence the need for income diversification. The interviewees mentioned that they had to diversify their sources of income to increase household income, for example, by processing agricultural products, and/or providing tourism services. Chungnam #8 commented that:

“There has been no great progress in farming and farm income. [...] We are trying to live happy

lives. However, we could not earn enough income from farming to make a living. In the past, we [parents' generation] could send our children to university through farming. However, we cannot rely on farming alone these days, so we need to engage in non-farm activities as well."

Smallholders (e.g. those with a lower than average landholding) reported that the main motivation for their involvement in non-farm activities was to earn income. Farm households dependent on small areas of land are likely to be poorer than larger farms and hence they have a greater need to supplement their farm incomes. Also, they may have more time available to spend on non-farm activities.

Some interviewees argued that non-farm activities were important because they helped to guarantee a more stable income. Income from farming is seasonal and can fluctuate due to market conditions. For example, farm households in Gangwon-do have a farming season lasting three to six months a year. Farm households can process their low quality agricultural products and earn an additional income, while they sell their good quality raw products on the market. They can thus generate added value by processing agricultural products and stabilise their income stream by selling them after the farming season is over. Gangwon #1 illustrated this as follows:

"There have been machines that extract juice from grapes in every house for a long time, because low quality grapes cannot be traded on the market and need to be processed. [...] However, we have been able to process our low quality grapes with modern facilities since we participated in the GRVD programme. Processing low quality agricultural products is important because we cannot obtain an appropriate price [and earnings] without selling the extracted juice. Also, we can be less affected by the weather and the market situation because we can process some of the agricultural products."

Alongside the economic value of non-farm incomes, farm households also considered non-economic benefits, such as increasing their quality of life⁶⁸ (e.g. increasing personal satisfaction, social interaction and cohesion), as a motivation for engaging in non-farm activities. Some interviewees (i.e. Gangwon #7, #8, #16, Chungnam #14 and Gyeongnam #10, #16) said that increased quality of life was one of the benefits arising from non-farm activities. Chungnam #14 commented that:

⁶⁸ Quality of life is not captured simply by market transactions but can be measured by diverse types of data (Stiglitz *et al.*, 2009a; 2009b; OECD, 2013). Quality of life can be measured by diverse indicators such as work and life balance, education and skills, social connections, environment quality, personal security, subjective well-being (*ibid.*).

“Personally, I think non-farm activity is exciting. Our rural village is like a grand welfare facility. I sometimes feel like I am living in a cemetery because there is no productive [farm] labour force in our rural village. Thus, I am glad to see people coming to our village for rural tourism.”

However, rather than being emphasised as a separate motivation, an increasing quality of life was mentioned alongside the primary motivation of increasing income:

“If [raw] agricultural products are over-supplied in the market, the price drops sharply. There is almost nothing to add value in rural areas. We started Kimchi processing and rice processing through the GRVD programme to increase income and the quality of life. [...] Non-farm activities contributed to household income and they helped to increase social cohesion and networks.”
(Gangwon #16)

Other interviewees (e.g. Chungnam #4 and Gyeongnam #13) explicitly stated that they had participated in rural policy measures because they wanted to develop their villages. Farm households can participate in rural policy measures as members of a community business. Many farm households are involved in setting up or participating in community organisations (e.g. an agricultural association or agricultural company)⁶⁹. In particular, some interviewees who participated in the GV or GRVD programmes mentioned that they participated in non-farm activities not only to increase household income but to develop their village and rural communities. In addition, the heads of villages and Chairs of community businesses emphasised that the development of their villages was a motivation for their participation. This view was reflected in the following comment:

“Our village has no other opportunities for developing itself. When I saw what other villages had done, I thought that our village needs to try something such as rural tourism for our village development. Thus, we applied to get involved in the GV programme.” (Gyeongnam #13)

Interviewees who had participated in the LID and CIRRR programmes were more likely to emphasise increasing income as their motivation for engaging in non-farm activities. By contrast, interviewees with larger farms (more than average landholding) were more likely to suggest that increasing both quality of life and income was their motivation for undertaking non-farm activities.

⁶⁹ Agricultural associations and the companies are defined in law, i.e. ‘Act on Fostering and Supporting Agricultural and Fisheries Enterprises’.

In summary, farm households expect both financial and non-financial benefits from their community businesses. Overall, the main motivation for diversification into non-farm activities is to obtain an additional and stable income which will support farm households following the decline of their farm income. However, depending on the farm size or other characteristics (e.g. being the Chair of a community business), other motivations, such as enhancing quality of life and developing rural communities, were identified amongst the interviewees.

7.4 Determinants of and Barriers to Income Diversification

Most interviewees said that they were very much influenced to diversify by the financial opportunities available to them through rural policy measures. Rural policy measures surely influence the decision to participate in non-farm activities, as participation in projects supported through measures led to an increase in the households' assets, such as human, social, physical, and financial capital. The four main rural policy measures identified in Chapter 6 impose, however, some requirements for participation, such as partnership and match-funding from participants. Among the four rural policy measures, only the GV programme provides 100 per cent government funding. Gyeongnam #2 commented that:

“It is difficult to start non-farm activities, such as a community business, without government support. It is hard to invest a hundred million KRW (equivalent to about GBP 50,000 at 2013 prices) in non-farm activities because we [people in our village] do not have enough money. We can overcome financial constraints and get involved in non-farm activities with the help of the GV programme.”

Five interviewees mentioned that legal regulations, which are part of the Food Sanitation Act, may also influence farmers' participation in food processing businesses. Regulations related to food processing can limit participation because they require food-processing companies to have appropriate facilities and equipment (e.g. metal detectors) to ensure food safety. Many farm households with low financial assets may have difficulty in starting a food processing business because they cannot afford the necessary facilities and equipment required by the regulations. However, with the help of the LID or CIRR programmes, farm households can obtain the required facilities and gain the necessary Hazard Analysis and Critical Control

Point (HACCP) certification, e.g.

“Until now, anyone could do food processing [for sales] at home without a licence. However, from next year, people can only undertake food processing [for sales] when they have HACCP certification for food safety. The requirement for Kimchi processing is one metal detector and we obtained it with the help of the CIRR programme. Now we have HACCP certification.” (Chungnam #6)

Nevertheless, some farm households cannot participate in rural programmes because of financial constraints. Some interviewees (e.g. Chungnam #10, #12 and Gyeongnam #14) reported that they had difficulties in raising the match-funding required to participate in a particular policy measure (CIRR and LID programmes). In particular, poorer smallholders may have difficulty in borrowing money from a bank because they have little to offer as guarantee.

“One of the most challenging things is to raise match-funding. There are 100 households in my village, of which 23 hoped to participate in the CIRR programme. We had to raise 300 million KRW as match-funding collectively. I worried that we could not raise the match-funding, because even 10 million KRW is big money in rural areas. Fortunately, we were able to make it but I [as Chair] cannot sleep well because of worries about the success of our project.” (Chungnam #12)

Such views led to some interviewees arguing that government funding needs to be increased because many farm households have difficulty in raising the required match-funding.

In addition, some farm households (i.e. Gangwon #5, Gyeongnam #3, #4, #5, #6, #7 and #8) held the view that the match-funding required from participants was more than 40 per cent of total funds (i.e. sum of match-funding from participants and funding from government) when they participate in rural policy measure (i.e. LID or CIRR programme). Although they knew that both physical assets and support services required match-funding, they held the view that the required match-funding between them were different. They thought that, in practice, support services were fully government funded but investment in physical assets required a high percentage of the match-funding from participants. Gangwon #16 made the point that match-funding may increase the level of engagement of participants in a rural programme, such as the GRVD programme, because they thought of community businesses as their own. In comparison, farm households that do not have to invest in the community business tend to be less active in it.

Community businesses attract people from different backgrounds and with different levels of farming experience and some interviewees suggested that the varied human capital that they offer could make a positive contribution to the activities of their non-farm businesses. Gangwon #6 recalled that:

“I ran a private educational institute in the city; however, I had to quit because it did not work well. [...] I wanted to start my own business and found that there were opportunities from government support in the rural areas, while there was no support in the city. Thus, I decided to move into my mother’s house in a rural village to participate in a rural policy programme [the CIRP programme]. I think my experience helped my current business [food processing].”

Some interviewees mentioned that high levels of human capital, including knowledge and experience of marketing and business practices, are important for the performance of community businesses. In particular, the Chairs of community businesses who may be more skilled and knowledgeable than other participants often play an important role such as providing marketing expertise.

However, one interviewee suggested that not all farm households needed high levels of human capital to participate in non-farm enterprises, especially when these involved routine or manual activities. Chungnam #6 reported how in his village even elderly residents could earn useful additional income by participating in non-farm activities:

“People in my village are old. However, people in their 70s and 80s can work in our Kimchi processing factory. Old people can work and earn money, although they do not have special skills or experience. They like earning income by working. They do not have other chances to earn income in rural villages because the towns and cities are remote from our villages and old people do not have their own cars.”

Land may be one of the most important household assets and interviewees held different views concerning the relationship between landholding and income diversification. While some enterprises might benefit from having more land available (e.g. to grow additional crops for processing), some interviewees, with small or medium sized farms, felt that having less land meant that they faced less restrictions on the amount of time they had available for non-farm activities. Gangwon #9 commented that:

“Large farms cannot participate in non-farm activities. They do not have enough time for non-farm activities. Most farm households in our village hold about 3 to 17 hectares. Unlike in a mechanized paddy field, we need much labour in our upland for farming. Our farming is labour-intensive. Thus, large farm households are busy with their own farming. I think that farm households with 3-5 hectares of farmland can participate in non-farm activities and can get a good result.”

In addition, two interviewees (Gangwon #7 and Chungnam #7) suggested that farm households that participated in tourism could do so without needing large amounts of land. Farm households with access to good levels of natural capital, such as scenic landscapes, forests or open water, may, however, have an advantage when it comes to setting up successful tourism enterprises. Indeed, most tourism villages exploited their high levels of natural capital when they joined the GV programme, e.g. Gangwon #7 noted the advantage of natural capital:

“My village is surrounded by mountains. We have good air and water. We have a mountain stream that people can enjoy. The natural environment and landscape have been well preserved. Many people said that my village has good natural capital for rural tourism. In particular, my village is popular as a tourism village [supported by the GV programme] to primary and secondary school students for educational and travel purposes. Group tourism is a significant feature of rural tourism.”

Some interviewees (i.e. Gangwon #16, Chungnam #14 and Gyeongnam #2) argued that not every farm household has the same opportunities to gain access to critical information on rural policy measures, such as the level of government support available. The head of the village or someone with a good relationship with a local government officer may access such information relatively easily, while other farmers may take longer to obtain the same information. The usefulness of good links to local government was reflected in the following quote:

“Local government officers informed me of the GV programme. I thought, rural tourism can be helpful because people in my village are old and we have only small farms. [...] hence, I decided to participate in this programme.” (Gyeongnam #2)

In summary, farm households need diverse assets such as financial and human capital to participate in community businesses. Some farmers can overcome barriers to income diversification with the help of rural policy measure. However, many farmers cannot

participate in rural policy measures because of financial constraints, while other farmers may face different barriers such as a shortage of land or information.

7.5 Policy Implementation and its Impact on Farm Households' Assets

7.5.1 Rural policy measures and partnership

Community businesses, which are supported by rural policy measures, tend to be implemented through a partnership between rural people (e.g. farmers and/or non-farmers). For example, farmers play an important role in the GV and GRVD programmes where the focus is on the development of the village. By contrast, the main players in the LID and CIRR programmes are non-farmers or entrepreneurs rather than farmers because they typically have more time and money to invest in non-farm activities or community businesses.

Partnerships can play an important role in supporting non-farm activities, especially in cases where farm households lack sufficient assets, such as physical capital or social networks, to succeed individually. Gangwon #1 and Chungnam #3 both mentioned that the partnership element of community businesses can help farm households take advantage of economies of scale. Thus, through cooperation, farm households may decrease their production costs, while at the same time increasing their levels of human capital by learning from other farm households.

Gangwon #5, however, introduced a note of caution highlighting the challenges inherent in trying to achieve cooperation in a community business:

“It is difficult to achieve cooperation between farm households in the village. I think it is difficult for only two or three people to do business together. Business in villages or agricultural associations may look good and work well. However, it is difficult to obtain the desired results. Although some people are involved in the community business, they do not play an active role. Without cooperation between farm households, government support may not be very helpful to farm households.”

Sometimes conflicts occur within the community business and this may hinder effective partnership working. Some interviewees (Chungnam #7 and #13) felt that conflicts can occur

not only between members of the community business but also between participants and non-participants. In particular, conflicts between participants and non-participants were reported as being quite common in the GV and GRVD programmes both of which are implemented at the village level. Chungnam #7 commented on his experience of conflict:

“I have been to the police five times and to the prosecutor twice to ask for an investigation. In our village, non-participants accused me of embezzlement in the process of implementing the GRVD programme. [...] When I met several well-known Chairs of the GRVD programmes across the country, I found that five out of seven Chairs had the experience of having been to the police for similar reasons. This is common. This is our rural situation. This makes it difficult for people to work as Chair for their own village [i.e. community business].”

A few interviewees (Gangwon #12 and #16 and Chungnam #7) argued that if most people in the village participate in their community businesses, the possibility of conflicts may decrease because it is generally the non-participants that have negative opinions about the business. Participation can increase if the village holds common funds⁷⁰ that can be used as part of the match-funding for the community business. The difficulties of raising match-funding can be solved by using this shared financial resource enabling many people in the village to participate in the community business. Chungnam #7 commented that:

“I think many people need to participate in the GRVD programme, which helps to increase farm household income. Regarding community business, I think that as many people in the village as possible need to participate because this can reduce conflicts. People who did not participate in the community business always presented negative opinions. When we asked the village’s people to participate in the community business at the beginning, half of the farm households did not participate. Thus, we decided to use the village’s ‘common money’ and tried to involve as many as farm households as members. This is important as it can help reduce [the number of potential] conflicts.”

Some interviewees (Gangwon #12, #15, #16 and Chungnam #7) supported the view that the leaders (e.g. Chairs) of community businesses play as important a role in resolving conflicts, as they do in helping their villages to make a profit. They also agreed that the role of leader is difficult because they have to spend a lot of time working for the community businesses. However, there are few or no incentives to take on a leadership role, particularly in the GV

⁷⁰ Some villages share common funds that they have earned as an award from the government. These can be used to fund shared village objectives.

and GRVD programmes, e.g.

“I am the head of the village, the Chair of the GV programme, and the Chair of the GRVD programme. There are no young people in our village. I take these roles for my village. One problem is that the support given to me as Chair of the community business is not enough. I argue with my spouse because I spend too much time at the community business. [...] I think most Chairs in the GRVD programme may have similar problems.” (Gangwon #12)

Leaders in LID and CIRR programmes have no such lack of incentives because they are actually the owners of the businesses.

Several interviewees (i.e. Gangwon #5 and #16, Gyeongnam #1, #6 and #16) reported that decision-making in their community businesses could be difficult. Decision-making in community business is related to the type of organisation (e.g. agricultural association and agricultural company). Community businesses based on villages or agricultural associations emphasise a community perspective, such as community development and common benefits, and decisions are often made when there is full consensus between all members. In these cases, horizontal relationships may exist between members, where they have equal rights when it comes to making a decision, and at times this may make it difficult for members to reach a consensus. Community businesses that are supported by the GV and GRVD programmes normally employed an agricultural association. In comparison, in an agricultural company and a (standard) corporation⁷¹ which focus on maximising profit, decisions are more straightforward as they are normally made according to the share of investment held by individual. Community businesses that are supported by the LID and CIRR programmes are often organised as agricultural companies. The potential problems for decision-making are reflected in the following:

“A standard corporation has voting rights according to investment. However, agricultural associations are different. People in the agricultural associations think that they are all owners although they may have invested very little. Thus, decision-making is very difficult. It takes time to make a decision and it is difficult to reach agreement if anyone has different opinions. Thus, I think decision-making often can be ineffective. Also, it is difficult to get a good result. This is an inherent problem of such agricultural associations. [...] We recently received a new regulation from the government that, [...] with the agreement of all members, we can change the decision-making rules

⁷¹ Corporations can also participate in rural policy measures without the need to create another organisation such as an agricultural association or agricultural company.

from all participants having equal rights, to voting rights reflecting the extent of the individual's investment. However, I think that the people in the community business will not agree to this change.” (Gangwon #16)

In particular, shared decision-making can be difficult where members have different interests and priorities. In a community business, decision-making can take a long time and be inefficient because each member has his own interest and situation to take into account, e.g.

“We all have individual businesses but we came together to promote our businesses. Four enterprises formed a consortium and participated in the LID programme together. [...] However, support services, such as education and training and empowerment, were managed by the [community business'] executive office and coordinators in the LID programme. It is difficult to advertise together because the four enterprises are in different situations. Last time, one enterprise did not have anything to advertise so it was difficult and took long time to make a decision. We could do something within 3 or 4 days if things went well. But it took one month last time. That made me really tired.” (Gyeongnam #6)

The Confucian culture and approach to life still exists in rural areas in South Korea and this may influence decision-making in the community business. For example, in this culture old people have a stronger voice than young people and men have stronger voices than women. This sometimes leads to decision-making that reflects respect for status rather than business acumen. For example, Chungnam #10 commented that in his experience decision-making in the GV or GRVD programmes can be difficult if the head of the village and the Chair of the community business are different and the age of one is seen to outweigh the business expertise of the other:

“In our village, the head of the village often hinders our project. I think he has not experienced work in an organisation before. He is likely to give orders to the Chair [the interviewee] of the community business because he is older than me and he is a head of village. A head of village is normally older than a Chair of the community business. Our village has this problem. I have heard that several community businesses have similar problems when the Chair of the community business and the head of the village are different.”

In summary, partnership and leadership are found to be important in community businesses because they may lead to good performance. Meanwhile, conflicts arising from ineffective partnership and leadership often lead to poor performance. In practice, partnership can

provide considerable challenges for the successful implementation of rural policy measures. Table 7.1 summarises particular partnership issues raised by respondents across the four rural policy measures.

Table 7.1 Rural policy measures and partnership

	Partnership
GV programme	<ul style="list-style-type: none"> ▪ Decisions are made by a one-person-one-vote system. They are often ineffective. ▪ Single coordinator but this is argued to be ineffective. ▪ Chair has no additional incentive to undertake this role.
GRVD programme	<ul style="list-style-type: none"> ▪ Decisions are mainly made by a one-person-one-vote system. ▪ Single coordinator ▪ Farmers participate in planning the community business. ▪ Chair has no additional incentive.
LID programme	<ul style="list-style-type: none"> ▪ Decision-making is relatively straightforward ▪ Two coordinators but this is argued to be ineffective. ▪ Support services are often ineffective.
CIRR Programme	<ul style="list-style-type: none"> ▪ Decision-making is relatively straightforward. ▪ No coordinator and farmers have difficulty in implementing support services. ▪ Support services are often ineffective.

Source: author's own research

7.5.2 Financial capital and physical capital

Most interviewees shared the view that rural policy measures had the potential to increase the financial capital of farm households and that this support was very helpful. For example, farm households with little financial capital can overcome financial barriers to income diversification through the support offered by rural policy measures. Chungnam #7 stated that:

“Rural policy measures helped a lot. It is challenging to do non-farm activity without government help. The money from the government helped our village. I think only a few villages could start community businesses without government support.”

Most interviewees felt that measures supporting the provision of both physical assets and support services were generally (if not always) helpful in enabling farm households to engage in non-farm activities, e.g.

“The government helped us to build a processing factory and to obtain some facilities for agro-processing. We can now produce our own processed products and sell them on the market. This would have been difficult if there was no government support.” (Gangwon #5)

In addition, the availability of financial capital helped when taking advantage of other opportunities. Farm households and villages that have participated in rural policy measures can increase their levels of financial capital which may improve their ability to participate in additional rural programmes. Gangwon #16 reported that:

“In Gangwon-do, there is a local government rural policy measure called the New Rural Village Construction programme to support village development. This gives prize money to villages from a competition. In our Myeon, four villages won the prize. When we participated in the GRVD programme, these four villages participated in an income project. The other villages had difficulty in participating in income projects because of financial constraints. Big money was required to participate in the income project. The four villages, which participated in the New Rural Village Construction programme, overcame financial barriers through their prize money [...]”

Some interviewees (e.g. Gangwon #15, Chungnam #7 and Gyeongnam #11) thought that marketing support for agricultural products and processed food was particularly helpful in increasing income. Without government support, farmers may have to use their own limited resources to market their products which, according to Gangwon #15, may not always be possible:

“With marketing support from the LID programme, we advertised our products on the metro and buses. The advertising was helpful. It would have been difficult to advertise our products without government support. The advertising was helpful to sales in both fresh produce and processed products and we could increase our household income.”

Other respondents (i.e. Gangwon #6, Chungnam #4 and #13) mentioned the benefits of improved physical capital, such as better processing facilities, as a result of support from rural policy measures. This allows farmers to participate in new non-farm activities or can improve their performance in existing activities. Many activities, such as agro-processing, require specific modern facilities or equipment that may otherwise be unaffordable. Gangwon #6 commented that:

“I had opportunities through the CIRP programme. I wanted to sell to the one of the big market chains. However, I could not because the condition of my facilities did not meet the big market's requirements. Now I can sell my products through the big market chain. This was possible with the new facilities and it was a huge benefit to me. As a result, I can sell more products and earn more

income.”

Again, improved physical capital can also open up future opportunities for involvement in non-farm activities.

7.5.3 Human capital

Most interviewees shared the view that a farm household could increase its levels of human capital, such as education and training, skills and experience, through participation in rural policy measures. Improved levels of human capital can permit farm households to participate in new non-farm activities and can increase their performance in existing activities. Most respondents mentioned that increasing their knowledge and experience will help to increase their capabilities and provide them with other opportunities in the future. Gangwon #10 commented that:

“Non-farm activities positively affected my capability. I think that my knowledge has increased through the LID programme. I had education and training that was related to non-farm activities. I feel more competent and I think my capability has increased.”

However, some interviewees (Gangwon #6, Gyeongnam #4, #5, #6 and #11) held the view that education and training through rural policy measures was not as helpful as they had expected. The training offered by support services does not always satisfy the needs of farm households. These respondents felt that the support offered by academics was not very helpful because the insights offered tended to be general rather than specific. In particular, some entrepreneurs felt that they had more knowledge of business practices than the consultants (e.g. academics) who were assisting them.

Some interviewees (i.e. Gangwon #5, Chungnam #7 & #8 and Gyeongnam #4 and #15) emphasised the commercial difficulties involved in agro-processing businesses. Although community businesses can produce agricultural processed products, many find it difficult to make a profit. In many cases, they did not succeed in finding a market for all of their products and it was argued that rural policy measures had not increased participants' human capital sufficiently to enable them to compete effectively in the market.

“I produced healthy food using local agricultural products. I got the support from the LID

programme and could produce the product. I think this is first such product in the world. However, there is problem in the marketing and there is no market for it. But, the cost of advertising it is too expensive. Thus, I am in very difficult situation.” (Gyeongnam #4)

Many interviewees raised concerns about market competitiveness and some suggested that limitations in human resources were a common reason for the failure of small agro-processing businesses in rural areas. These businesses have to compete with large companies but may be disadvantaged because they lack people with specialist knowledge of marketing, sales or R&D. Many interviewees felt that the support of rural policy measures is not sufficient to make community businesses competitive. As Gangwon #5 pointed out:

“I thought all we would have to do is to produce traditional alcohol using fruit. However, we have to market our products as well. However, marketing is difficult. I am trying to sell our products, but we are in a difficult situation because of sluggish economy.”

Gyeongnam #15 also commented that:

“I think companies have to be at least middle-sized to survive and compete in the market. Even agricultural cooperatives⁷², which have infrastructure such as marketing chains, have difficulties in competing in the market. It is difficult for a community business to succeed in the market because big businesses already have their market share. [...] We can make products with the help of rural policy measures, but marketing those products is difficult. We often see that community businesses which produce their own products stop operations because they cannot make a profit.”

In addition, there was a view among some respondents that it is difficult to educate or train older people to help them to adopt new skills and new ideas. Some interviewees thought education is helpful, while some interviews felt that it is helpful but not very effective:

“I had education and training that was related to rural policy measure. I expected education for business and training for making documents. However, they focused on the general education. I was a little disappointed. I think education and training should be changed to be more helpful and practical for community business.” (Chungnam #10)

One interviewee (Gyeongnam #13) mentioned that the education, such visiting successful

⁷² Agricultural cooperatives are established to increase farm production and to enhance farmers' economic and social position. The agricultural cooperative in South Korea has two main businesses, which are banking and marketing.

village or areas was helpful. The interviewee felt that he learned how to develop his village when he visited successful villages of GV programme. In contrast, one interviewee (Gyeongnam #11) thought that education and training is not very helpful for community businesses. He felt that education from visiting successful villages was slightly shallow and it was not always possible for old people to learn from the education and training.

A few interviewees (Gyeongnam #4, #5, #6, #7 and #8) mentioned that they could not actively participate in the planning of their community business. In particular, they did not participate actively in the elements of rural programmes related to support services (e.g. provision of education and training and providing expertise in areas like sales, advertising and marketing) and they felt that such services were less helpful than the provision of physical assets. Some farmers had difficulty in obtaining what they needed from rural policy measures, in particular, from support services. There were several reasons why they did not actively participate in planning their business. Local government officers often played a dominant role in the planning and implementation of support services, while farmers played a less active role. Also, some interviewees reported that the rules and requirements for support services were too strict to include what they needed. In addition, farmers did not always know about services such as education and training and often sought help from academics and consultants whose consultancy was sometimes less helpful. In particular, farm households in the CIRR programme had difficulty in accessing support services because of the lack of a coordinator. Furthermore, farmers often felt that consultation at the planning stage was often unhelpful in terms of obtaining the support that they needed and that they should play a greater role in the planning of rural policy measures which support their community businesses. This is reflected in the following:

“Local government tells us to apply to the rural programme. However, local government officers dominate the process of planning. Our local government officers told me not to be concerned about the cost of education and training, because they would manage it. We had only to prepare the documents that local government officers asked for. In particular, regarding support service, local government officers decided what they thought was needed. They did not try hard to support what we really needed. Support from the government was different from what we expected from rural programmes. Also, the rules are too strict to include what we want in the planning. In the implementation stage, we are disappointed because the support is not very helpful. [...] Local government officers may be specialists in policies. However, we are specialists in producing products. I think we have to play an important role in planning our project [supported by rural policy measures].” (Gyeongnam #6)

Access to support services may be associated with conditions that lead to problems for participants. For example, rural programmes may require community businesses to develop their own new brands and products, even though participants may already have their own products. Gangwon #3 stated that:

“Each business out of our four has its own product, but we have to make new brands and new products in order to be supported by the rural policy measure. In this view, the support from the rural policy measure was unhelpful and ineffective.”

Some interviewees claimed that government officers did not try hard enough to help them, and that they were only interested in whether or not money was spent according to rules and regulations. Farmers felt that the government officers seemed to avoid taking any responsibility regarding the implementation of rural policy measures rather than trying to help provide what participants really needed. For example, Gyeongnam #8 observed that bureaucratic processes around tendering made it hard for farmers to engage with local consultants or service providers, as these tended to be outbid by less suitable companies from the big cities, i.e.

“Consultation and marketing can be helpful if we can contract with a company which we can have long relationship with. However, it is difficult to engage a local company because it may be uncompetitive at public tender. Companies in Seoul or big cities only help us during the contract period. [...] It is difficult for us to have continuous relationships with those companies because we are remote from them and because big companies do not think of us as important customers. But we can build long-term relationships with local companies because they think us important. However, we cannot select a consultation company or a design service company because big companies in Seoul and big cities win at the public tender.”

One interviewee (Chungnam #7) emphasised the importance of identifying rural resources at the planning stage. However, identifying local resources is usually the responsibility of consultants commissioned by villages or associations and Chungnam #7 claimed that the work done by them is often relatively cursory and therefore not successful.

Several interviewees claimed that the coordinator⁷³ in their community business was not very helpful or less helpful than they expected. Frequent changes of coordinator in the GV programme are a major problem, and qualified coordinators are scarce in rural areas. However, some villages did not want a coordinator because coordinators were perceived as not being very helpful. Other respondents felt that the two coordinators in the LID programme were not helpful enough given the associated costs and wanted to invest the resources elsewhere.

The issue of investment in human resources was raised by several interviewees (Gangwon #3 and #12 and Gyeongnam #6) who were concerned about the long term sustainability of community businesses when government funding for coordinators, physical assets and support services runs out. If community businesses make enough profit, these businesses keep partnerships and could retain their coordinators, however, respondents reported several examples where a business had difficulty earning enough money to keep their coordinators once government support had ended.

7.5.4 Social and natural capital

Some interviewees (i.e. Gangwon #7, #8, #10, #11 and Gyeongnam #10) felt that the opportunity to participate in a community business had increased their social capital and that of their communities. For example, through involvement in a non-farm activity farm households can increase their social networks and combat isolation. Similarly, a new business, such as a tourism venture, can breathe new life into a small rural community, increasing social cohesion and building a new sense of community. Increased social capital and a greater sense of community may also help in taking advantage of other opportunities for involvement in non-farm activities.

In addition, increased social capital may lead to greater networking among households and facilitate the sharing of useful knowledge and information. Similarly, improved social networks can help farm households to gain more opportunities to sell their products.

A few interviewees (Gyeongnam #4, #5 and #6) agreed that participating in rural policy

⁷³ There is a coordinator each in the GV and GRVD programmes, while there are two coordinators in the LID programme. The government pays the salary of the coordinator, for a maximum of eight years in the GV programme and for 3-5 years during the implementation of the GRVD and LID programmes.

measures can positively influence the image of a community business. A relationship with the government, through participation in rural programmes, may be an advantage to community businesses if it increases public trust in their products.

By contrast, participants in community businesses have also experienced conflicts that could have a negative influence on their social capital. As mentioned earlier, Chungnam #7 argued that conflicts can result from the lack of distinction in the power relationships between members. These conflicts can erode social capital and damage the prospects of the enterprise.

In summary, rural policy measures influence a range of household assets, including human, financial, physical and social capital. Increasing households' assets can be one of the benefits of participating in rural policy measures. These increased assets can have a positive impact on the performance of community businesses. All four rural policy measures studied had a positive impact on capital, with some variations across programmes, e.g. the GV and GRVD programmes were found to have a greater impact on social capital than the LID and CIRR programmes. Table 7.2 summarises respondents' views on the impacts of rural policy measures on households' assets.

Table 7.2 Rural policy measures and their impacts on households' assets

	Financial and physical capital	Human capital	Social capital
GV programme	<ul style="list-style-type: none"> ▪ Small increase 	<ul style="list-style-type: none"> ▪ Increased through experience 	<ul style="list-style-type: none"> ▪ Large increase in social capital ▪ There is potential conflict between participants and non-participants.
GRVD programme	<ul style="list-style-type: none"> ▪ Large increase 	<ul style="list-style-type: none"> ▪ Increased through education and training 	<ul style="list-style-type: none"> ▪ Large increase in social capital ▪ There is potential conflict between participants and non-participants.
LID programme	<ul style="list-style-type: none"> ▪ Large increase 	<ul style="list-style-type: none"> ▪ Increased through education and training 	<ul style="list-style-type: none"> ▪ Increase in social capital ▪ Potential conflict
CIRR programme	<ul style="list-style-type: none"> ▪ Large increase 	<ul style="list-style-type: none"> ▪ Increased through education and training 	<ul style="list-style-type: none"> ▪ Increase in social capital ▪ Potential conflict

Source: author's own research

7.6 Rural Policy Measures and their Impacts on Farm Households

7.6.1 Rural policy measures and their impacts on farm households' incomes

Most interviewees shared the view that rural policy measures are helpful and that increased income is the most important benefit arising from the associated non-farm activities. While agreeing that their household income had increased following their participation in rural programmes, the majority of respondents had difficulty in estimating the magnitude of that increase. The impact on household income is complicated because community businesses are conducted in partnership and because there is a time lag in terms of income gains. Gyeongnam #1 commented that:

“We benefited from the CIRP programme. We could add value to our agricultural products and earn three times more revenue by agro-processing. Balsam pear was not well known to people. Rural policy measures helped to increase its recognition. Our production and sales of both fresh and processed products increased.”

Many farm households (i.e. Gangwon #2 and #9, Chungnam #1, #2 and #13, Gyeongnam #2, #10 and #12) mentioned that they had increased their non-farm income by a small, but helpful, amount. Older farmers thought the small addition to their incomes more significant because they do not need a lot of money to live on, whereas younger farmers were not as satisfied as their elders.

Some interviewees (i.e. Gangwon #6, #9, #14, #15, Chungnam #14 and Gyeongnam #1) commented that they could achieve a more stable income and sustainable livelihood strategy by participating in a community business. They considered non-farm income to be helpful because it is less variable within and between years than farm income. Non-farm activities such as food processing may help to stabilise the price of agricultural products on the market because farmers can reduce the supply of fresh agricultural products on the market and they can process surplus agricultural products. Gangwon #15 commented that:

“The price of pumpkins will increase by 10 per cent if there is a shortage of 10 per cent in supply. However, the price of pumpkins will decrease by 50 per cent if there is 10 per cent of oversupply in the market. We can stabilise the price of pumpkins by processing some of our pumpkins. We can sell processed food during the year.”

Several interviewees (i.e. Gangwon #3 and #12, Chungnam #7, #13 and #14 and Gyeongnam #3) commented that rural policy measures helped to increase both non-farm and farm income. Rural policy measures can influence farm income because many non-farm activities in rural areas are related to farming. For example, many farm households that participated in the GV programme had increased farm income through selling agricultural products to tourists. Thus, farm income and non-farm income can be positively related to each other. Farmers can add value through processing and achieve increased sales of their agricultural products.

The financial benefits that farm households obtain are related to their level of engagement in community businesses. Profit distribution in community businesses is mostly related to the financial investment of farm households. Higher financial investment leads to higher financial benefits. Meanwhile, higher waged employment may link to farmers' human capital and the performance of community businesses. Farmers with good knowledge, skills and health can more easily participate in community businesses as employees than farmers with poor human capital. If their businesses work well, they need more labour and participants can work more as employees such as coordinators or manual workers.

7.6.2 Rural policy measures and their impact on non-financial benefits

A few interviewees (Gangwon #7, #8 and #9 and Gyeongnam #10) held the view that rural policy measures also influence non-financial benefits such as quality of life. Although the four key rural policy measures do not have the explicit objective of increasing the quality of life of farmers, they thought that an increase in quality of life was one of the benefits of participating in a rural policy measure. Some thought that non-farm activities directly increased their quality of life (e.g. subjective quality of life, increasing personal satisfaction, social interaction and cohesion), while others thought that the increased non-farm income positively influenced quality of life because it enabled them to do things that they could not have done otherwise. Gangwon #9 mentioned that:

“My wife has taken part in many new social activities since participating in rural programmes. She went on several training courses. I feel that her life has changed. She did only household chores and farming with me before participating in a non-farm activity. However, she has earned money from non-farm activities, such as cleaning tourist accommodation. I feel that her quality of life has changed somewhat.”

Chungnam #14 thought that farmers who live lonely lives can obtain a sense of community by participating in non-farm activities. As a result of the rural policy measures they have more opportunities to meet people and in consequence can become more positive and active in their lives.

A few interviewees (Gangwon #6 and #12, Chungnam #3 and Gyeongnam #16) held the view that rural policy measures encouraged people to both live and work in rural areas. Rural policy measures can be incentives for people, in particular young people, to move into rural areas because of the job opportunities that they generate. Rural policy measures may help farmers to keep farming by helping farmers' non-farm activities and sustaining rural areas. In the opinion of Gangwon #12:

“I think young people have to move into rural areas. The coordinators in our community business came from Seoul, the capital city. I am in my 50s but I am a younger person in my village because there are no young people there. [...] The government does not think seriously about the shortage of young people in rural areas. I think rural tourism can be an incentive for young people to move into rural areas.”

Farm households obtained financial and non-financial benefits from rural policy measures. Many interviewees benefited from rural policy measures but they did not always continue to benefit once the support ended. Table 7.3 summarises the impact of rural policy measures on farm households.

Table 7.3 Impact of rural policy measures on farm households

	Financial benefits	Non-financial benefits
GV programme	<ul style="list-style-type: none"> ▪ Small increase in income ▪ Non-farm income (from tourism) ▪ Farm income (from sales of agricultural products) 	<ul style="list-style-type: none"> ▪ Community cohesion and the quality of life increased.
GRVD programme	<ul style="list-style-type: none"> ▪ Small increase in income ▪ Non-farm income (from processing or tourism) ▪ Farm income (from using agricultural products or sales of agricultural products) 	<ul style="list-style-type: none"> ▪ Community cohesion and the quality of life increased.
LID programme	<ul style="list-style-type: none"> ▪ Increase in income ▪ Non-farm income (from processing or tourism) ▪ Indirectly influences farm income (from using agricultural products and rural resources) 	<ul style="list-style-type: none"> ▪ Increased income influences quality of life indirectly.
CIRR programme	<ul style="list-style-type: none"> ▪ Increase in income ▪ Non-farm income (from processing or tourism) ▪ Indirectly influences farm income (from using agricultural products and rural resources) 	<ul style="list-style-type: none"> ▪ Increased income influences quality of life indirectly.

Source: author's own research

7.6.3 Similarities and differences of impacts across rural policy measures

Community businesses that are supported by the four rural policy measures are implemented by partnership. Thus, partnership and leadership in community business are important for good performance. If partnerships and leadership are good, the business may perform well. Meanwhile, if partnership is not good and conflicts are not solved, the performance of community business may be poorer. Partnership is often related to the type of organisation of the community business. If the organisation is operated by a one-person-one-vote system, there is higher chance of having difficulty in decision-making than when decision-making is based on the share of investment.

Partnership also influences the planning and implementation of rural policy measures. Well-designed plans based on partnership influences participants' motivation and willingness to participate in community business. Rural policy measures helped households to increase households' assets. However, there was ineffective implementation of support services, such as education and marketing. Local authorities often dominate in planning and implementing rural policy measures. Meanwhile, the rules related to rural programmes are too strict to include what participants need. In particular, human capital such as knowledge, skill, and ability on marketing and business are important for performance of community businesses. Community businesses need people with higher human capital for their success. If they did not already have or did not increase their human capital through rural policy measures, they would have difficulty in succeeding.

Social networks help community businesses. At the planning stage, social networks help increase participation and at the implementation stage, they help performance because trust can decrease transaction costs and have positive impacts for farm income.

Rural policy measures have a relatively small impact on household income. These measures helped farm households in the short-term but not necessarily over the long-term. If government support ends, many community businesses have difficulty sustaining their businesses.

Community business works best when partnership is good and when household and community assets are increased. In the GRVD programme, more farmers participate in the community business and the programme can help farm households to increase the capital that

they need for their community businesses. The LID and CIRR programmes can help increase farmers' incomes but fewer farmers participate in these programmes. These programmes are normally related to high risks on the market but community businesses may not sufficiently increase human capital to enable them to deal with those risks. These programmes also need to increase the capabilities of community businesses. Table 7.4 compares the influence in terms of implementation and increased assets of different rural policy measures.

Table 7.4 Summary of impact of rural policy measures

	Implementation	Increased assets
GV programme	<ul style="list-style-type: none"> ▪ Decision-making of one-person-one vote system is often ineffective. ▪ Community business is effectively planned because people do not invest money. 	<ul style="list-style-type: none"> ▪ Little increased financial and physical capital ▪ Highly increased social capital
GRVD programme	<ul style="list-style-type: none"> ▪ Decision-making is difficult because several villages participate. ▪ Conflicts happen easily because decision-making is mostly made by one-person-one-vote system. ▪ Relatively effectively planned ▪ Relatively less required financial capital 	<ul style="list-style-type: none"> ▪ Human capital increased by education and training ▪ Increased financial and physical capital ▪ Highly increased social capital
LID programme	<ul style="list-style-type: none"> ▪ Effective decision-making ▪ Two coordinators ▪ Support service is ineffectively planned. ▪ High financial barriers because of high match-funding required from participants 	<ul style="list-style-type: none"> ▪ Human capital increased by education ▪ Highly increased financial and physical capital ▪ Little increased social capital
CIRR programme	<ul style="list-style-type: none"> ▪ Effective decision-making ▪ Partnership is not good and support service can be relatively ineffective because this programme has no coordinator ▪ High financial barrier because of high match-funding required from participants 	<ul style="list-style-type: none"> ▪ Human capital increased by education ▪ Highly increased financial and physical capital ▪ Little increased social capital

Source: author's own research

7.6.4 Impact of rural policy measures across farm households

One interviewee reported that some farm households in his village had experienced large increases in income as a result of the GRVD programme. After participating in the GRVD programme, households in the village that specialised in rural tourism, increased their income by a factor of five. They held summer and winter festivals based around their natural landscape and other local resources using an innovative approach as described by Chungnam

#7:

“In winter, about 250,000 people visit our ‘ice festival’. Among these, 200,000 people were paying visitors. Our main income source is the entrance fee. We also increased income by selling the agricultural products of our own village and of nearby villages to the tourists. [...] We targeted companies in the cities, while many rural tourism villages focus on students as target customers. We rented our places and facilities to the companies which need training venues for short periods. In our village, we have 18 people who work in our community business. People aged over 65 have earned 25 million KRW in non-farm income a year.”

A coordinator in community business can come from an urban or rural background, but it is important for them to possess certain qualities and skills, e.g. computer literacy and administration. As Gangwon #7 commented, young people may offer some advantages as coordinators:

“There are many old people in my village. I was scouted as a coordinator for rural tourism in my village because I am young. I think old people may have difficulty in being employed as coordinators because our main customers in rural tourism are students in primary and secondary schools. The work as coordinator requires reasonable health. Also, coordinators have to deal with paperwork.”

Some interviewees suggested that Chairs in community business have more opportunities to benefit from participation because they have better access to information than other participants. However, several Chairs (e.g. Gangwon #13 and #16), in particular in the GV and GRVD programmes contradicted this, arguing that they did not benefit from rural policy measures because they had to spend so much time administering the community business. Gangwon #13’s experience is typical:

“Community business is good for people and our village. If it performs well, it will be helpful to me as well. However, it is a cost for me as an individual because I spend a lot of time on our community business [including meetings] and I spend less time on farming. I have to spend my own money e.g. for petrol and mobile bill, although it is related to work in community business. However, I am not well paid to do it because it is a kind of voluntary work.”

Three respondents (Gangwon #11, Chungnam #8, and Gyeongnam #13) suggested that not everyone can get the same benefits from non-farm activities promoted through rural policy measures. They felt that such activities could influence income inequality between farm households because wealthy farm households and wealthy areas may have more opportunities

to benefit from them. This participation increased household and village assets which in turn may provide more opportunities in the future, further widening the income gaps between some participating and non-participating households.

Three other interviewees (Gangwon #7 and #11 and Chungnam #7) mentioned that bad feeling could arise between participants and non-participants because not everyone can benefit from the programmes especially when match-funding from participants is required. This view was reflected in the following comment:

“Some farm households think of me negatively because I received government support although I am a newcomer in our village. However, they did not get support from the government although they had lived for a long time in the village. Actually, many farm households cannot afford to raise the match-funding because it is a very high burden.” (Gangwon #11)

The Korean government expects community businesses to be financially independent once government support ends. However, many community businesses have had difficulty in standing alone and working well. Some interviewees (i.e. Gangwon #14 and #15 and Gyeongnam #12 and #15) reported that their community businesses worked well during the period of government support but that additional help from the government would be useful to achieve longer-term sustainability. Gyeongnam #15 commented that:

“We participated in the LID programme. During the period of government support, the tourism business worked well. However, it performed less well after the support ended. I think other villages and community businesses are in a similar situation. I think the government needs to support us more.”

Gangwon #6 and #7, who had both returned to rural areas, reported that they could use their experience, education and training when participating in non-farm activities. These returners can play an important rural role as heads of the villages or Chairs of community businesses because they often have higher levels of human capital (e.g. youth, education) than members of other farm households.

Young people who have returned to farming in rural areas from the city may participate more actively in rural policy measures because they often have higher levels of human capital such as education, experience and knowledge of non-farm activities. The returners who have

experiences other than farming may also use their experience in a community business. Younger farmers take advantage of their human capital because they can more easily develop new skills and adapt to new activities. However, old people also participate in and benefit from non-farm activities that do not require high levels of human capital.

Many farm households have difficulty in undertaking non-farm activities because of barriers such as a lack of financial or human capital. Farmers with higher assets, such as financial and human capital, benefit more from government support because high levels of assets influence participation and the performance of their businesses. People with good information and social capital benefit more than other people. Household and community assets influence participation and performance of community business.

Farm type also influences participation in non-farm activities. Rice farms and horticulture farms have fewer opportunities to participate in non-farm activities. Other farms (e.g. fruits, vegetables, speciality crop) more commonly participate in non-farm activities and their agricultural products can be resources for rural tourism and agro-processing.

In particular, farmers with higher household assets have less difficulty in raising match-funding than other poorer smallholders. Rural policy measures (e.g. LID and CIRP programmes) that require higher match-funding may be more accessible to wealthy farmer or entrepreneurs because they have fewer financial barriers to overcome when participating in those programmes.

7.6.5 Impact of rural policy measures across regions

Most interviewees shared the view that the rural policy measures influenced not only individual farm households but also villages and regions. Villages that have participated in GV programmes have certain advantages when participating in other rural programmes, such as the GRVD programme, because the experience of participating in a rural policy measure can be strong point in their favour if their performance was good. Some villages may have more opportunities to benefit from rural policy measures because they have greater assets and resources which can then play a positive role in the funding decision.

Some interviewees mentioned that an improved image of the village positively influenced the rural economy. For example, Gangwon #14 and Chungnam #1 argued that the improved

image influenced not only rural tourism and agro-processing but also sales of agricultural products. Thus, rural policy measures influence the rural economy more broadly. The improved mood in the village also positively influenced farmers' lives in the long term.

Gyeongnam #2 and #11 thought that the location of the community business, especially proximity to big cities, can influence its performance, and that this is particularly important for tourism businesses. Regarding the GV programme, group tourists from primary and secondary schools, are a significant feature. They visit rural villages for educational purposes. Therefore, rural villages near to Seoul or big cities have an advantage as they are preferred because of time and costs:

“My village is located far away from Seoul. We advertised our village [which is supported by the GV programme] for three years at the rural tourism fair in Seoul. However, we have not received any groups of tourists from Seoul. People may want to have tourism services in nearby areas (Dos). I think that villages within one hour's travelling of a big city are good for rural tourism.”
(Gyeongnam #2)

Farmers in Gangwon-do and Chungcheongnam-do, which are near to Seoul, have more opportunities for rural tourism. Distance to Seoul and large cities influences the performance of rural tourism because proximity to cities is advantage in their businesses.

By contrast, interviewees have different opinions on the relationship between food processing and proximity to big cities. Some farmers mentioned that being near to cities was helpful to food processing, while other farmers stated there was no relationship between distance to cities and the success of food processing businesses. The three sampled Dos exhibited few differences in their agro-processing businesses and the benefits they received from related to rural policy measures.

Mountainous areas (i.e. Gangwon-do) have an advantage for rural tourism rather than agro-processing. Mountainous areas have an advantage in natural resources and landscape. Chungcheongnam-do which is near to Seoul has an advantage in rural tourism compared to Gyeongsangnam-do which is relatively remote from the capital.

7.7 Conclusions

This chapter has looked at the impacts of four rural policy measures on farm households and local communities. These policy measures offer households the opportunity to diversify into non-farm activities through their participation in a community business. Interviews with a selection of farmers identified a range of financial and non-financial benefits that households can gain from participation. They also identified a range of barriers to participation, notably the need in some cases for participants to provide some element of match-funding.

In terms of implementing these measures and running a successful community business, issues around partnership building and effective leadership were identified as significant challenges facing participants. Conflicts can arise from a variety of sources and must be tackled if some of the benefits of participation are not to be lost. While financial support to improve facilities or purchase equipment was welcomed, the effectiveness of the support services offered by the government was sometimes questioned by respondents, who had their own ideas about what might be most useful for their community businesses.

Impacts of rural policy measures on household and community assets influence the performance of community businesses. If partnership is good, the GRVD programme is most helpful to increase farmers' income and non-financial benefits. Some interviewees argued that rural policy measures may influence income inequality within rural areas because people with more assets have more opportunities for income diversification. However, there is insufficient information to prove that this is the case (as the study did not focus specifically on economic welfare). Similarly, wealthy villages and those located closer to large cities may have more opportunities to benefit from rural policy measures. Farmers who live in Gangwon-do and Chungcheongnam-do benefit more from the tourism businesses that are supported by rural policy measures than farmers in Gyeongsangnam-do which is relatively remote from Seoul.

The findings from this chapter and those from the two previous chapters are discussed in more detail in the next chapter.

Chapter 8: Discussion

This chapter focuses on the impacts of those rural policy measures (i.e. GV, GRVD, LID, CIRP programmes) that support community businesses in which individual farmers and farm households participate as members. Research questions a, b and c, have been answered to some degree in previous results chapters. In particular, this chapter answers research questions d-h through discussion. The chapter reviews the findings from chapters 5 to 7 using a framework of four over-arching questions that incorporate the research questions set out in Chapter 1. The four over-arching questions address respectively: (1) the benefits of income diversification for farmers in South Korea; (2) the determinants of and barriers to such income diversification; (3) the key features of policy measures that support farm income diversification; and (4) differential impacts of such policies across socio-economic groups.

8.1 What are the Benefits of Diversification of Income?

8.1.1 Financial benefits

Overall, this study revealed that, for most farmers, the financial benefits associated with undertaking non-farm activities were the main reason for income diversification. The finding was also confirmed by key informants. As Reardon (2006) points out, studies show that farm households generally diversify into non-farm activities to either increase or stabilise their income, and this study was no exception. Many Korean farm households that had experienced a decrease in farm income are now focusing on increasing household non-farm income through new activities, while others used these new income sources to maintain existing income levels.

The findings of this study regarding the increased levels of non-farm income and employment in farm households in South Korea, are consistent with the findings of Haggblade *et al.* (2010) in Africa, Asia, and South America. Haggblade *et al.* (2010) argued that non-farm activity is significant as it can provide a high proportion of farm household income and generate new employment opportunities, often with a low capital requirement. Their observations about income share and employment opportunities were confirmed in this study, though in some

cases non-farm activities promoted through policy measures (e.g. the LID and CIRR programmes) were found to require a significant amount of start-up capital. This proved to be an important constraint for some farm households in this study who found it difficult to participate in community businesses because they could not raise the required match-funding (See 8.2.1 for further discussion).

When compared to the LID and CIRR programmes, a greater number of farmers were found to have opportunities to increase non-farm income through the GV and GRVD programmes. This is because the latter tend to be less restrictive in terms of the financial or human capital required to participate in non-farm activities. Although community enterprises such as rural tourism and agro-processing under the GV and GRVD programmes are more inclusive, they tend to offer smaller returns to participants than the other two programmes. Some farm households and communities that participated in community businesses felt that rural policy measures were very helpful in increasing their incomes. Other respondents reported that their community businesses were less helpful in terms of income when they were in their early stages and profits were often reinvested in the business rather than distributed to participants.

Farm households must have appropriate assets (e.g. financial and human capital) in order to participate in non-farm activities. The required asset levels, however, may vary depending on the nature of the non-farm activities. For example, waged employment does not generally require financial assets but may require high levels of human capital. There is generally a correlation between the assets required and the level of return from non-farm activities. Thus, many low-return non-farm activities (e.g. manual labour in an agro-processing business) requires a low level of household assets, while high-return activities (e.g. running an agro-processing business) may require higher levels. These findings were also confirmed by key informants.

Farmers' involvement in community enterprises is influenced by their household assets and the performance of these enterprises. The financial benefits of such enterprises are generally related to how much participants can contribute both in terms of labour and their financial investment. If community businesses work well, then they will support more jobs both for investors and other villagers. Some jobs will be filled by those who have invested in the enterprise, while others will go to waged employees who possess appropriate skills and education.

As Reardon *et al.* (2000) suggest, strong links exist between non-farm activity and agriculture. Most non-farm activities that are promoted by rural policy measures in South Korea were shown to be linked to farming activities, with agro-processing and rural tourism found to be common community business enterprises in the studied areas. The former relies on raw agricultural products for processing, while the latter relies on the value of the agricultural landscape as the context for recreational activities for rural tourists. There was also found to be some complementarity between these activities, as the sales of some agricultural products increased through demand from rural tourists, as reported in both the farmer and key informant interviews. These observations on the links between agricultural and non-agricultural activities are consistent with those from several previous studies (e.g. Ellis, 1998; Reardon and Crawford, 1994; and Mattas *et al.*, 2008).

Rural policy measures that support income diversification can also support the viability of rural communities. Both farmers and key informants commented that these measures promote new enterprise development, which can be an important source of new job opportunities in rural areas where employment opportunities may be limited. Increased employment can help to sustain rural communities by encouraging young people to move into rural areas and by supporting the incomes of existing households.

8.1.2 Non-financial benefits

As well as offering financial benefits, policy measures can have an important influence on farm households' assets and livelihoods (Ashley and Hussein, 2000). Both farmers and key informants noted how income diversification with the help of rural policy measures could increase the households' non-financial assets, such as human, physical and social capital, which in turn may give farm households access to new opportunities. Income diversification can also increase the quality of life (e.g. subjective quality of life, personal satisfaction and social interaction, reducing loneliness) of farmers and enhance rural communities by increasing their social capital. These findings are consistent with those of Ellis (1998), DFID (1999), Ashley (2000), and Ashley and Hussein (2000) who all argued that individual farm households can improve their social networks and contribute to greater community cohesion through their participation in community businesses.

Some of the individuals interviewed in this study, particularly some of the female and older farmers, as well as some of the key informants, felt that the non-financial benefits associated

with farm-income diversification exceeded their financial benefits. These benefits may be generated more directly and in a shorter time (e.g. education and networks) than financial benefits which may take longer to be realised, especially when they come from the establishment of a new community enterprise which may take time to earn a profit and in any case such financial benefits may sometimes be small.

The findings of this study therefore suggest that farm households in South Korea can develop livelihood strategies based around income diversification through non-farm activities supported by rural policy measures, even when the financial benefits are relatively small. Income diversification can contribute to financial stability as the new sources of income allow farm households to reduce the possibility of income fluctuation. Hence, households that have more stable and secure incomes may experience an improved quality of life.

The findings from farmer and key informant interviews reveal contrasting views on the influence of partnership or community businesses (as a non-financial benefit of farm diversification) on rural communities. It is suggested that, in most cases, community businesses help to increase social capital and community cohesion through networking. However, in some cases, they were found to have a rather negative influence on rural communities. Such negative impacts were often associated with the conflicts (e.g. conflicts in planning and decision-making and from differential levels of support) that can occur when establishing a new community enterprise. These conflicts may result from perceptions about the unequal distribution of resources or benefits. If these conflicts are not resolved in a timely and effective manner, then the partnership may result in a loss of social cohesion and sense of community as well as smaller economic benefits. This is a confirmation of the findings of Ashley (2000) who argued that social changes following partnership or community businesses can be negative as well as positive. Although partnership can offer collective income and capacity building, ineffective partnership may aggravate existing conflicts within a community resulting in no development at all (Ashley, 2000).

While not offering large financial benefits the GV and GRVD programmes were often found to have a greater influence on increasing social capital than the LID and CIRR programmes. This reflects the emphasis placed by these programmes on village-based enterprises and community development.

8.2 What are the Barriers to Income Diversification and do Rural Policies Help to Overcome Them?

8.2.1 Financial capital

As mentioned earlier, lack of financial capital can be one of the most important barriers to income diversification, especially for poor farm households (Farrington *et al.*, 2002). Both farmer and key informant respondents reported that many farm households have difficulty in participating in non-farm activities because of financial constraints. This is a particular problem when rural policy measures require match-funding from individuals who want to participate in community enterprises. For example, farmers often found it difficult to participate in the LID and CIRR programmes because both require high levels of match-funding from participants. Hence, lack of financial capital remains the biggest constraint to participation in non-farm activities for poor farm households. This is consistent with Farrington *et al.*'s (2002) contention that the lack of financial capital is one of the most significant barriers blocking access to self-employment opportunities for poorer farm households.

There are some exceptions to this, and farmers (no matter their farm size) in South Korea can participate in some programmes with no (e.g. the GV programme) or little (e.g. the GRVD programme) match-funding. For example, some villages in the study were found to have overcome financial barriers by using the village's 'common money'. Villages that have 'common money' find it easier to develop community businesses than other villages.

In general, households with financial and human capital were found to have more opportunities to engage in community enterprises. This suggests that some rural policy measures have an uneven influence in increasing household assets through participation in such businesses. Wealthy households may enjoy the benefits of participation, while other households are less able to respond to attractive non-farm opportunities. This is consistent with the findings of Reardon (1999), Barrett *et al.* (2001), and Rahut and Micevska Scharf (2012). However, there may be differences between self-employment and waged employment participation. While self-employment in non-farm activities supported by rural policy measures often requires financial investment including match-funding, wage-employment does not require financial capital, however, other forms of capital such as human capital (e.g. skills and health) can be more important determinants of a farm household's ability to

generate non-farm income.

8.2.2 Agricultural land and physical capital

The area of land (owned or rented) available to farmers can influence their participation in non-farm activities because it has an impact on both their income and on the amount of time they have available to spend on non-farm activities. Reardon *et al.* (2006) argued that land can serve as collateral where credit markets function and thus can increase access to credit, which in turn can be used to invest in the physical capital needed for more remunerative non-farm activities. Alternatively, farmers who earn more income from their farmland may have less incentive to engage in income diversification activities. The findings from this study confirm that landholding can have a negative influence on participation in non-farm activities. Large-scale farmers (e.g. over five hectares) who invest a considerable amount of money and time on farming expect to make a living from this activity. However, farmers who have less land do not expect to enjoy a high income from farming and they are therefore more likely to participate in non-farm activities if the opportunity arises. In addition, across enterprise types, farmers who grow rice or engage in horticulture were found to be less likely to undertake non-farm activities because their enterprises are more labour or capital intensive and because these enterprises offer fewer opportunities for non-farm activities, such as agro-processing or farm tourism. Also, rice farmers may have less motivation for participation in non-farm activities because they receive subsidies from the government based on land area and rice production. Conversely, other farmers who grow speciality crop were observed to be involved in non-farm activities such as agro-processing and farm tourism. These observations were confirmed by key informants.

In a study of rural Peru, Escobal (2001) found that a more developed public infrastructure and a denser population decreased transactions costs and boosted investment in both the farm and non-farm sectors. This study found that a more developed local infrastructure was helpful to farmers wanting to participate in non-farm activities. For example, the existence of certain local facilities (e.g. agro-processing facilities) and public services (e.g. roads, electricity, and broadband) can support the development of a variety of non-farm activities (e.g. rural tourism) both at individual and community level.

According to Abdulai and Delgado (1999), location and geographical characteristics are among the most significant determinants of non-farm activities. Location in more agricultural

areas seems to have an impact on the likelihood of income diversification activities such as agro-processing. However, farm households in Dos with a high proportion of agricultural land have fewer incentives to participate in tourism, because they earn more income from farming or they have fewer opportunities to undertake other non-farm activities. By contrast, farm households in the Dos with less farmland have stronger incentives to engage in tourism activities because they need an income source other than farming. Measures that support tourism were seen to be more important to farm households in regions with lower areas of farmland. Also, people in mountainous areas benefit more from tourism than processing because tourists tend to find mountains more attractive destinations than farmland. In comparison, measures that support processing have more impact in areas with a large proportion of agricultural land. Also, agro-processing businesses work best when they are supported by a good infrastructure, such as access to roads or airports. Gyeongsangnam-do has better infrastructure than Gangwon-do in terms of access to roads and infrastructure and this benefits those farm households in that region engaged in processing businesses.

Non-farm activities related to tourism, such as those under the GV programme, are influenced by other location-related variables, such as distance to large cities, infrastructure and access to natural resources. While distance from Seoul or other large cities influences the success of tourism-related non-farm activities, it has less influence on the success of agro-processing activities. Distance to market for rural products was argued not to influence the performance of community businesses. With advances in transportation, traditional markets do not play such an important role in sales of agricultural products. These were reported by both farmers and key informants. Similarly, Canagarajah *et al.* (2001) demonstrated that in Ghana, remoteness alone may be insufficient to discourage non-farm activities and argued that overall regional infrastructure could be more important.

8.2.3 Human and social capital

Farmers reported that tangible assets, such as financial and physical capital are important factors that influence participation in agro-processing and rural tourism. However, they also mentioned that intangible assets, such as human capital, also play an important role. The importance of these different forms of capital was also reported by key informants. Farmers with higher levels of human capital can employ other assets more effectively than their less able neighbours. This is consistent with the findings of DFID (1999), which argued that human capital is important not only for its intrinsic value but also to make better use of other

types of asset.

High levels of human capital, such as education and training, experience and skills, were found to help farmers to diversify their income sources, as they aided the participation of farmers in a range of non-farm activities. These findings are consistent with those of Escobal (2001), Lanjouw (2001), Reardon (2001), Reardon *et al.* (2001) and Beyene (2008), who all argued that education is a key source of human capital for income diversification. However, farmers in this study had contrasting views on the importance of human capital for income diversification: some believed that not all employment that is related to rural policy measure requires a high level of human capital to participate. Many non-farm activities (e.g. physical work in agro-processing business) do not require high levels of skill or experience, though these tend to be linked to low-return activities such as manual labour. Insufficient human capital can, however, be an entry barrier to high-return non-farm activities, a view expressed by both farmers and key informants. Barrett *et al.* (2001), Escobal (2001), Janvry and Sadoulet (2001), Reardon *et al.* (2001) and Reardon *et al.*, (2006) have all similarly argued that non-farm employment that requires higher levels of human capital is generally linked to high-return activities. Key informants, however, argued that a community's combined human capital may be more important than that of any individual farm household in achieving the desired results of a community enterprise.

The findings presented in earlier chapters suggest that age also plays an important role in income diversification. For example, farmers over the age of 60 are more likely to participate in non-farm activities than younger farmers. This contradicts Abdulai and Delgado (1999) and Lanjouw *et al.* (2001) who found a negative relationship between a farmer's age and participation in non-farm activities. Younger farmers do not necessarily have more skills or better education than older farmers. Many rural young people in South Korea with high levels of skills and education have moved to cities, and perhaps those left behind have fewer skills than younger migrants. In addition, access to financial capital is important in providing opportunities to participate in some community enterprises supported by rural policy measures and this may be positively correlated with age. Also, bearing in mind the fact that farmers who participated in the online survey were all email users, the older farmers in the survey may actually have similar levels of human capital to the younger farmers. This finding also contradicts Hwang and Lee (2015) who argued that there is a negative relationship between age and participation in non-farm activities in rural Korea. By contrast, this study argues that other household assets such as financial capital are more important for

participation in non-farm activities.

Social capital is important for community businesses because it can lower transactions costs and reduce the risks of engaging in a rural community business (Reardon, 2006). Social capital also influences participation and performance in community businesses. The strength of social capital and social networks is important for the successful performance of non-farm activities (Meert *et al.*, 2005). Both farmers and key informants reported that conflict can be a barrier to farm households participating in a community business. Poor relationships among participants can give rise to further conflicts and have a negative impact on the performance of the business. If such conflicts are not resolved, then it is difficult for these businesses to thrive. This finding is consistent with those of Ashley (2000), Lanjouw *et al.* (2001) and Reardon *et al.* (2006) who all argued that social capital, such as social networks and trust, matter for non-farm opportunities and earnings.

8.2.4 Do rural policies help to overcome those barriers?

Both key informants and farmers were clear that rural policy measures which support the provision of physical assets and support services were effective in aiding farm households' diversification into non-farm activities. Most respondents commented that rural policy measures that aimed at boosting non-farm activities increased their household assets and helped to overcome some important barriers to participation in non-farm activities. This was a confirmation of the findings of Ashely and Hussein (2000) who argued that policies have a significant influence on household assets and livelihoods. Also, these findings are consistent with Haggblade *et al.*'s (2010) contention that policies need to remove existing economic and social barriers that limit entry by the poor into more financially rewarding non-farm activities.

This study has demonstrated that with the support of rural policy measures, some less affluent farm households can diversify into non-farm activities. However, many farm households cannot overcome the financial barriers to participating in some community enterprises because they cannot raise the required match-funding.

Rural policy measures can also help to increase human capital. Respondents in both farm households and key informant groups believed that education, training and consultancy advice delivered by rural policy measures increase farm households' human capital and help them to undertake certain non-farm activities including skilled employment and other activities that

offer a higher income than farming. Better skills also improve the collective performance of a community enterprise. These findings confirm those of Reardon *et al.* (2001) who argued that education determines participation and success in rural non-farm activities and incomes and that higher education levels are related to high-productivity and well-paid jobs.

There were contrasting views on supporting community enterprises rather than individual enterprises. The majority of key informants and farmers reported that community businesses can help overcome various barriers to income diversification with the help of other members and can achieve economies of scale and decrease production costs. In addition, some informants argued that the Korean government needs to support community enterprises rather than individual enterprises because support for individual farm households or enterprises can be seen as preferential treatment which can lead to jealousy and conflict among local actors. However, one key informant and several farmers presented a more negative view on policy support for community enterprises, arguing that community-based enterprises spend much of their time managing internal conflicts and noting the lack of business and other skills required for success among participants. These respondents argued that individual enterprises should also be supported through rural policy measures.

8.3 What are the Key Features of a Successful Policy Measure in South Korea?

Key informants suggested that very few community businesses succeeded and that many failed. The informants reported that only 10 per cent of the community businesses, which were supported by rural policy measures, were successful in earning income, while 90 per cent of community businesses did not survive or faced financial or other difficulties. This revealing information suggests that, while it is very hard for community businesses to survive, it is easy for them to fail. Regarding the reasons for the high failure rate of these enterprises, the key informants highlighted poorly prepared business plans and strategies, ineffective partnerships and a shortage of relevant assets (e.g. human capital).

Most of the farmers interviewed for this project participated in community enterprises which are supported by rural policy measures. As discussed in earlier chapters, some of these businesses worked well, while others did not. Both key informants and farmers reported some issues that influence the performance of community businesses. The important factors that influence the performance of community businesses are good partnership and leadership,

flexibility in the planning and implementation of the rural policy measures that support them, education and training, and implementing appropriate strategies for success.

8.3.1 Good partnership and leadership

Partnership and leadership can significantly influence the performance of a community business. The findings of the present study are consistent with those of Ashley (2000) who argued that poor partnerships engender or exacerbate conflicts and negatively influence the performance of a community business. Rural policy measures can increase social capital through supporting the formation of successful community enterprises that are based on cooperation and partnership. Such non-farm activities improve social capital as they can help to improve social cohesion, build trust and develop social networks in local communities. These findings were reported by both farmers and key informants. Findings from this study suggest that community businesses based around effective partnerships are likely to be more successful than those based around poor partnerships. Good partnerships need to build trust and cooperation between participants. However, effective partnerships do not happen automatically in the community businesses that are supported by the rural policy measures examined in this study. While partnerships were identified as being important factors in the success of enterprises across all programmes, partnerships formed under the GRVD and LID programmes seemed to work better than those of the GV and CIRR programmes because the support offered by the former provides better incentives for cooperation and reduces conflict. The CIRR programme was identified as having greater difficulties in terms of partnership formation because it does not have a coordinator and instead depends on the Chairs of the community businesses to take on that role.

Good partnership was argued to be dependent on good leadership that can reduce or resolve conflicts. Where leadership is less effective conflicts can arise and cooperation can be reduced leading to poorer performance. Individuals play their own roles in a community business but share common goals, so trust between members is important. Leaders play other important roles in community enterprises. Chairs of community enterprises have to take responsibility for various challenging and important tasks because the village may otherwise lack individuals with appropriate skills (e.g. marketing or business) and cannot afford to employ them. In addition, Chairs can influence participants' motivation and performance by providing an example of their commitment to the joint enterprise. If Chairs of community businesses put their own interests first, then other participants may follow their example and the business

could suffer as a result.

However, changes in leadership in community enterprises under the GV and GRVD programmes are not uncommon owing to their potential for conflict. Chairs may stand down when conflicts are not resolved as they have few incentives to remain in such a contentious position. Heads of villages, who serve a fixed term of two or three years, often become Chairs of community businesses in their villages. The need to replace a Chair can make a community business less effective because it takes time for the new Chair to become accustomed to the role (i.e. rebuilding lost capacity). Similarly, the loss of highly experienced Chair can lead to a reduction in the human or social capital available to a community business.

Decision-making in community enterprises in South Korea is often based on a one-person-one-vote system, and some decisions require the agreement of all members. When every member of the group has equal rights, the decision-making process can be protracted and in some cases this leads to decisions not being made in a timely manner. Such “horizontal relationships” also provide extra scope for conflict. In addition, the (hierarchical) Confucian culture of rural society in South Korea can further complicate decision-making because the views of older members are taken more seriously than those of their younger counterparts, and men have a stronger voice than women. Decision-making in enterprises supported under the GV and GRVD programmes is normally based on a one-person-one-vote system which can lead to conflict. By comparison, community businesses that are supported by the LID and CIRR programmes normally base decision-making on the share of investment made by participants and this tends to lead to fewer conflicts.

Therefore when Chairs of community businesses are relatively young, they can be overruled by their elders. Similarly, the views of a female Chair are taken less seriously than those of a man who has less business expertise or education. Such cultural hierarchies can be particularly influential in a one-person-one-vote system, where expert opinion may be ignored if it differs from that of an influential group of older or male members. To take better advantage of the expertise of its younger and female members, community enterprises in South Korea require a change of culture.

In some cases decision-making is based on the share of investment across members. Decisions in projects funded under the LID and CIRR programmes are often determined using this criterion. Whatever criteria underpin decision-making, it is important that participants see

it as fair and that it takes proper account of expertise rather than being dominated by hierarchies. Regulations about the governance of state-funded community enterprises might help to ensure that decision-making is fairer and more transparent but this alone will not change ingrained cultural attitudes. Such changes are likely to take longer to achieve and require the active support of outside agencies which could be brought in to work with community enterprises as part of the requirements of the funding programme.

The potential for conflict in community enterprises has been raised several times in the preceding discussion. Such conflict not only involves participants but can also arise between participants and non-participants. As well as poor leadership, perceived inequalities in the distribution of government support can be the cause of conflict. Although some level of conflict is inevitable in community enterprises, it is difficult for them to perform well unless they are resolved. Therefore as Ashley (2000) argued, programmes supported by rural policy measures will be more effective if they reduce the potential for conflict among participants. However, the rural policy measures studied in this project do not ensure 'good' partnership among participants and include no formal mechanisms for resolving conflict. The design of future programmes should take account of the need to reduce conflict by ensuring more effective leadership and partnership building and where necessary by providing external support to ensure better and fairer decision-making.

8.3.2 Flexibility in the planning and implementation of rural policy measures

Key informants reported that farmers often failed to properly prepare their business plans and strategies and that, as a result, many community businesses did not thrive. Any factors that hamper farmers when they are preparing plans and developing strategies need to be properly understood. Farmer interviews explored these constraints. The planning of rural policy measures is often dominated by local government officers, while farm households have little involvement in the process, even in terms of suggesting the support they would need when participating in a particular measure. It is therefore not surprising that farmers in the study often felt that they did not get what they needed from rural policy measures. This suggests that the design of rural policy measures could be improved if more stakeholders, including farmers, were encouraged to participate in the planning process. To encourage more grass roots participation, greater flexibility (e.g. rules and their application) in the planning and implementation of policy measures is needed. With greater flexibility in terms of participation, more farmers would be able to take an active role in the planning process and

therefore suggest what support they require to take advantage of the policy measures.

Local authorities play an important role in planning and implementing rural policy measures and, as suggested previously, the relationship between local government officers and farmers is crucial in encouraging the latter to participate more in the planning process. Improving communications between these two groups would help to improve these relationships and facilitate the identification of the most helpful policy support and delivery methods. At present, farmers perceive that local authorities are more concerned with monitoring their compliance with rules and regulations rather than in evaluating the impact and performance of policy measures. This concern over process begins in the application process where farmers concentrate on satisfying the requirements of the funder and taking the advice of local government officers and consultants in planning their enterprise, rather than on relying on their own expertise and experience. This can result in plans that farmers later view as being less than optimal.

Some rural policy measures allow community enterprises to use external consultancy services. Concerns about corruption mean that the associated tendering process excludes local firms from applying for these funds. While corruption is a real concern, many rural businesses genuinely wish to develop a long-term relationship with the consultant. This is likely to be easier to achieve with a local company rather than one from a more distant city. In addition, some farmers feel that they cannot obtain the same quality of support within the same budget from nationally-based consultants. Again, flexibility in implementation of processes needs to be applied to ensure that farmers obtain the support that they need.

8.3.3 Education and training

Both farmers and key informants reported that education and training are important for participants in community businesses. However, the majority of farmer respondents felt that much of the education and training available through rural policy measures was less helpful than they had expected, meaning that they sometimes did not obtain the training that they required.

To improve the performance of community enterprises, participants need to increase both household and community assets. In terms of the planning process, farmers need to decide what they want to do and how they can achieve it, while at the same time identifying their

current assets and any additional resources that they require to fulfil their objectives.

Support services, such as the education and training offered through rural policy measures, are important in increasing the capacity of rural communities and farm households. Improved skills and knowledge can help farmers to participate in non-farm activities and in the long term will make local communities more sustainable and less reliant on bringing in skills from outside. From the perspective of community enterprises, education and training sometimes need to be focused, e.g. delivering specific skills and knowledge related to marketing and business, or in support of tourism or agro-processing. In practice, however, communities have difficulty in obtaining such tailored education from rural policy measures.

This suggests that the consultancy and training offered by academics and specialists needs to be tailored to the needs of communities if it is to make the best possible contribution to the development of community enterprises. At the planning stage, participants need to be actively involved in the planning process of their community business. A useful first step would be to identify the required knowledge, skills and training and the most appropriate mechanisms for their delivery. While local academics can offer some assistance to community enterprises, more detailed knowledge may need to be obtained from specialists brought in from further afield. For cost reasons, some more specialist education and training might need to be delivered at a regional or even national level. Central and local government can help to identify appropriate educational providers who can offer training suitable for farmers across a wide range of ages and education levels. Local entrepreneurs may have more practical knowledge and experience in marketing and business than many academics and it may be that other informal mechanisms of knowledge exchange within and between communities can be designed to take advantage of their expertise. For example, farmers can learn about new approaches by visiting neighbouring villages that host successful community enterprises that provide examples of good practice in terms of partnership and organisation.

As suggested in the previous section, the involvement of farmers in the planning and implementation of education and training, alongside local and national authorities, is likely to result in the delivery of support services that are better suited to the needs of rural communities.

8.3.4 Strategies for successful community businesses

Community businesses need to make a profit to be sustainable. In order to implement their business strategies they need to identify gaps in their resources and then fill them, sometimes with the assistance of rural policy measures. Rural business enterprises have difficulty in competing with their larger urban counterparts, and in many cases, community businesses, such as agro-processing and rural tourism, do not operate all year round. In particular, rural tourism is seasonal, especially when it is based around agricultural activities. Seasonal enterprises often have difficulty in covering fixed costs and making a profit, and in these cases their strategy must be designed to make the most out of limited opportunities.

Agro-processing businesses which use regional agricultural products also face difficulties in being (price) competitive because the raw materials they use can be more expensive than those from other regions or imported from abroad. If community businesses do not use their own local raw materials, then they will have a limited impact on the local economy. Therefore rural policy measures that support agro-processing must also incentivise the use of local agricultural products.

Although community enterprises initially benefit from rural policy measures, these measures do not continue to offer support after a certain period. During implementation, community enterprises can benefit in a number of ways including advice, equipment, and other support services. Eventually the Korean government expects community businesses to be financially independent. However, many participants think that they need more help from the government and that government support should continue. For sustainable community business and rural policies, the neo-endogenous model of rural development (Ray, 2000) suggests that increasing local institutional capacity is important and that building human and social capital is a significant first step towards achieving this. Increasing institutional capacity helps to develop and implement measures that mobilise local resources and exploit external opportunities (Ray, 2000; Hubbard and Gorton, 2011). Without increased institution capital (e.g. human and social capital), community businesses may have difficulty in making profits and maintaining partnerships. Rural development programmes should therefore increase local institutional capacity so that they “*can both mobilise internal resources and cope with external forces acting on a region*” (Ward *et al.*, 2005, p. 5). Although many Korean rural policy measures since the mid-2000s helped to increase farmers’ human capital as well as their physical assets, their support for increasing human capital and local capacity needs to be

more effective. As identified previously, local capacity can be increased through education and training, as well as by increased local knowledge exchange and through utilising the expertise of external actors.

8.4 What are the Differential Impacts across Socio-economic Groups?

8.4.1 Differential impacts across socio-economic groups

Farm households with higher endowments, such as financial, human and social capital, may benefit more from rural policy measures than their counterparts. As reported earlier the ability to provide match-funding influences participation in some non-farm activities which provide opportunities for increasing income. Farm households with higher human and social capital benefit more from rural policy measures because they are better able to access and exploit the opportunities that these measures offer. Participation in rural policy measures increases household and community assets and those experiences open the way to further opportunities in the future. As a result, more affluent farm households have more opportunities to earn non-farm income, while farm households with lower assets may do not benefit from rural policy measures. Many farm households commented how they found it especially difficult to participate in non-farm activities because of the constraints of financial and human capital, a view endorsed by key informants. This is consistent with the findings of other studies (Escobal, 2001; Reardon *et al.*, 2001; Lay *et al.*, 2008; Haggblade *et al.*, 2010).

The impact of rural policy measures can be different if they lead to self- or waged employment. Non-farm self-employment tends to requires greater levels of financial and human capital than waged employment, though the latter provides opportunities for individuals who are less skilled or affluent. In general, asset-rich farm households have more opportunities to participate in high-return non-farm activities than farm households with lower levels of human and financial capital who are more likely to engage in low-return waged employment.

Older farmers may be satisfied with smaller increases to their incomes because their needs may be relatively modest, while younger farmers tend to be less satisfied with small returns. Younger farmers need additional income to support their families and may therefore invest more time and money in their community businesses. Generally, young people find it easier to

adapt and learn new skills (e.g. information technology) and this gives them advantages in participating in non-farm activities.

As suggested in section 8.2, rice farmers, horticulturists and farmers with large holdings of farmland were less likely to engage in non-farm activities because they could earn enough income from farming and they have less time available for non-farm activities. Farmers with smaller holdings tended to be more active in participating in non-farm activities.

Returners often play an important role in community businesses. They tend to have broader and more varied experiences than farmers who have remained in their villages and many are still relatively young when they return. They often become heads of villages or Chairs of community businesses because of their superior human capital. Their experience was found to be helpful to their community businesses.

Those individuals in leadership roles have opportunities to access useful information earlier than other villagers because they have more contact with local government officers. So, while they play a vital role in providing opportunities for non-farm activities in their communities, they also tend to benefit more from rural policy measures because of their advantages.

Alongside some differential impacts across socio-economic groups, there are similarities in impacts across farm households. For example, farmers across different age group and across different level of landholding held similar perspective on the financial impacts. This may be related to the fact that community businesses are implemented through partnership. As suggested in earlier chapters, the performance of community businesses is influenced by the community assets including their leaders' capabilities as well as those of individual farm households. When it comes to benefits of rural policy measures, whether or not farmers participate in non-farm activities that are supported by rural policy measures is important because the participation influences the distributional impacts of rural policy measures.

8.4.2 Are there inequalities?

Rural policy measures and the community businesses that they support may influence existing inequalities across farm households as noted both by farmers and key informants. Poorer farmers are less able to participate in some activities than their more prosperous neighbours who then have the opportunity to become even more prosperous. This is particularly apparent

when entry barriers to income diversification, such as the requirement for match-funding, exist. Similarly, high-return activities may be confined to more affluent households, while poorer households tend to participate in low-return activities which have fewer entry barriers. This finding is consistent with those of van de Walle and Cratty (2004) and Haggblade *et al.* (2010) who found that non-farm activities can contribute to economic growth but at the same time lead to further income inequalities.

Non-farm activities may therefore have a negative impact on rural inequality, especially where rural policy design does not consider the barriers to income diversification faced by less affluent farm households. This is consistent with Reardon *et al.*'s (2001) contention that non-farm employment and government support may not necessarily solve rural income inequality problems. These distributional problems need to be addressed by policy-makers, who need to lower the barriers to non-farm activities faced by poor farm households. Although income inequality cannot be solved by rural policy measures alone, it does need to be taken into account in policy design and implementation.

People who participate in community enterprises but are self-employed need to invest money at the inception stage of the business and the level of investment may then form the basis for any subsequent distribution of profits. The level of involvement in community enterprises for these shareholders is influenced by the availability of financial capital. If the community business works well, then higher investment will lead to higher returns. Meanwhile, participation as an employee in these businesses is dependent on individuals possessing the appropriate skills and knowledge. Farmers with less farm income may therefore still participate in community businesses as employees, though such jobs may attract relatively low wages.

8.5 Conclusions

This chapter has discussed a range of important issues based on findings from the empirical research. Many non-farm activities that are supported by Korean rural policy measures are based around community businesses and this study mainly focused on the impacts of rural policies that aim to support farm households to participate in such enterprises. By and large, farmers felt that the four rural policy measures studied were useful and helped them to participate in non-farm activities and increase their household incomes. However,

consideration of the findings outlined above suggests some to areas for improvement in these policy measures.

Implementation of rural policies influences the performance of community businesses. More grass roots involvement is needed in planning rural policy measures and the community enterprises that they support. When farm households do not actively participate in the planning process, support services work less well because they are less well-tailored to the needs of the community enterprises. The planning and implementation of rural policy measures therefore needs to be more flexible to ensure that rural policy measures are more fit for purpose.

In addition, barriers to income diversification, such as lack of financial and human capital need to be addressed by policy-makers. Rural policy measures need to help poor farm households to overcome these barriers to income diversification. Although match-funding from participants is necessary to increase responsibility and motivation, policy-makers also need to consider the financial barriers faced by many farm households. Similarly, additional support for increasing human capital influences participation and the performance of community businesses. This support needs to be well targeted to ensure that the necessary education and training are available.

Rural policy measures can therefore increase both household assets and income. Although many farm households only experience a small increase in income following their participation in these programmes, this increase does provide additional stability which is helpful to ensuring more sustainable livelihoods for farm households. The discussions in this chapter relate to community enterprises supported by rural policy measures. Some insights from the discussion may also apply to individual enterprises, but these need to be examined further by future studies. This study presents recommendations for policy design in the next chapter based on insights from the findings of previous chapters and the discussion presented here.

Chapter 9: Conclusions

Since the mid-2000s, the Korean government has implemented a range of rural policy measures which, among other things, have been designed to increase farm households' non-farm income and to support rural development through community businesses and other enterprises. This study has explored the impacts of these rural policy measures in terms of the financial and non-financial benefits that they generate, drawing on the views of key informants and members of farm households.

This chapter summarises the main findings of the study and presents proposals for improving rural policies and how they are implemented. Finally, the chapter discusses the study's limitations and outlines an agenda for further research.

9.1 Do Farmers Really Need Non-farm Income?

Korean farmers interviewed in this study reported that they need non-farm income in order to achieve a more sustainable livelihood. Following the expansion of agricultural market liberalisation, which gave other countries access to South Korea's internal markets, Korean farmers are now competing in a global market. As a consequence, many Korean farm households are experiencing a decrease in real farm income and it has become an increasingly common strategy for them to diversify their income sources by undertaking non-farm activities. Although the Korean government does offer farmers some subsidies, they have a limited ability to offer further support in the wake of international trading agreements. Farmers who cannot earn enough income from farming therefore need the additional income that non-farm activities can provide.

Members of farm households experiencing a decrease in farm income may have difficulty in finding alternative employment in cities because they have been farming for their whole lives and lack the skills relevant to these jobs. Waged employment in routine jobs may be available in rural areas but this may not offer sufficiently ample or secure remuneration to achieve a sustainable household income. Without the aid of appropriate policy measures, this study has shown that opportunities for higher return employment in rural areas may be few and far

between.

Most farmers in this study not only want to increase household income by diversifying into non-farm activities but also want to ensure that their incomes are more stable. Farm households can therefore develop a more sustainable livelihood strategy through the addition of income earned from non-farm activities, which may be less variable and seasonal than those based around agricultural enterprises. The majority of farmers in the study reported that they receive positive financial benefits from the government-supported community businesses that they are involved in.

Rural communities are also shown to receive non-financial benefits, such as increased community cohesion and better social networks, following the implementation of rural policy measures. In some cases, however, such measures, and the community-based enterprises that they support, may also lead to conflict and to an unequal distribution of the benefits associated with them. If those conflicts are not resolved, they may negatively influence rural communities and the local economy.

9.2 What Should Farmers Do to Maximise their Potential to Benefit from Non-farm Activities? What does Government Need to Do to Facilitate This?

Evidence from this study suggests that farm households may benefit from rural policy measures that support the formation of community businesses or that help to overcome barriers to their participation. In order to facilitate their participation in community enterprises, some farm households will, however, need to improve their skills or increase their asset base.

Participation in non-farm activities may require diverse household assets such as financial capital, labour, knowledge and skills. Lack of these assets can be a barrier to participation. Although rural policy measures may help farm households overcome those barriers, farm households must also make an effort to overcome them and increase their level of involvement. Farm households need to identify the barriers to participation in non-farm activities and the level of their involvement. They need to participate in planning rural policy measures actively to obtain the necessary household and community assets. In addition, policy-makers need to ensure that measures to reduce or meet these entry thresholds are incorporated in any new policies aimed at supporting farm household income diversification.

As farmers reported, flexible rules of support may help farmers to increase their household assets.

Considering the burden of match-funding, less affluent farm households may benefit less from rural policy measure than affluent farm households. Under various measures farm households can participate in community businesses as long as they can raise the necessary match-funding. Poor farm households and villages may need more help from the government to ensure that they have opportunities to participate in rural policy measures. As identified in chapter 7, some villages can use their 'common money' as match-funding for community businesses supported through the GRVD programme. Similar provisions in other measures may help more villagers to participate in community enterprises.

9.3 Is Policy Support an Effective Way of Helping Farmers' Non-farm Activities?

Farmers reported that rural policy measures provide them with opportunities to improve their household assets and capabilities. This may in turn influence their participation in community enterprises and the income that they earn from them. Although policy support alone is not sufficient to increase farmers' non-farm incomes, the rural policy measures investigated in this study (i.e. the GV, GRVD, LID and CIRR programmes) were all shown to have the ability to enhance both farm household income and household assets. Korean rural policy measures may provide physical assets and support services which are helpful to increase household and community assets. However, farmers reported that the provision of support services from rural policy measures is generally less helpful than a corresponding increase in physical assets or local infrastructure. Farmers reported that support services were less helpful to them than the acquisition of physical assets.

Farmers often do not get what they need from support services because the rules of support are strict and local government officers dominate the planning and implementation of these services. Also, many farmers cannot actively participate in planning rural policy measures because they lack the necessary skills or opportunities. Greater flexibility in planning and implementing rural policy measures is required to increase their effectiveness.

Through the assistance offered by rural policy measures, farmers can overcome diverse barriers to participation in non-farm activities or community businesses, including the lack of

financial capital, skills, knowledge, information and infrastructure. Some farm households, however, cannot overcome obstacles such as the financial barriers erected by the requirement for participants in some programmes to provide match-funding. Where policy measures result in increased assets, such as facilities, experience and knowledge, these may provide further opportunities to participate in non-farm activities in the future.

Such policy measures have been shown to be effective in helping some farm households to overcome barriers to income diversification by helping them to participate in community businesses. Policy-makers designing such measures need to take into account the barriers to participation, such as the lack of financial or human capital, which limit the scope for farm households to diversify into non-farm activities. If these issues are not considered in policy design, then the opportunities provided by rural policy measures may offer little or no help to the most vulnerable groups in rural areas.

Good partnership and leadership are important for the performance of community businesses. Such businesses operate through partnership and where successful this can increase social capital. However, the current implementation of rural policy measures does not guarantee good leadership or effective partnership in community enterprises and more work may need to be done to increase the capacity of rural communities to operate these businesses effectively.

While farmers reported that rural policy measures are normally helpful when setting up a community enterprise, their experiences suggested that these businesses may not work so well once government support ends. This suggests that rural policy measures are not always effective in helping community businesses to be financially independent.

9.4 What do Non-farm Activities Mean for Rural Areas?

In terms of individual farm households, it has been shown that non-farm activities can be an important income source and can support the achievement of a more sustainable livelihood. This improvement to household incomes can also have a positive impact on ensuring the future of small rural communities that might otherwise be threatened by out-migration. Thus, some households who may otherwise have had to give up farming and move out of the area may stay on the land and continue to contribute to their local communities. In addition, non-farm activities may encourage city people to move to rural areas and add their skills to the

community asset base.

In community enterprises, both farmers and non-farmers, farm activities and non-farm activities, are linked and influence each other. In many cases, agro-processing and rural tourism are based around local agricultural enterprises and demonstrate the positive multiplier effect of government support for non-farm activities. Natural resources and agricultural products are important assets that help the competitiveness of many community businesses. Non-farm activities can therefore positively influence farm activities, rural communities and rural economies.

For sustainable rural development, local people in rural areas need to increase their human capital and develop their local resources. In particular, non-farm activities need to be linked to other activities and people beyond farming and rural areas. In many rural areas of South Korea, farmers and rural communities need to improve their assets and capabilities through their interactions with local and external actors and rural policy measures can form the basis of these activities.

9.5 What Sort of Policies Work Best and Why? Recommendations for Future Policy Design

Farmers reported diverse views on the effectiveness of the rural policy measures in which they participated. For each of the four rural policy measures investigated, some farmers mentioned that they had a beneficial impact on non-farm incomes. Some rural policy measures were found to be more helpful than others and each has its own advantages and disadvantages. In terms of financial benefits, if the performance of community businesses works well, then the GRVD and LID programmes were found to be more helpful than the GV and CIRR programmes. More farmers were found to have opportunities to increase non-farm income through the GV and GRVD programmes compared to the LID and CIRR programmes. Although community enterprises under the GV and GRVD programmes are more inclusive, they tend to offer smaller returns to participants than the other two programmes because they are based on smaller investments. However, the GV and GRVD programmes were found to have a greater influence on increasing social capital than the LID and CIRR programmes. Overall, the four rural development programmes studied in this thesis should be retained because, when they work well, they are helpful in increasing farm household income and have

a positive influence on developing household and community assets.

Along with differences across rural policy measures, there were some common factors across rural policy measures that influenced the performance of community enterprises. In community businesses, partnership and leadership substantially influence performance. Without good partnership and leadership, it is difficult to obtain good results. Conflicts between participants and between participants and non-participants may prevent the formation of effective partnerships and also make decision-making more protracted, all of which negatively influences performance. However, the rural policy measures studied in this project do not ensure good partnership among participants because they have no formal mechanisms for resolving conflict. Rural policies need to take account of resolving conflicts through effective leadership and partnership building.

In particular, conflicts happen more frequently when decision-making is based on one-person-one-vote, rather than a system based on participants' levels of investment in the community business. Furthermore, the hierarchical Confucian culture prevalent in rural Korea can mean that in some enterprises age and gender take precedence over expertise in the decision-making process. Policy measures should be designed to incorporate governance structures that enable participants in community enterprises to overcome these unhelpful cultural barriers. Whatever criteria underpin decision-making, it is essential that participants agree that they are fair and based on objective criteria rather than hidden cultural priorities such as age or status. Regulations about the governance of state-funded community enterprises might help to ensure that decision-making is fairer and more transparent. However, any change to such an ingrained cultural attitude is likely to take a long time to achieve and will require the active support of outside agencies that can be brought in to work with community businesses as part of the requirements of the funding programmes.

Key informants reported that, following the introduction of the Block Grant System in 2010, local authorities have flexibility in planning and implementing policy measures. Farmers, however, reported that further flexibility in planning and implementation is required to make rural policy measures more effective. Greater flexibility can ensure farmers' more active participation in planning community businesses. Farm households need to take an active role in planning rural policy measures, alongside policy-makers and other specialists. It is difficult for farm households to get what they need from rural policy measures if they have little involvement in the process of planning and implementation. Farmers' active participation in

planning rural policy measures helps to overcome barriers to participation and may increase the level of their involvement in community businesses and their resulting benefits. Local authorities need to encourage more grass-roots participation by allowing greater flexibility in the design and application of rural policy measures.

Support services, such as the education and training provided through rural policy measures, are important as a means of increasing the capacity of communities and farm households. Increased human capital is argued to be important in helping farm households and local communities to be more sustainable in the long term. Farmers and key informants all reported that the support services provided by rural policy measures need to be improved. In particular, the consultancy and training offered by academics and specialists needs to be tailored to the needs of communities in order to make the best possible contribution to the development of community businesses. A useful first step would be to identify the knowledge, skills and training required, as well as the most appropriate mechanisms for their delivery. For example, local entrepreneurs may have more relevant practical knowledge and experience in a particular enterprise than an outside expert. Knowledge exchange and sharing within and between communities can be designed to take advantage of this local expertise; for example, farmers can learn about new approaches by visiting neighbouring villages that host successful community enterprises.

The financial returns generated by rural policy measures are influenced by the level of engagement that farm households have in their community businesses. Overall, financial and human capital exert the greatest influence on farm households' participation in community enterprises, either as employees or self-employed shareholders. To maximise the benefits of these enterprises across rural communities, policy-makers need to address barriers to participation and to encourage greater involvement by farmers.

As well as supporting community enterprises, policy-makers should begin to take greater account of the need to support individual enterprises as a means of increasing farm household income. As suggested by some key informants and farmers, individual enterprises can work as well as community businesses. These small businesses may avoid some of the problems associated with community enterprises, though they are far more limited in scope and offer returns to a single household rather than to many.

9.6 How Future Policy Measures Can Support the Non-farm Activities of Farmers

This section proposes some improvements in policy design based on the recommendations made in previous sections and reflects the observation made by some key informants that only a small percentage of community enterprises succeed, while the majority fail or are less successful than expected. Policy-makers therefore need to improve policy design in order to eliminate weaknesses that may discourage farmers' participation in community enterprises or negatively influence their performance. Particular concerns include engaging farmers with policy measures, the governance and leadership of community enterprises and capacity building to support rural livelihoods.

Based on a bottom-up approach, local people and local authorities can and should play an important role in the planning and implementation of rural policy measures. This study suggests that capacity building is one of the most important requirements to support the development of community businesses and that this should be a priority. As part of the capacity building process, communities should be encouraged to engage in a preliminary period of planning and reflection that will enable them to identify their strengths and weakness and to assess how these can best be addressed through the support offered by rural policy measures. Existing measures to increase human capital and capacity of farm households and communities have been found to fall short of expectations. This study suggests the need for a new Capacity Building programme tailored to the needs of rural communities wishing to develop new community enterprises and reflecting their existing levels of education and experience. This programme should be implemented at the early stage of community businesses development (before planning and implementing rural policy measures) and should then be rolled out across all policies which relate to the Budget for the Special Account of Regional and Local Development in South Korea.

The resulting programme should be co-designed by community actors, policy-makers and education providers and among other things should provide a forum for the exchange of knowledge and expertise between villagers, local farmers and established rural entrepreneurs with experience in the design and management of successful rural businesses. The government (i.e. MAFRA) will need to provide coordination with educational providers at national and local levels but local people and communities should be consulted on the design and delivery of training to ensure that it is fit for purpose.

In particular, rural communities need to develop relationships with diverse external actors (e.g. academics, consultants, and specialists) who can provide expertise and support the development of capacity within community enterprises. Policy-makers can encourage external specialists to become involved with rural community businesses through appropriate funding measures (e.g. to fund visits and workshop events).

Alongside recommending capacity building for participants in rural policy measures, this study also proposes supporting capacity building for potential participants and communities with poor assets to help their future participation in rural policies. The government needs to provide communities, which have low levels of assets, with opportunities to enhance their capacity through education and consultancy. This support can help communities identify their strengths, weakness and barriers to participation in non-farm activities. Communities will have access to appropriate information about rural policy measures which they may apply for. Communities need to develop strategies to overcome their barriers (e.g. financial constraints).

The government also needs to encourage more local people's involvement in community businesses. Some poor people may overcome financial constraints through using their villages' 'common money' or through some form of investment in kind. Other farmers may participate in community businesses as a result of their investment of agricultural products.

Central government needs to set and apply minimum prohibited lists of activities that rural policy measures should not support. The guidelines from central government need to be clear, so that local government officers can apply them consistently.

Policy-makers need to encourage community enterprises to be transparent and fair in their management practices (e.g. spending budget and profits) in order to help maintain partnerships and reduce conflict. Communities therefore need to share relevant financial information between participants following appropriate training.

In addition, greater status and support needs to be given to the coordinator in rural enterprise development. This is a key developmental role requiring a one or two individuals to work with local and external actors to develop the framework to implement the new enterprise. These individuals would need specialist training and would be expected to play a key part in

working with the community to identify the appropriate level of support that they require.

Table 9.1 summarises policy recommendations and proposals for policy design.

Table 9.1 Policy recommendations and proposals for policy design

Key concerns	Policy recommendations	Proposals for policy design
Participation	<ul style="list-style-type: none"> ▪ More inclusive ▪ Greater level of involvement ▪ Reduce barriers to participation ▪ Greater flexibility in policy design 	<ul style="list-style-type: none"> ▪ Capacity Building programme needs to be implemented prior to and in parallel with enterprise development. <ul style="list-style-type: none"> - People (communities) are informed about rural policy measures and develop strategies for business. Also, analysing strong points (assets) and weak points which should be improved through rural policy measures. - With the same or a small increase in budget
Governance	<ul style="list-style-type: none"> ▪ Deliver more effective decision-making ▪ Enhance partnerships ▪ Reduce and resolve conflicts ▪ Improve status of coordinator role ▪ Overcome hierarchical Confucian culture 	<ul style="list-style-type: none"> ▪ Capacity building for potential participants <ul style="list-style-type: none"> - The government needs to support (e.g. through education and consultancy) communities to identify their strengths, weakness (barriers to starting community businesses). - With additional budget
Capacity & performance	<ul style="list-style-type: none"> ▪ Provide more tailored education, training and consultancy support ▪ Improve interaction with external actors ▪ Improve business planning ▪ Increase local assets (including institutional assets) ▪ Identify more appropriate support and delivery mechanisms 	<ul style="list-style-type: none"> ▪ Tailored education and training (support services) and choosing delivery methods <ul style="list-style-type: none"> - Central government and local authorities provide or match appropriate education providers (including other governmental organisations or private ones) to provide tailored education - Communities need to choose the delivery methods, e.g. training, knowledge exchange or sharing of best practice. - With the same budget (change of delivery methods) ▪ Interaction with external actors <ul style="list-style-type: none"> - External actors (e.g. academics and specialists) need to be involved in programmes (e.g. funding visits, workshop or consultancy) - With the same or a small increase in budget ▪ Communities are encouraged to have more involvement. <ul style="list-style-type: none"> - Investment in kind and villages' common money can be employed as match-funding. ▪ Flexibility in planning and implementation <ul style="list-style-type: none"> - Local government officers need to be consulted. ▪ Greater status and support needs to be given to the coordinator of the rural enterprise <ul style="list-style-type: none"> - Providing specialist training

The research findings of this study lead to significant recommendations for policy-makers - in particular, covering issues of participation, governance and capacity building, with the aim of increasing the effectiveness of rural policy measures.

Issues which this study found to be significant and influential in increasing the rural policy effectiveness include the scale of governance (vertical and horizontal integration), social capital as a tool for rural development and gender relations and cultural contexts for rural development. The findings of this research contribute to our knowledge of non-farm income and its link to rural development policies.

9.7 Critiques of this Research and Agenda for Further Research

All research projects have their limitations, and this study is no exception. This study employed convenience sampling in the survey of Chapter 5 so that it is difficult to generalize the results to the total population of Korean farmers. However, the exploratory online survey helped to provide useful information about non-farm activities and the impacts of rural policy measures as well as helping in the design of the subsequent in-depth interviews with farmers.

Regarding the impacts of rural policy measures, this study focused on short- and medium-term impacts. Some community businesses described by respondents are in the process of implementation and others have recently lost government support. However, it may take time for rural policy measures to have an impact on farm households' assets and incomes. Financial benefits may take longer to be realised, especially when they come from the establishment of a new community enterprise that may take time to grow and develop. Studies on evaluating the long-term impacts of policy measures using longitudinal analysis would help provide a more detailed understating of the impacts of rural policies.

This study therefore suggests that further research is required on the long-term impacts of community businesses (e.g. survival rate after 5 years) that are supported by rural policy measures. How do successful enterprises manage their partnerships and how have they dealt with leadership and coordination and the management of conflict? Community businesses need to be investigated from a long-term perspective because rural policy measures aim to enable community businesses to be financially independent. Policy-makers need to identify whether rural policy measures help to develop sustainable community enterprises or only

provide support for short-term success which then fades as funding is withdrawn.

Although this study has explored the impacts of rural policy measures on farm households, a fuller evaluation of the success of community enterprises supported by rural development measures is required. The extent to which different rural policy measures succeed in meeting their objectives also needs to be studied further. Similarly the broader policy priorities underpinning the different rural policy measures adopted in South Korea, need to be considered in more detail to understand how they interact with the objective of diversifying farm household income sources. Studying the impacts of rural policies from both short and long-term perspectives (e.g. success rate and survival rate) may help policy-makers to decide whether or not to continue with or to improve particular policy measures.

As discussed earlier, the potential for policy measures to support individual enterprises is also of interest and the advantages and disadvantages of both types of support could be explored in future studies. Whether or not promoting community businesses is the only effective way of helping farm households to increase their incomes also needs to be studied further. A particular question of interest is once government support ends, do participants have the same motivation to continue with their community enterprises? Similarly, do the non-financial benefits associated with these enterprises, such as better community cohesion and social networks, persist if the enterprise ends? Other important research questions can be framed around the formation of future government policies for the support of farm households and rural communities and the effectiveness of various measures for delivering particular outcomes.

Appendices

Appendix A: Survey Questionnaire to Farmers

1. Where do you live? Please fill in the Do (province) where you live among nine Dos.

I live in () Do.

2. Which rural policy helps you to increase non-farm income in your area (Do)? If you are not directly related to non-farm activity, please answer your understanding based on your neighbours. Please fill in the important rural policy in order based on following policy lists: Green tour Village programme, Agricultural Industry Complex, Tourist Farm, Rural Homestay business, Rural Special Production Complex, Traditional food, Agricultural Processing, Rural Festival, Others

1st(), 2nd(), 3rd(), 4th(), 5th()

3. What is your non-farm income in your total household income?

Non-farm accounts for () % of my total household's income.

4. What is your highest non-farm activity in your non-farm income?

()

5. Could you suggest any idea to increase non-farm income, if you have?

()

A1. What is your main farm type?

- Rice
- Fruit
- Field vegetables
- Livestock
- Controlled horticulture
- Specialty crop
- Others

A2. What is your age?

- Less than 50
- 50-59
- 60-69
- More than 69

Appendix B: Key Informant Interview Guide

1. Importance of non-farm activity

- Is non-farm activity important for farm households? And why?
- How does non-farm activity contribute to the broader rural economy and communities in your view?

2. Necessity of rural policies

- Does the government need to support the non-farm activity of farm households? And why?
- Do rural policies explicitly target non-farm income of farm households? If so, why do they do this? Who decide to support non-farm activities of farm households? Who designs the policies?
- How are rural policies designed to help farmers diversify their incomes through non-farm activities? In what ways do the successful policies work?
- Which rural policies support non-farm activities for farm households? And how?
- Which rural policies that should be helpful offer less support for non-farm activities of farm households, if any? And why?

3. Determinants /Motivation of non-farm activity

- What are the main determinants of non-farm activity of farm households in your view? (What makes farm households diversify into non-farm activity?)
- Do you know any barriers preventing farm households from diversifying into non-farm activity? If so, what are they? Are they different for different groups of farm households or farmers?

4. Benefits of non-farm activity

- What is the most important benefit from non-farm activity to a farm household?
- How does government support for non-farm activities help to increase farm households' well-being? Give evidence of evaluation of the impacts of policy on farm household.
- Give examples of how different policies have helped to increase non-farm income or improve quality of life for farmers and farm households.

5. Impacts of rural policy

- How do rural development policies influence the income, employment, and quality of life of farm households?
- Are these impacts different according to income level, farm type and employment type? Is there evidence that not all farm households benefit in the same way from these policies?
- Do some policies favour farm households with higher incomes?
- Is there any evidence that these policies have different impacts on farm household income depending on the location and characteristics of the farm household, e.g. if it is in a remote area, or an area more dependent on agriculture, or for different types of farm?

6. Inequality

- Do you think that there are inequalities between farm households and non-farm households in both rural and urban areas?
- If yes, do these rural development policies help to close the gap between farm and non-farm in both rural and urban incomes? What is the evidence to support this?

7. Other contribution

- How does non-farm activity contribute to the rural economy in general?
- Does it have any positive or negative impact on other rural sectors?

8. And, finally

- Do you think there is anything wrong with the current policies for promoting non-farm activities among farmers?
- If you could make one change to the current policies for promoting non-farm activities among farmers, what would it be?
- Would you like to add anything else?

Appendix C: In-depth Interview Guide

1. Basic Information

- Collect information about the household:
What is their current farm type and activity? etc.

2. Non-Farm Activity (NFA)

- What do they think NFAs are?
- Which NFAs does your household engage in?
- Who in your household is involved with NFAs?
- When did you start engaging in NFAs?
- Why did you start?
- Did anyone assist you in starting on their NFAs?
- How?
- How important are NFAs to your household?
- Do your NFAs require your participation in another group, e.g. agricultural corporation associations, agricultural corporation company
- Will you keep engaging in these NFAs? If not they why/when might you stop?

3. The Impacts of Rural Policy (RP)

- Does your households benefit from an RP measure designed to help NFAs?
Prompt using examples
- Which NFAs do these policy measures help with and how?
- Would your household engage in the NFAs without this support?
- If no, why not? If yes, please explain how they help, e.g. training, education, financing, infra
- Do any other groups/organizations help with your NFAs?

4. The Impacts of NFAs

- What are the main benefits of the NFAs you engage in that are linked to the RP measures?
- How have the NFAs changed things for your household?
- What impact have they had on your household income?
- Approx. What proportion of your household income attributable to non-farm activities?
- Have you needed any co-financing to achieve these income gains? Explain
- Have they resulted in new opportunities for anyone in your household that would otherwise have not existed? What and for who?
- Has this resulted in you changing any of your other activities? What and why?
- Are there any drawbacks, if any?
- More broadly have these measures had an impact on your village/community?

5. Differential Impacts

- Does your location affect your ability to earn money from NFAs? How?
- Have the RP measures we have been talking about made any difference to this?
- Does the size or type of farm affect your ability to earn money from NFAs? How?

6. And finally,

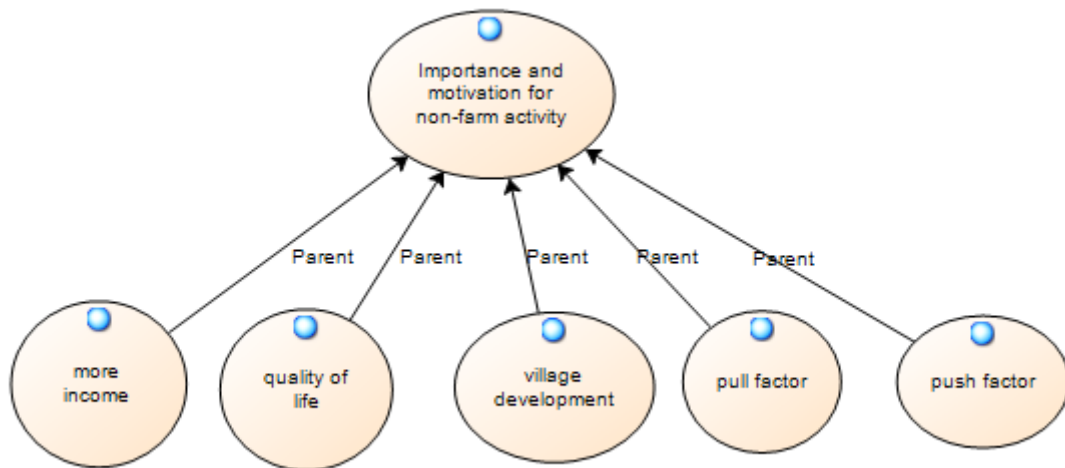
- Do you have any other policy measure that you participate in?
- Could you suggest any other ways in which the Government could help to improve your income from non-farming activities either through these measures or in any other ways?
- Some information: income vs. non-farm income

Total income	$I \leq 1000$	$1000 < I \leq 3000$	$3000 < I \leq 5000$	$5000 < I \leq 7000$	$7000 \leq I$
Non-farm income	$I \leq 500$	$500 < I \leq 1000$	$1000 < I \leq 3000$	$3000 < I \leq 5000$	$5000 \leq I$

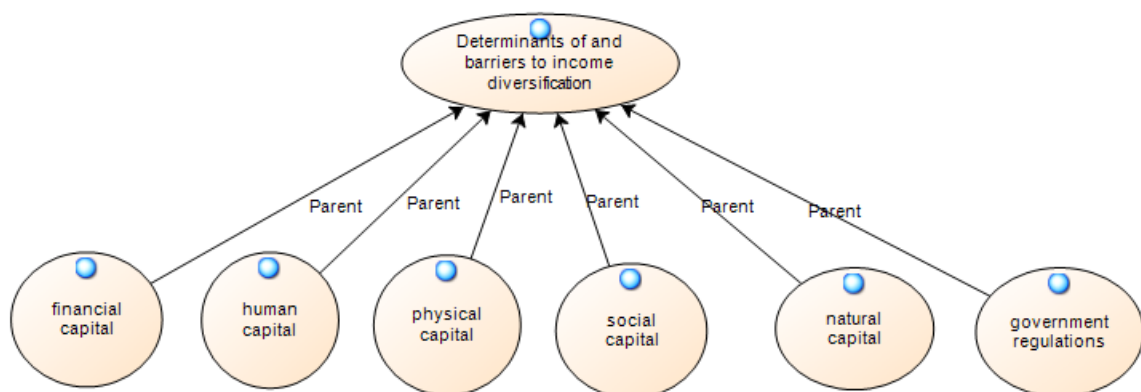
- Do you have anything that you would like to add more?

Appendix D: Themes and Subthemes

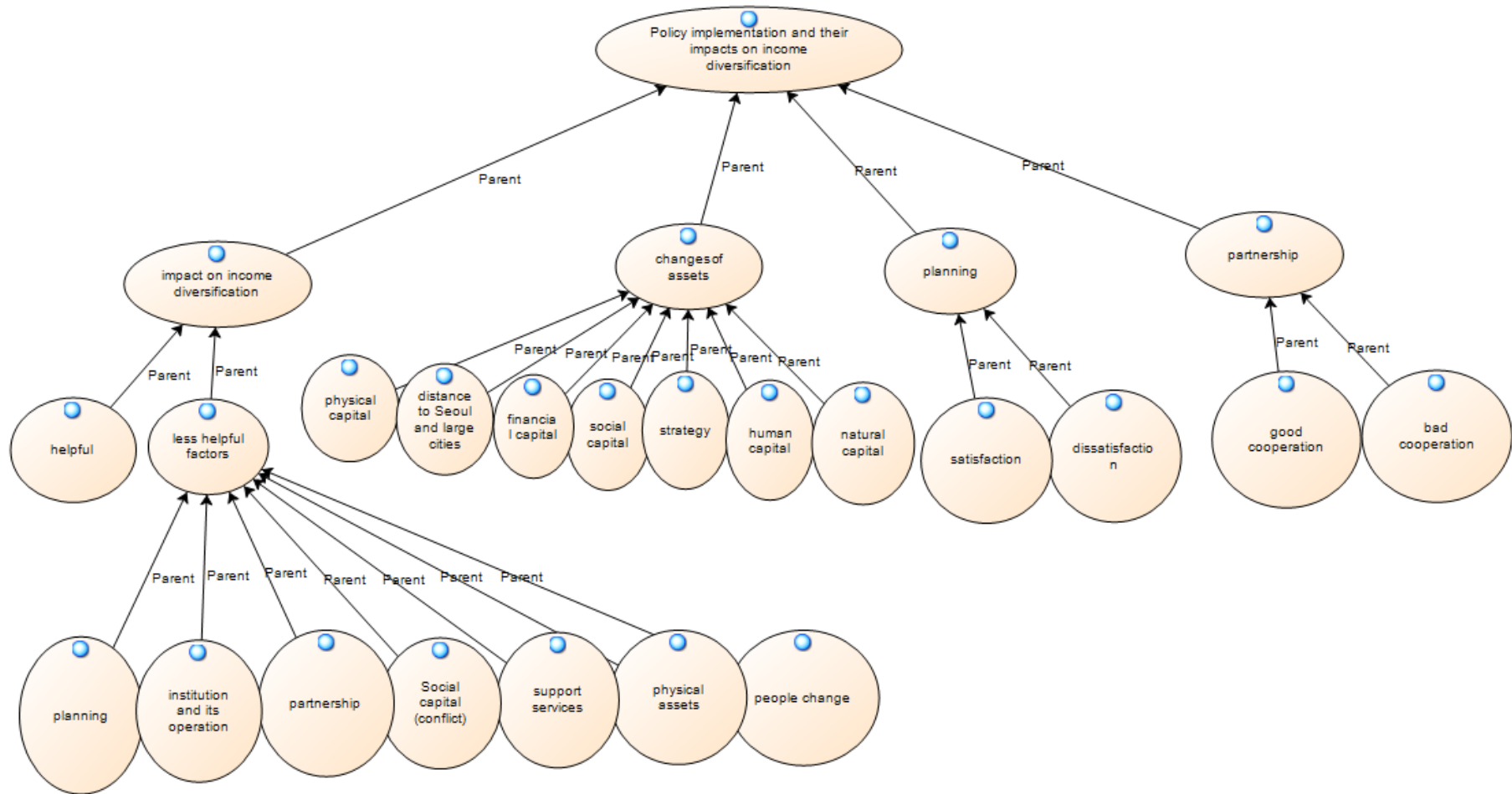
Theme 1: Motivation for income diversification



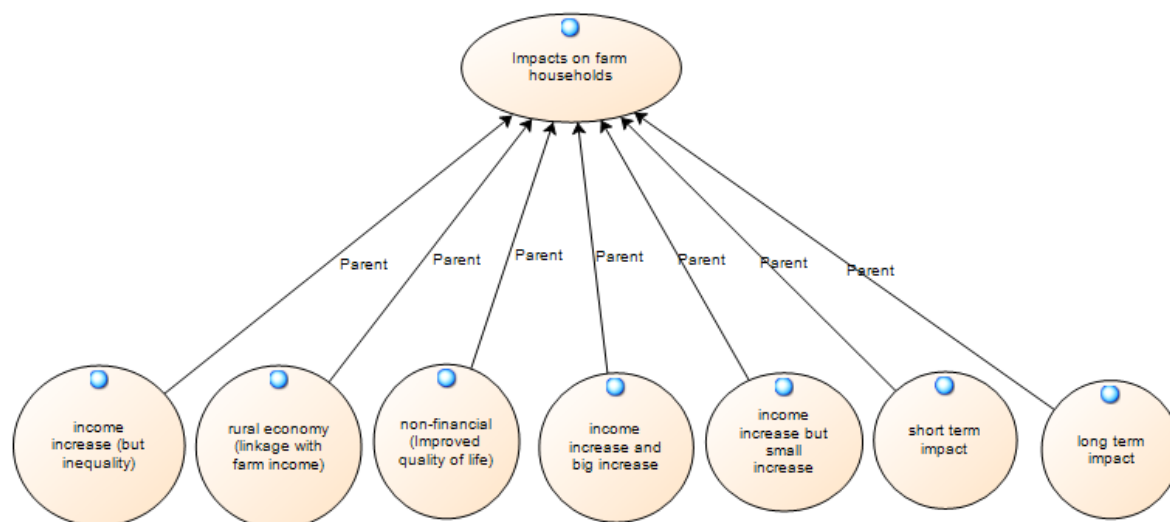
Theme 2: Determinants of and barriers to income diversification



Theme 3: Policy implementation and its impacts on income diversification



Theme 4: Impacts on farm households



Appendix E: Summary of Interviewed Farmers

Name	Si or Gun	Distance to city centre (km)	Age	Farm (hectare)	Major farm type	Rural policy measure	Supporting Period
Gangwon #1	Yeongwol-gun	17	49	2.6	Grape	GRVD	2009-2013
Gangwon #2	Yeongwol-gun	5	65	1	Wild vegetables	GRVD	2010-2014
Gangwon #3	Wonju-si	21	55	10	Silk yarn	LID	2011-2013
Gangwon #4	Wonju-si	14	43	0.7	Lacquer tree	LID	2012-2014
Gangwon #5	Inje-gun	14	55	1.5	Rice	CIRR	2011-2013
Gangwon #6	Inje-gun	40	42	1	Wild vegetables	CIRR	2013
Gangwon #7	Jeongseon-gun	16	41	2.6	Pepper	GRVD	2011-2015
Gangwon #8	Jeongseon-gun	13	38	1	Soybean	LID	2012-2014
Gangwon #9	Pyeongchang-gun	64	53	5	Potato	GRVD	2010-2014
Gangwon #10	Pyeongchang-gun	13	57	3	Wild vegetables	GV	2007
Gangwon #11	Pyeongchang-gun	25	52	1	Soybean	CIRR	2012-2013
Gangwon #12	Hongcheon-gun	40	56	1	Livestock	GRVD	2011-2015
Gangwon #13	Hongcheon-gun	32	58	10	Ginseng	GV	2012
Gangwon #14	Hongcheon-gun	33	56	3	Pumpkin	LID	2011-2013
Gangwon #15	Hongcheon-gun	31	49	3	Pumpkin	LID	2011-2013
Gangwon #16	Hoengseong-gun	12	55	1.7	Rice	GRVD	2007-2011
Chungnam #1	Asan-si	12	58	5	Pepper	CIRR	2013-2014
Chungnam #2	Asan-si	12	57	0.2	Pepper	CIRR	2013-2014
Chungnam #3	Gongju-si	4	49	5	Blueberry	LID	2014-2017
Chungnam #4	Gongju-si	31	55	13	Chestnut	CIRR	2012-2013
Chungnam #5	Gongju-si	31	54	3.5	Rice	GRVD	2010-2014
Chungnam #6	Cheongyang-gun	20	27	1.3	Chinese Cabbage	CIRR	2013-2014
Chungnam #7	Cheongyang-gun	14	52	1.7	Sweet Potato	GRVD	2005-2009
Chungnam #8	Cheongyang-gun	24	39	2.6	Tomato	CIRR	2014-2015
Chungnam #9	Cheongyang-gun	24	39	0.3	Tomato	CIRR	2014-2015
Chungnam #10	Seocheon-gun	16	50	1	Mushroom	CIRR	2013-2014
Chungnam #11	Nonsan-si	10	54	1.6	Strawberry	GV	2006
Chungnam #12	Nonsan-si	12	51	0.3	Peanut	CIRR	2013-2014
Chungnam #13	Geumsan-gun	6	65	0.7	Apple	GRVD	2008-2012
Chungnam #14	Hongseong-gun	8	58	3.3	Other grains	GRVD	2009-2013
Chungnam #15	Hongseong-gun	8	61	1.3	Rice	GRVD	2009-2013
Chungnam #16	Yesan-gun	9	63	3.3	Rice	GV	2006
Gyeongnam #1	Hamyang-gun	17	44	0.1	Balsam pear	CIRR	2011-2013
Gyeongnam #2	Hamyang-gun	20	56	2	Apple	GV	2005
Gyeongnam #3	Hamyang-gun	6	52	3	Wild ginseng	LID	2013-2015
Gyeongnam #4	Sancheong-gun	13	50	0.3	Purslane	LID	2013-2015
Gyeongnam #5	Sancheong-gun	13	58	0.3	Purslane	LID	2013-2015
Gyeongnam #6	Sancheong-gun	13	53	0.7	Garden Balsam	LID	2013-2015
Gyeongnam #7	Sancheong-gun	17	51	0.1	Safflower	LID	2014-2017
Gyeongnam #8	Sancheong-gun	11	56	0.8	Safflower	LID	2014-2017
Gyeongnam #9	Hadong-gun	5	42	5	Japanese apricot	LID	2011-2013
Gyeongnam #10	Namhae-gun	17	44	0.3	Rice	GV	2005
Gyeongnam #11	Geoje-si	14	46	3	Bamboo	LID	2009-2011
Gyeongnam #12	Geoje-si	14	53	1.5	Bamboo	GV	2010
Gyeongnam #13	Uiryeong-gun	4	52	5	Rice	GV	2009
Gyeongnam #14	Uiryeong-gun	23	52	0.6	Rice	LID	2010-2012
Gyeongnam #15	Miryang-si	19	50	2.3	Apple	LID	2009-2011
Gyeongnam #16	Miryang-si	14	44	0.1	Rice	GV	2004

Rural policy measure: Green-tourism Village (GV) programme, General Rural Village Development (GRVD) programme, Local Industry Development (LID) programme, and Complex Industrialisation of Rural Resource (CIRR) programme.

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