

NATIONAL GENDER PROFILE OF AGRICULTURAL HOUSEHOLDS

Report based on the 2006
Rural, Agriculture and Fishery Census

2010



VIET NAM



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Agriculture and Rural Development*

NATIONAL GENDER PROFILE OF AGRICULTURAL HOUSEHOLDS, 2010

Report based on the 2006 Rural, Agriculture, and Fishery Census

Food and Agriculture Organization of the United Nations
General Statistics Office/Ministry of Planning

Hanoi, 2010



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Acronyms and abbreviations

| | |
|-------------|---|
| FAO | Food and Agriculture Organization of the United Nations |
| GSO | General Statistics Office |
| MARD | Ministry of Agriculture and Rural Development |
| MDGs | Millennium Development Goals |
| SIDA | Swedish International Development Agency |
| SDD | Sex-Disaggregated Data |
| UN | United Nations |

Summary sheet

1 | Rural households/Hộ gia đình nông thôn

Sex of household head (%) /Giới tính chủ hộ.

| | |
|-------------------------------------|----|
| Male headed households/Chủ hộ nam | 80 |
| Female headed households/Chủ hộ nữ: | 20 |

Average household size/ Quy mô trung bình của hộ gia đình

| | |
|-------------------------------------|-----|
| Male headed households/Chủ hộ nam: | 4.4 |
| Female headed households/Chủ hộ nữ: | 3.3 |

Average household labour force (active members)/Lao động trung bình của hộ (số thành viên lao động)

| | |
|-------------------------------------|-----|
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| | |
|-------------------------------|----|
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| Female labourers/Lao động nữ: | 50 |

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| | |
|-------------------------------|----|
| Male labourers/Lao động nam: | 37 |
| Female labourers/Lao động nữ: | 37 |

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Land access (%) /Tiếp cận đất đai (%)

| | |
|-------------------------------------|----|
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Land area (ha)/Diện tích đất (ha)

| | |
|-------------------------------------|------|
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| | |
|-------------------------------------|------|
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| | |
|-------------------------------------|---|
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| Female headed households/Chủ hộ nữ: | 2 |

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| | |
|-------------------------------------|----|
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| | |
|-------------------------------------|----|
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| | |
|-------------------------------------|----|
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| | |
|-------------------------------------|----|
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| | |
|-------------------------------------|----|
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| | |
|--|------|
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Male headed households/Chủ hộ nam: 16

Female headed households/Chủ hộ nữ: 11

Average fish culture area (ha) / Diện tích trung bình nuôi trồng thủy sản (ha)

Male headed households/Chủ hộ nam: 0.09

Female headed households/Chủ hộ nữ: 0.06

12 | Safe drinking water, electricity and fuel for cooking / Nước uống an toàn, điện và chất đốt
Access to safe drinking water (%) / Tiếp cận nước uống an toàn (%):

Male headed households/Chủ hộ nam: 55

Female headed households/Chủ hộ nữ: 58

Access to electricity (%) / Tiếp cận điện (%):

Male headed households/Chủ hộ nam: 85

Female headed households/Chủ hộ nữ: 86

Wood as main fuel for cooking (%) / Củi là chất đốt chủ yếu để đun nấu (%):

Male headed households/Chủ hộ nam: 63

Female headed households/Chủ hộ nữ: 60

Preface

It is widely recognized that women's contribution to agricultural production is of great importance. However, their contribution is in most cases inaccurately reported and often underestimated. On the whole, agricultural statistics under-represent data items that are crucial for understanding women's role in the agricultural sector. The lack of relevant data on women in agriculture constraints planners' understanding of the real situation in rural economies and hence the integration of women in agricultural planning. Nevertheless, the agricultural census has great potential for studying and understanding gender issues in agricultural and rural development, like the distribution of agricultural work within households, the interactions between different household members in the management and operation of agricultural holdings, and gender inequalities in access to productive resources.

In response to the increasing demand placed upon national statistical systems for high quality, reliable statistical data disaggregated by sex and age for the food and agriculture sector, FAO with financial support of SIDA aims to strengthen national capacities for socially and sex-disaggregated data in agriculture and rural development in the Asia-Pacific region. This support involved the development and pilot testing of a Gender and Agricultural Statistics Framework that is compatible with World Programme for the Census of Agriculture guidelines. The Government of Vietnam expressed great interest in participating in the development and pilot testing of the framework. As an initial activity for this project, a three-day working meeting of the initiative's partners to develop the framework was held in Bangkok, Thailand in November 2008. One of the major needs identified by each of these countries was technical support on how to increase gender concerns in agricultural censuses and surveys to enable them to undertake the development and pilot testing of their national frameworks. This need has been subsequently reflected in the national work plans, where provisions have been made to train staff, especially Ministry of Agriculture staff, in gender-sensitive methods of questionnaire design and survey data collection and to follow up training with field tests of the gender-sensitive questionnaires and survey protocols produced. Further as part of the FAO-SIDA support, GSO was supported in re-tabulating the 2006 rural, agriculture and fishery census in order to produce a range of sex-disaggregated data that was used for further gender analysis. This National Gender Profile is the outcome of that support.

With great pleasure we present the first National Gender Profile of the Agricultural Sector. This document presents sex-disaggregated data on demographic and social characteristics of agricultural households, their gender-based access to productive resources, their livelihood activities, and important livelihood outcomes. All data is based on the 2006 Rural, Agriculture, and Fishery Census. The National Gender Profile is produced by FAO and GSO with the financial support of SIDA.

Mr. Nguyen van Lieu
Deputy General Director, GSO



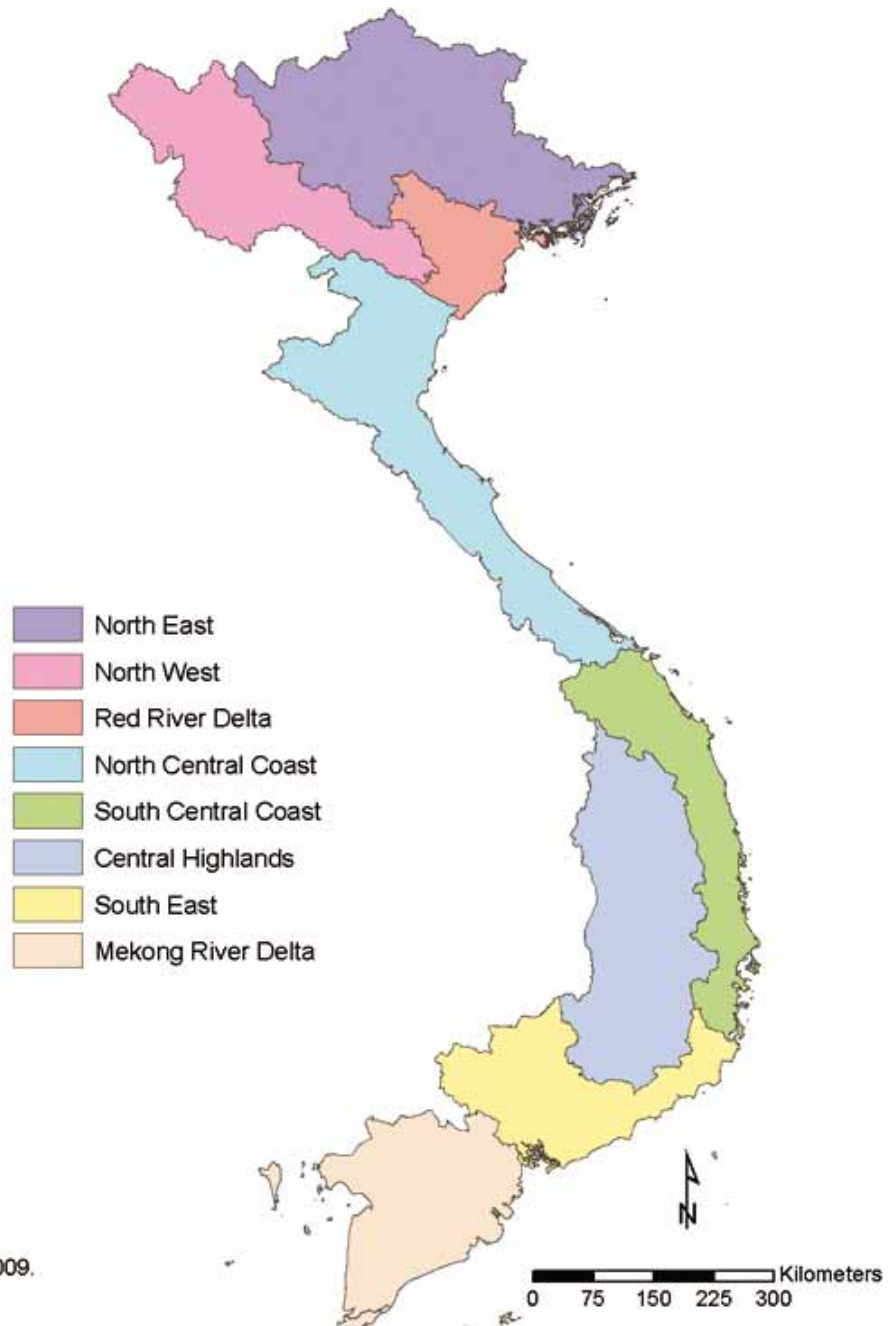
Mr. Andrew Speedy
FAO Representative



Hanoi
April, 2010

Map of Viet Nam

Regional Boundaries



Source: GAUL, 2009.

CHAPTER 1

Introduction

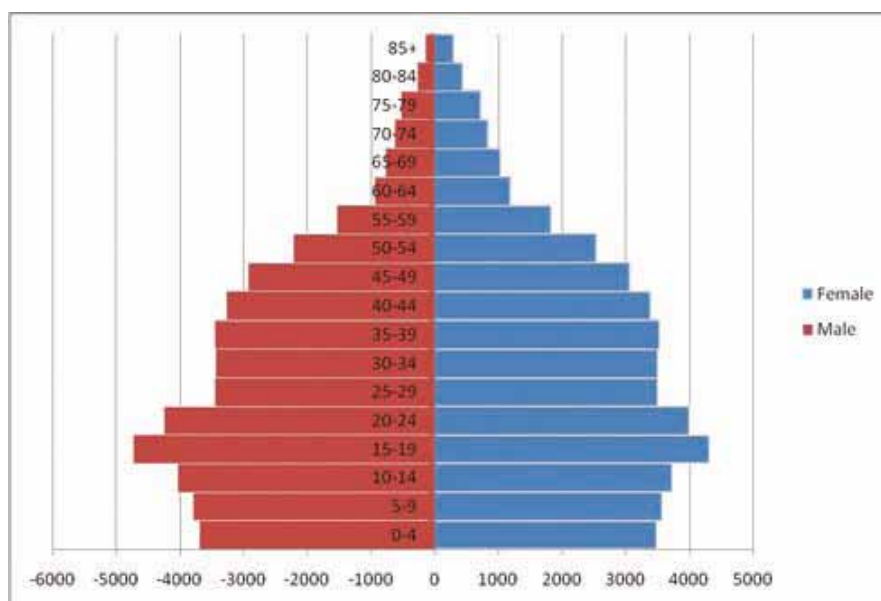
1.1 INTRODUCTION

Vietnam is located in the centre of Southeast Asia with a natural area of about 330 000 km². The country borders China to the north and Lao PDR and Cambodia to the west. In the east and the south, Vietnam borders Thailand. Vietnam lies in the tropics and receives a high quantity of sunshine. Each month of summer has up to 200 hours of sunshine. Yearly average temperatures range between 22° C and 27° C. Vietnam has two distinctive seasons. One is dry, cool or cold; the other is rainy and hot. The seasons vary across the country, depending on the northeast monsoon or the southeast monsoon. The dry season lasts from October until April but varies from locality to locality. Northern Vietnam (from Thua Thien – Hue to the north) is affected by the northeast monsoons. It has four relatively distinctive seasons: spring, summer, autumn and winter. Southern Vietnam usually has only two distinctive seasons: dry and rainy.

The population of Vietnam is 85 789 573 (National Population Census, 2009) of which 50.5 percent are female and 49.5 percent male. The rural population is 60 451 311 people, of which 30 315 148 are female (50.7%). From 1999 to 2009, the population has increased annually with 947 000 people. About 30 percent of the population live in urban areas and 70 percent live in rural areas. Two thirds of Vietnam’s population was born after 1975. Presently, half of Vietnam’s population is below 25 years of age and those above 60 years only represent 11 percent of the population (Chart 1.1).

Vietnam has 63 centrally-governed administrative units, which include 58 provinces and five cities, of which Hanoi and Hochi minh city are special cities. These 63 provinces are grouped into 8 agro-ecological regions: the Red River Delta; the Northeast; the Northwest; the North Central Coast; the South Central Coast; the Central Highlands, the Southeast and the Mekong River Delta. Vietnam has 54 different ethnic groups, of which Kinh is the largest group. They represent about 87 percent of the total population (GoV, 2007).

CHART 1.1 | Population Pyramid, 2010 (GSO, 2009)



Vietnam is an agricultural country, with 70 percent of its population living in rural areas. About two-thirds of the Vietnam population depends on the agricultural sector as a main source of employment and livelihood. It is an important economic sector in terms of food production, employment, production of raw material for industries, and source of foreign exchange earnings. The contribution of crop production to the GDP was 20 percent in 2009 (MPI, 2009).

This Gender Profile report analyses differences between men and women who live in rural areas and depend on agriculture for their livelihoods. The Gender Profile presents national and regional level data on household demographics, gender-based access to resources, livelihood activities and livelihood outcomes and is based on the 2006 rural, agriculture and fishery census.

1.2 THE 2006 RURAL, AGRICULTURE, AND FISHERY CENSUS

The 2006 Rural, Agriculture, and Fishery Census was designed to collect basic information relating to the rural areas, agriculture and fishery in support of planning, policy and strategy design for social and economic development at national and decentralized levels. The census results also serve as a basis for monitoring of national programs in rural areas and agriculture production. Further, the census was conducted to establish a rural, agricultural and fishery database that is used for further research, sampling frames, and to review specific annual statistics on agriculture and fishery.

The census covers both large and small scale farms. The 2006 census was conducted throughout the country. Complete enumeration of all enumeration units was applied to collect basic information on households, rural infrastructure, actual performance of farms, cooperatives and enterprises. Sample surveys were applied for some households to collect information on investment, savings, and production costs. The census has a total sample of 14 516 728 households and used six different questionnaires to collect a range of data on households living in rural areas: 1) Basic situation of the household; 2) Farm economy; 3) Basic situation and infrastructure of the commune; 4) Structure of agricultural, forestry and fishery cooperative; 5) Questionnaire for agricultural, forestry and fishery enterprise; and 6) Rural household economy questionnaire.

This National Gender Profile is based on three forms used by the Census: Form 1 (Basic situation of the household), Form 2 (Farm economy) and Form 6 (rural household economy questionnaire). Form 1 was used to collect information for all rural households in Vietnam on different characteristics, such as household population, land, livestock, aquaculture, crop production, equipment and machineries, and living environment. For specific data items, this Gender Profile used Form 1 to create a sub-sample of agricultural households. Forms 2 and 6 are sub-samples of Form 1. Form 2 was developed to collect information from all commercial farm owners in Vietnam on topics like general farm information, land, equipment and machineries, technology appliances, animal husbandry, aquaculture, production value and total farm income. Form 6 was used to collect data from a limited sample of 62 720 rural households on characteristics like household population, crop production, aquaculture, livestock production, information access, marketing, and loans. Table 1.1 gives the sample sizes of the different Forms used in this Profile. Tabulation of Form 6 was based on the sample households.

TABLE 1.1 | Census sample size

| Form | Primary statistical unit | Total |
|--------|--------------------------|------------|
| Form 1 | Rural household | 14 516 728 |
| Form 1 | Agricultural household | 9 383 837 |
| Form 2 | Commercial farm owner | 113 699 |
| Form 6 | Rural household | 62 720 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

1.3 RATIONALE FOR A NATIONAL GENDER PROFILE OF THE AGRICULTURAL SECTOR

The division of labour and responsibilities between men and women in rural areas are determined by various cultural, social, and sometimes political norms. These divisions often lead to one of the sexes being disadvantaged in relation to natural resources, rural infrastructure, education, health and other services. Generally, it is women who are more disadvantaged than men. Women are major contributors to the economy. In agricultural communities, women normally contribute, as family members and in their own right, to the physical work required for agriculture production. Their contributions, however, remain often invisible and therefore greatly undervalued for lack of gender disaggregated data (MARD, 2003).

Women's contribution to agricultural development is often not well-understood as a result of lack of data and the challenge of accurately measuring women's involvement in agricultural production activities. The work of rural women, often unpaid, is not considered to be productive work. While women's contribution is crucial for subsistence economies and food security, their activities are often excluded from economic accounts. Agricultural statistics thus tend to under-represent, or even omit, variables that are crucial for understanding the rural sector activities and rural development. Opportunities to mainstream gender into annual, five year and ten year plans as well as into the reform process are therefore missed (MARD, 2003).

Gender issues and women's participation influence the success and sustainability of agricultural programmers and projects. Development programmes should take into accounts the different roles, needs, and perceptions of men and women in agriculture in order to provide for sustainable improvements. They should take into account the gender based constraints that men and women face and in particular the factors that limit women's participation in project design, implementation, and management. However, the lack of adequate data on gender disparities limits planners' understanding of the real situation in rural economies and constrains their potential to act. There is thus a strong need for incorporating a gender perspective in statistics.

1.4 GENDER ISSUES PREVAILING IN THE AGRICULTURAL SECTOR IN VIETNAM

Table 1.2 presents the general areas of investigation in this report that were used for gender analysis using the 2006 rural, agriculture and fishery census.

1.5 RE-TABULATION

With support of FAO, GSO re-tabulated parts of the 2006 rural, agriculture and fishery census and produced a total of 227 tables that were used for further gender analysis. Not all tables are included in this report but will be made available at an online database.

TABLE 1.2 | Gender analysis framework of the agricultural sector in Vietnam

| Theme | Gender analysis |
|--|--|
| Demographic and social profile of the agricultural household | Agricultural population by sex Average age household head by sex of the household head Average household size by sex of the household head Household labour force (active agricultural population) by sex of the household head Sex ratio of active members by sex of the household head |
| Gender-based access to productive resources | To what extent do male and female headed households have access to: agricultural labour, land, improved technologies, communication devices, credit, and extension services |
| Livelihood activities | Gender based participation in crop production, animal production, aquaculture, commercial farming and off-farm employment sources |
| Livelihood outcomes | Gender-based differences in housing conditions, access to safe drinking water and sanitation, and sources of energy |

Source: GSO 2006 Rural, Agricultural and Fishery Census

1.6 KEY DEFINITIONS USED

Household: A person or a group of persons with a blood relationship or married, who share food and living space.

Agricultural Household: households engaged in self-employment or own account activities in agriculture such as crop production, livestock raising, fishing and forestry-related activities.

Household head: Representative of the household as recognized by its members.

Female headed household: Household represented by a female as recognized by its members.

Male headed household head: Household represented by a male as recognized by its members.

Sex: refers to the biological difference between men and women.

Gender: refers to the socially and culturally determined differences between men and women, that influence roles, attitudes, behaviours and that vary across cultures and over time.

Sex disaggregated data: refers to the collection of data by physical attributes.

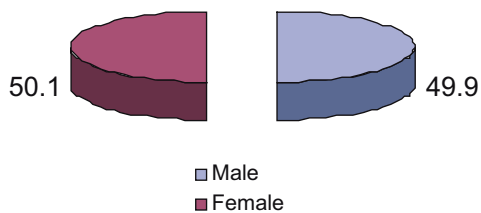
Gender disaggregated data: analytical indicators derived from sex disaggregated data on social and economic attributes.

1.7 OUTLINE OF THE REPORT

This report is divided into six chapters. Chapter 1 describes the rationale for a gender profile of agricultural household in Vietnam, and provides an overview of gender issues analysed in the report, introduction to the census and re-tabulation, and key definitions used in the report. Chapter 2 includes a demographic and social profile of the agricultural sector, including agricultural population, household characteristics, and ethnicity. Chapter 3 presents data on gender-based access to productive resources, including farm labour, land, improved technologies, information and communication, and credit. Chapter 4 presents data on livelihood activities, including employment sources, crop production, agricultural practices, livestock production, and fishery. Chapter 5 presents selected data on some livelihood outcomes, including poor housing conditions, access to safe drinking water and sanitation, and sources of energy. Finally, Chapter 6 provides general conclusions.

Demographic and social profile of the agricultural household

CHART 2.1 | Sex distribution of rural population at national level (2009)



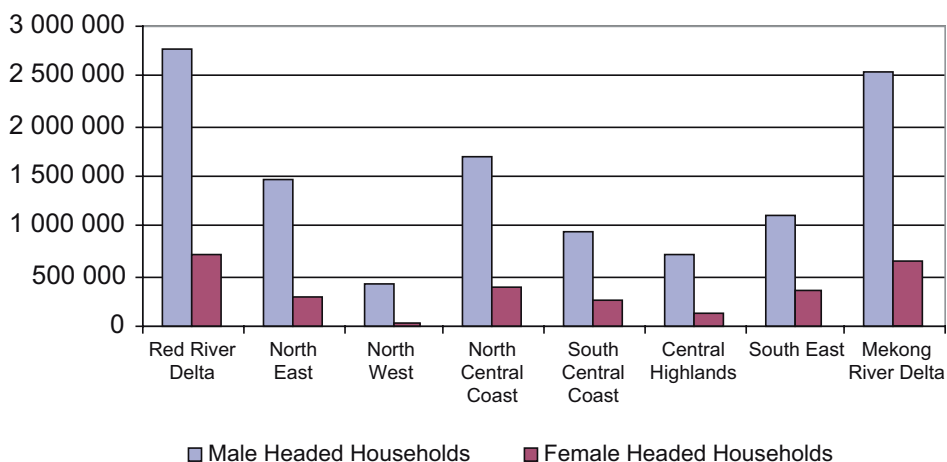
2.1 RURAL POPULATION

The rural population in Vietnam includes 60 451 311 people out of a total population of 85 789 573 people. Of the rural population 49.9 percent are male and 50.1 percent are female (30 315 148) (National Population Census, 2009). According to the 2009 Population and Housing Census, rural population is most concentrated in the North Central Coast area, followed by the Red River Delta and the Mekong River Delta. Less habituated are the Central Highlands and the South East region.

2.2 AGRICULTURAL HOUSEHOLDS

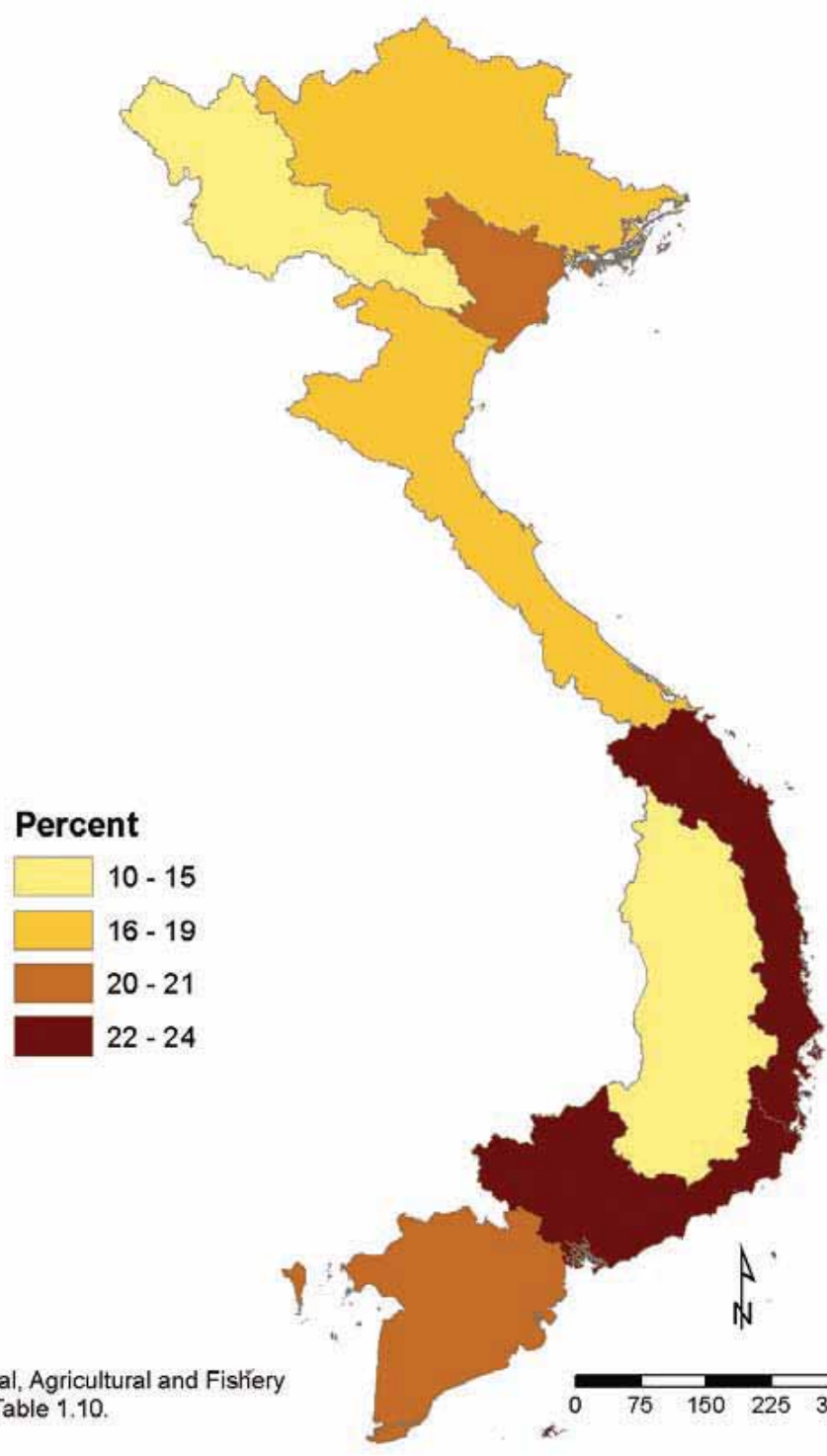
According to the 2006 rural, agriculture and fishery census, the total number of households is 14 516 728¹. In Vietnam, 80 percent of the households in rural (and selected peri-urban) areas are male headed and 20 percent are female headed. The number of male and female headed households varies per region (Chart 2.2, Map 2.1 and Map 2.2): The Red River Delta (721 275) and the Mekong River Delta (652 578) have the highest number of female headed households. The proportion of female headed households is the highest in South East (24%) and South Central Coast (23%) regions and lowest in North West region (10%) (Table 2.1).

CHART 2.2 | Number of male and female headed households by region



¹ This includes all households in rural areas and households in some selected peri-urban areas that were included in the census (complete enumeration).

MAP 2.1 | Percent female headed households



Source: 2006 Rural, Agricultural and Fishery Census Table 1.10.

MAP 2.2 | Percent male headed households

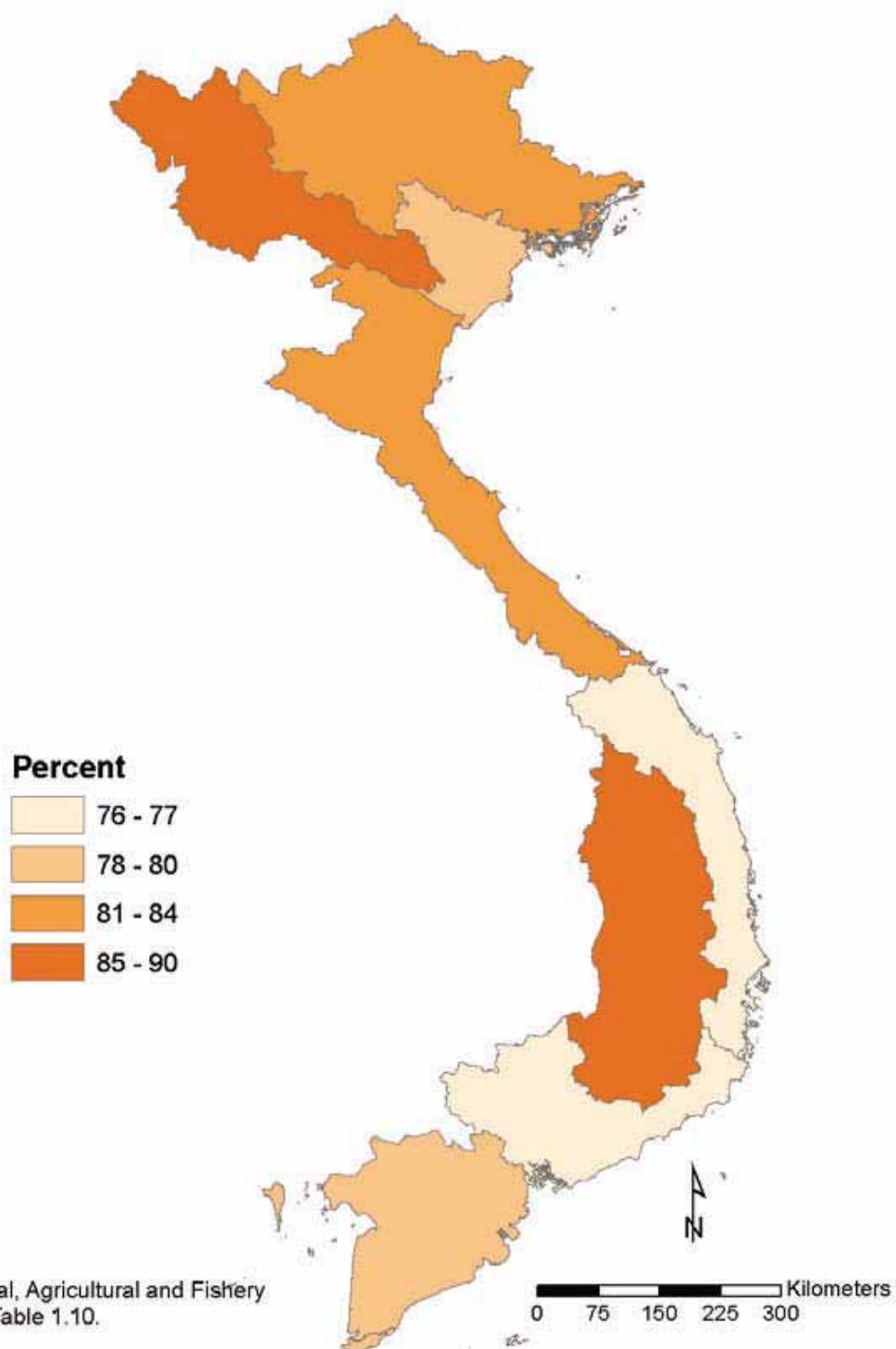


TABLE 2.1 | Proportion of male and female headed households, by region (%)

| Region | Male headed household | Female headed household |
|---------------------|-----------------------|-------------------------|
| National | 80 | 20 |
| Red River Delta | 79 | 21 |
| North East | 84 | 16 |
| North West | 90 | 10 |
| North Central Coast | 81 | 19 |
| South Central Coast | 77 | 23 |
| Central Highlands | 84 | 16 |
| South East | 76 | 24 |
| Mekong River Delta | 80 | 20 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 2.2 | Average household size for male and female headed households, by region

| Region | Total | Male headed household | Female headed household |
|---------------------|------------|-----------------------|-------------------------|
| National | 4.2 | 4.4 | 3.3 |
| Red River Delta | 3.8 | 4.0 | 2.7 |
| North East | 4.3 | 4.5 | 3.2 |
| North West | 5.0 | 5.2 | 3.6 |
| North Central Coast | 4.2 | 4.5 | 3.0 |
| South Central Coast | 4.2 | 4.5 | 3.1 |
| Central Highlands | 4.7 | 4.8 | 3.9 |
| South East | 4.3 | 4.5 | 3.8 |
| Mekong River Delta | 4.3 | 4.5 | 3.8 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

2.2.1 Household size

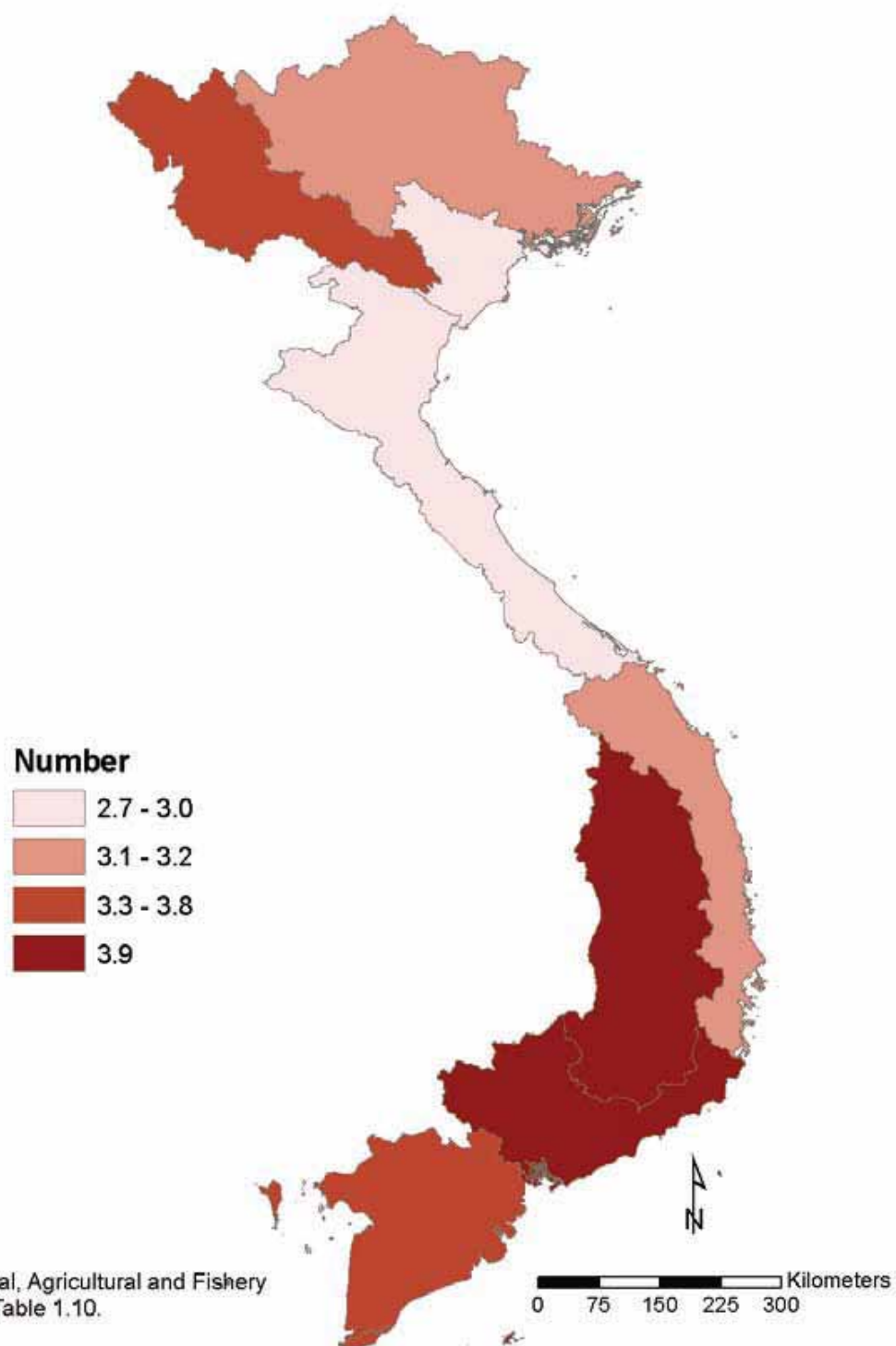
The national average household size for rural households is 4.2 members, with male headed households having an average of 4.4 members and female headed households 3.3 members (Table 2.3). At the regional level, household size in rural areas ranges between 4.0 (Red River Delta) and 5.2 (North West) members for male headed households and between 2.7 (Red River Delta) and 3.9 (Central Highlands) members for female headed households (Map 2.3 and Map 2.4).

The difference in household size between male and female headed households in rural areas is 1.1 at national level. At regional level, female headed households have on average 0.7 to 1.5 members less than male headed households. The difference in household size between male and female headed households is mostly due to the absence of a male head in female headed households but other factors are also likely to play a role.

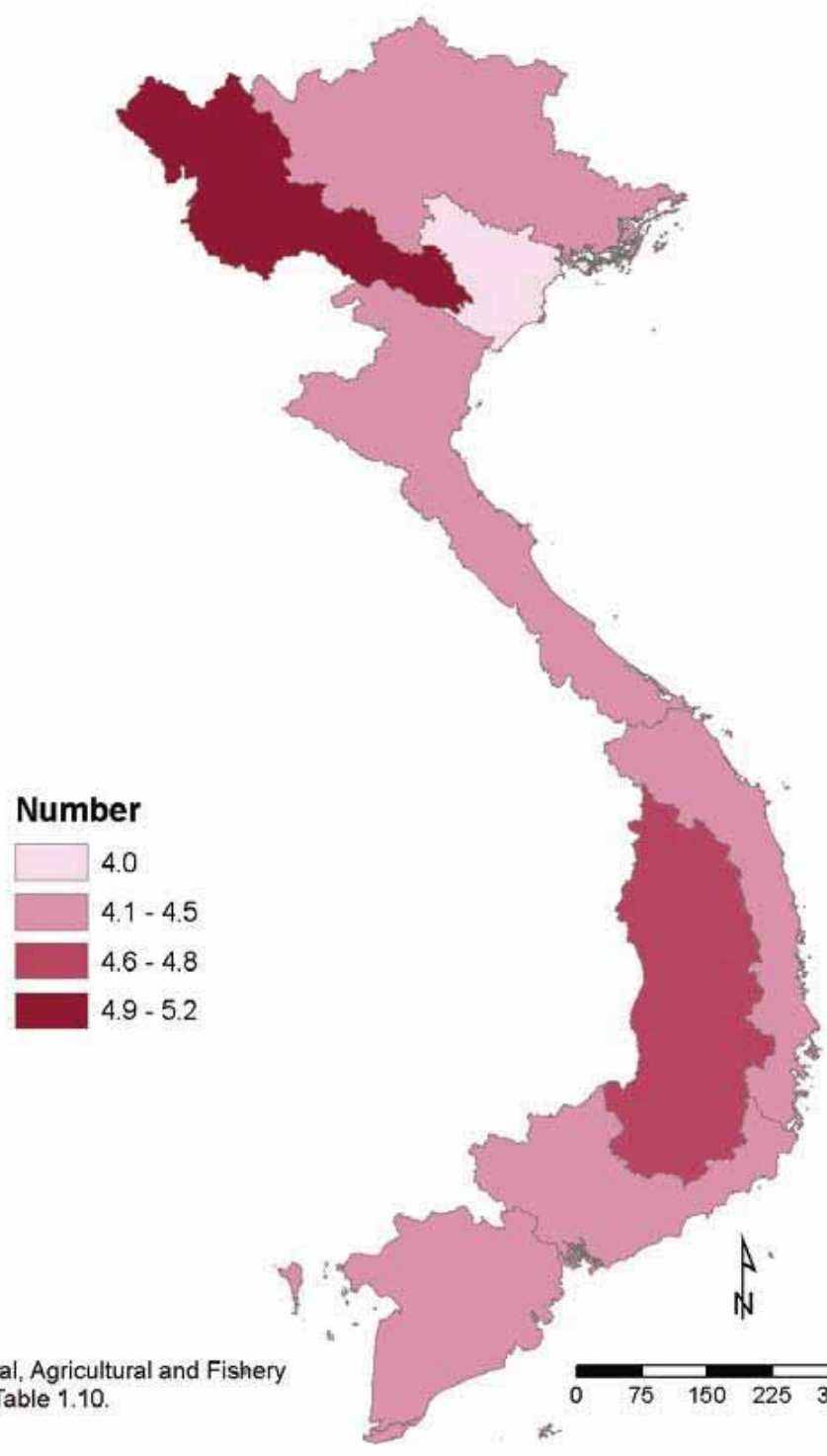
2.2.2 Household labour force

The active rural population refers to the population in rural areas that are within a certain age group that is considered working age. The working age in Vietnam for men is between 15 and 60 years and for women between

MAP 2.3 | Mean size of female headed households, all members



MAP 2.4 | Mean size of male headed households, all members



Source: 2006 Rural, Agricultural and Fishery Census Table 1.10.

TABLE 2.3 | Household labour force for male and female headed households

| Region | Male headed households | | Female headed households | |
|---------------------|--|--|--|--|
| | Proportion of household members at working age (%) | Average number of members at working age | Proportion of household members at working age (%) | Average number of members at working age |
| National | 58.3 | 2.6 | 57.0 | 1.9 |
| Red River Delta | 58.6 | 2.4 | 53.8 | 1.5 |
| North East | 57.5 | 2.6 | 58.4 | 1.9 |
| North West | 54.2 | 2.8 | 55.9 | 2.0 |
| North Central Coast | 54.6 | 2.5 | 52.3 | 1.6 |
| South Central Coast | 56.2 | 2.5 | 53.7 | 1.7 |
| Central Highlands | 53.7 | 2.6 | 54.7 | 2.1 |
| South East | 59.7 | 2.7 | 59.9 | 2.3 |
| Mekong River Delta | 63.0 | 2.8 | 61.3 | 2.3 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

15 and 55 years. Vietnam has an active rural population² of 35 381 202 or 58 percent of the overall population living in rural areas. This corresponds to 2.4 active members per household.

Male headed households have an average of 2.6 active members or 58 percent of its household members are of working age. Female headed households have less active household members due to the absence of a male head: 57 percent of its household members are of working age, which corresponds to an average of 1.9 household member per household (Table 2.3).

The North Central region has a slightly lower proportion of active members per household (52% for female headed households and 55% for male headed households). In contrast, the Mekong River Delta has the highest proportion of active household members: 61 percent of the members in female-headed households and 63 percent in male headed households are considered active by age (Map 2.5 and Map 2.6). Across the regions, female headed rural households have an average of 1 active member less than male headed households (Map 2.7).

2.3 ETHNICITY

The main ethnic groups are Kinh, Tay, Thai, Muong, Nung, Hmong, Dao, Gia-Rai, Ede, Cham, and Kho me, with Kinh being the largest ethnic group. The extent of female headship differs among the ethnic groups (Table 2.4). Few female headed rural households can be found among the Dao (4%) and the Gia-Rai (6%) compared to 20 percent at national level. Among the Muong (25%) and the Kho me (24%) female headship is higher compared to the national level.

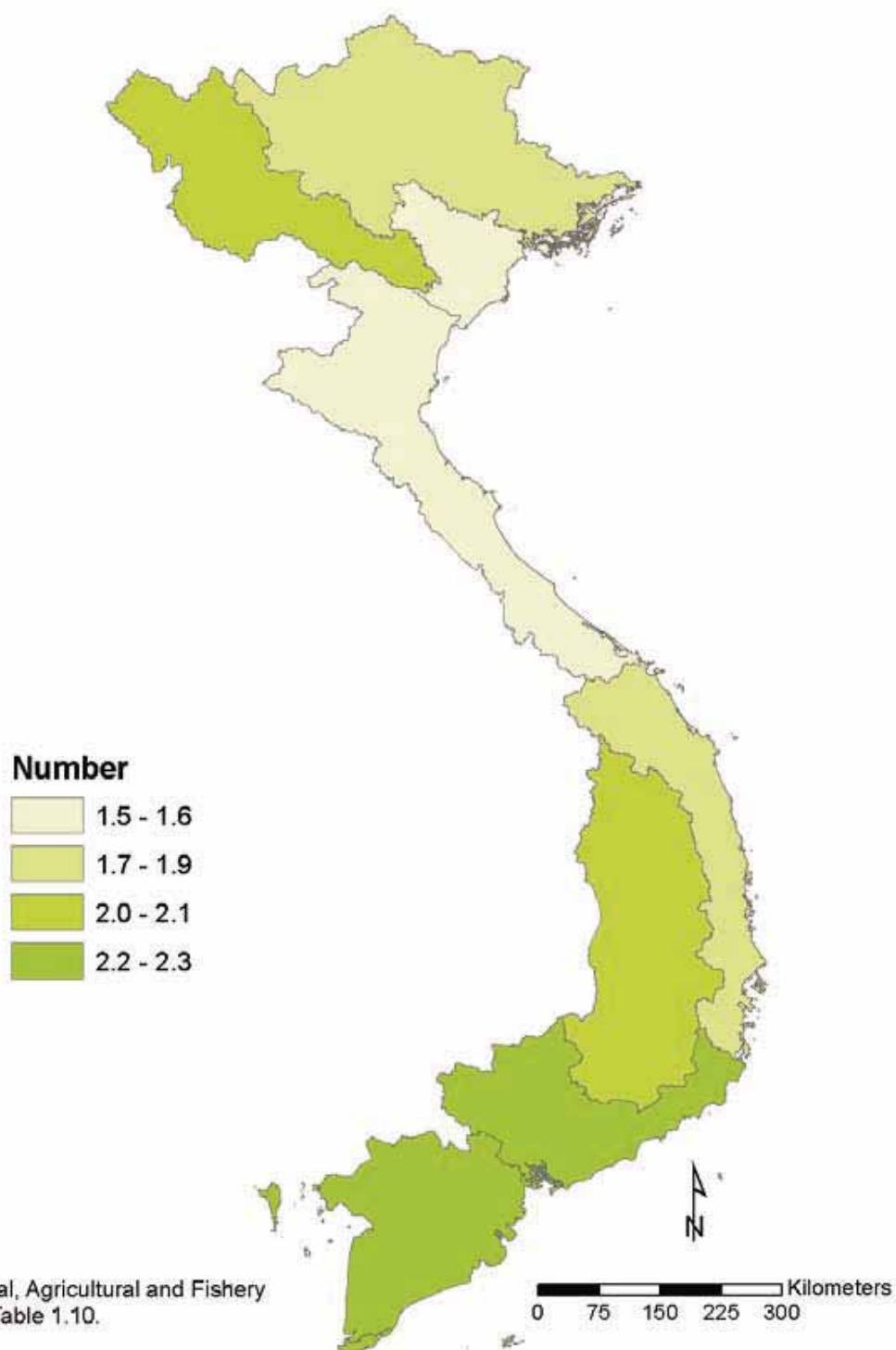
² Population in rural areas between 15 and 60 years old (men) and between 15 and 55 years old (women).

TABLE 2.4 | Male and female headship among different ethnic groups

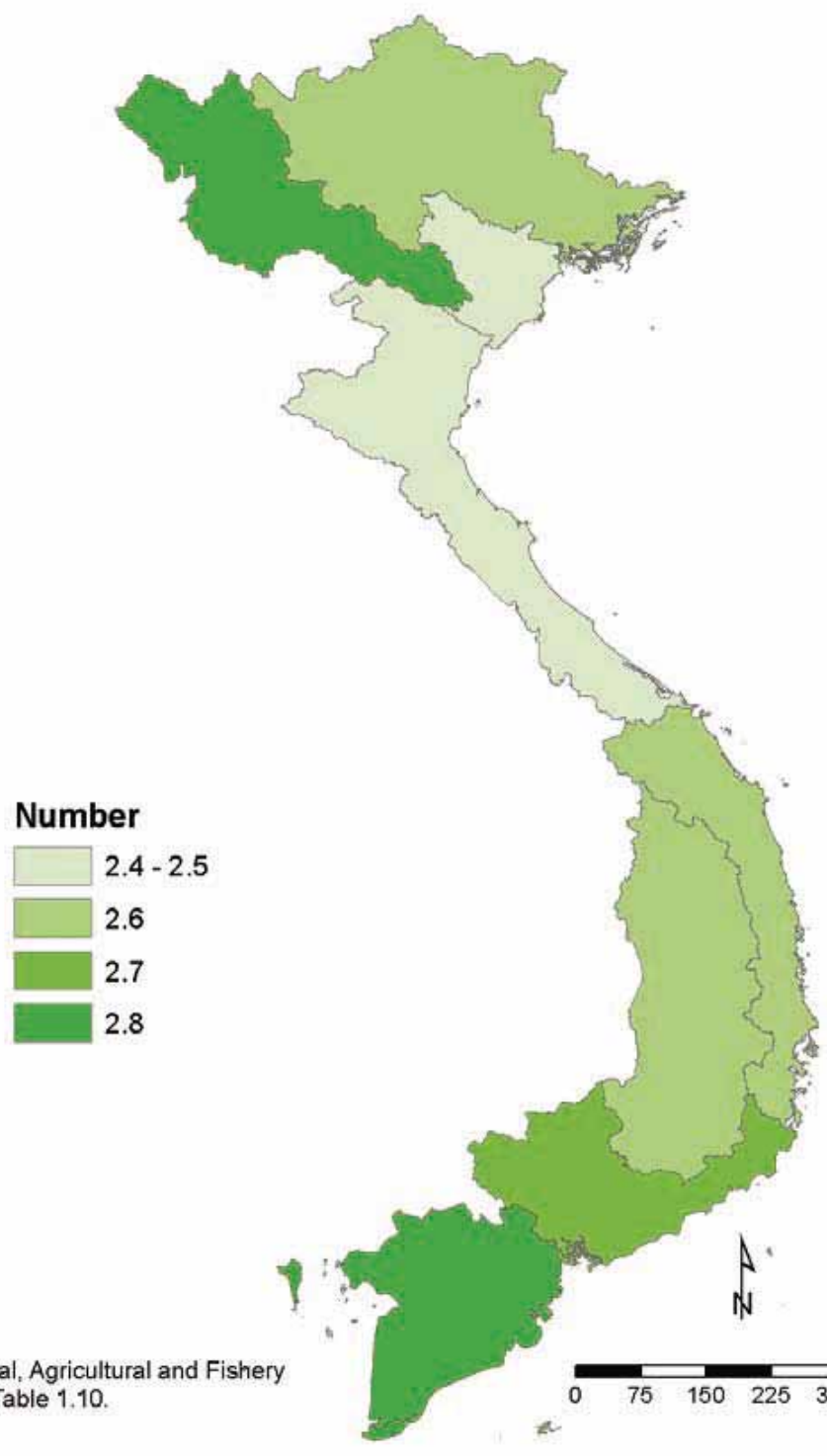
| Ethnic group | Male headed | | Female headed | |
|---------------------|-------------|------------|---------------|------------|
| | Number | Percentage | Number | Percentage |
| Kinh | 9 808 089 | 79.2 | 2 571 683 | 20.8 |
| Tay | 275 120 | 87.4 | 39 571 | 12.6 |
| Thai | 264 117 | 92.4 | 21 852 | 7.6 |
| Muong | 174 369 | 75.4 | 56 751 | 24.6 |
| Nung | 222 247 | 87.9 | 30 730 | 12.1 |
| Hmong | 164 767 | 90.2 | 17 966 | 9.8 |
| Dao | 151 419 | 96.1 | 6 191 | 3.9 |
| Gia-Rai | 122 562 | 94.2 | 7 513 | 5.8 |
| Ede | 60 434 | 83.3 | 12 120 | 16.7 |
| Cham | 47 650 | 84.0 | 9 059 | 16.0 |
| Kho me | 20 421 | 76.2 | 6 366 | 23.8 |
| Other Ethnic Groups | 360 119 | 84.6 | 65 614 | 15.4 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

MAP 2.5 | Mean number of household members at working age (15 to 55 years) for female headed households

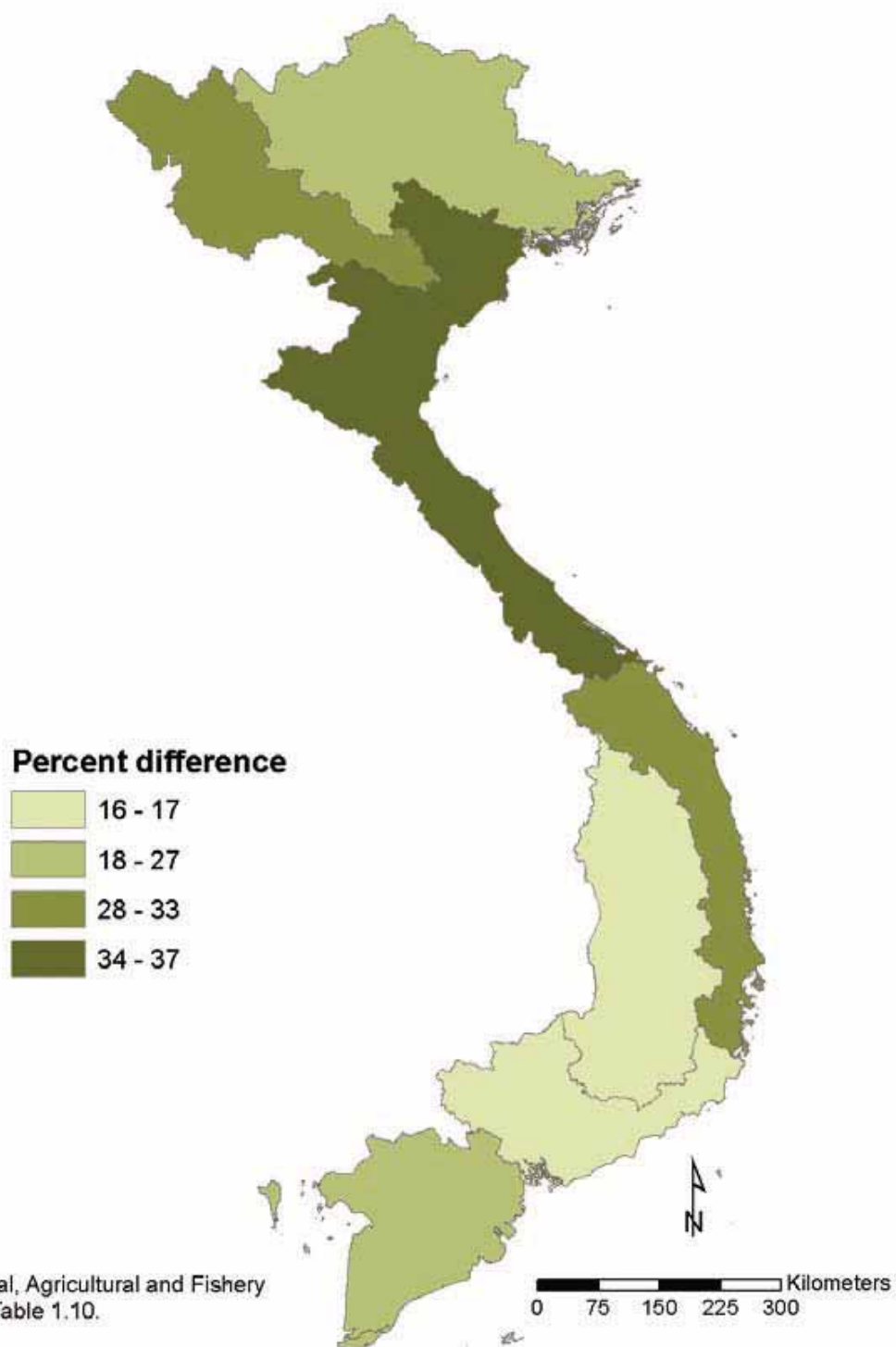


MAP 2.6 | Mean number of household members at working age (15 to 60 years) for male headed households



Source: 2006 Rural, Agricultural and Fishery Census Table 1.10.

MAP 2.7 | Percent difference in number of working age households members between male and female headed households



CHAPTER 3

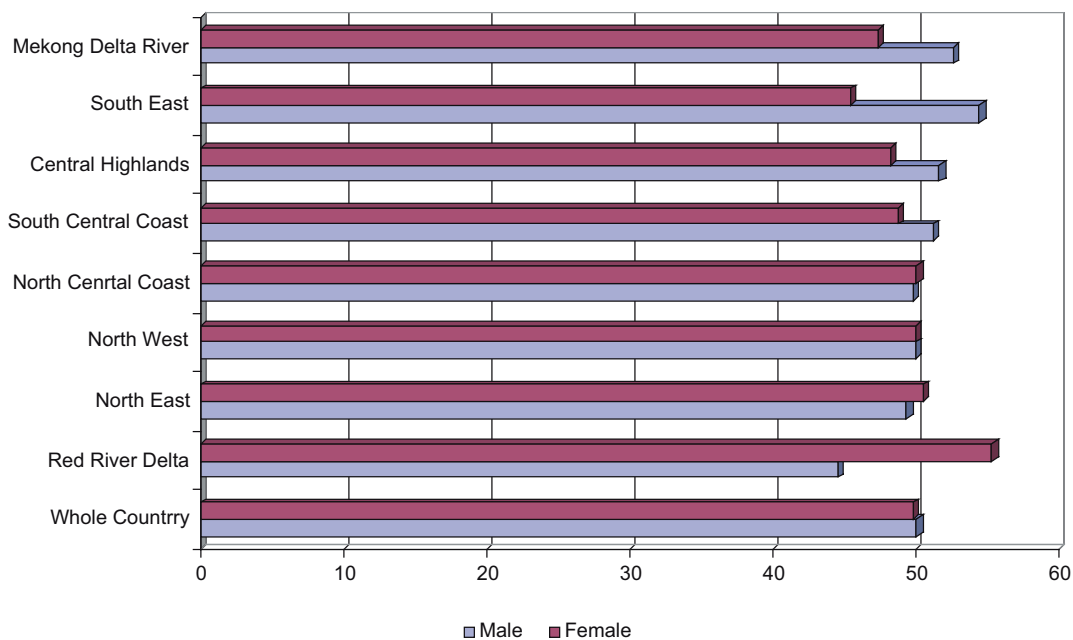
Gender-based access to production resources

3.1 AGRICULTURAL LABOUR

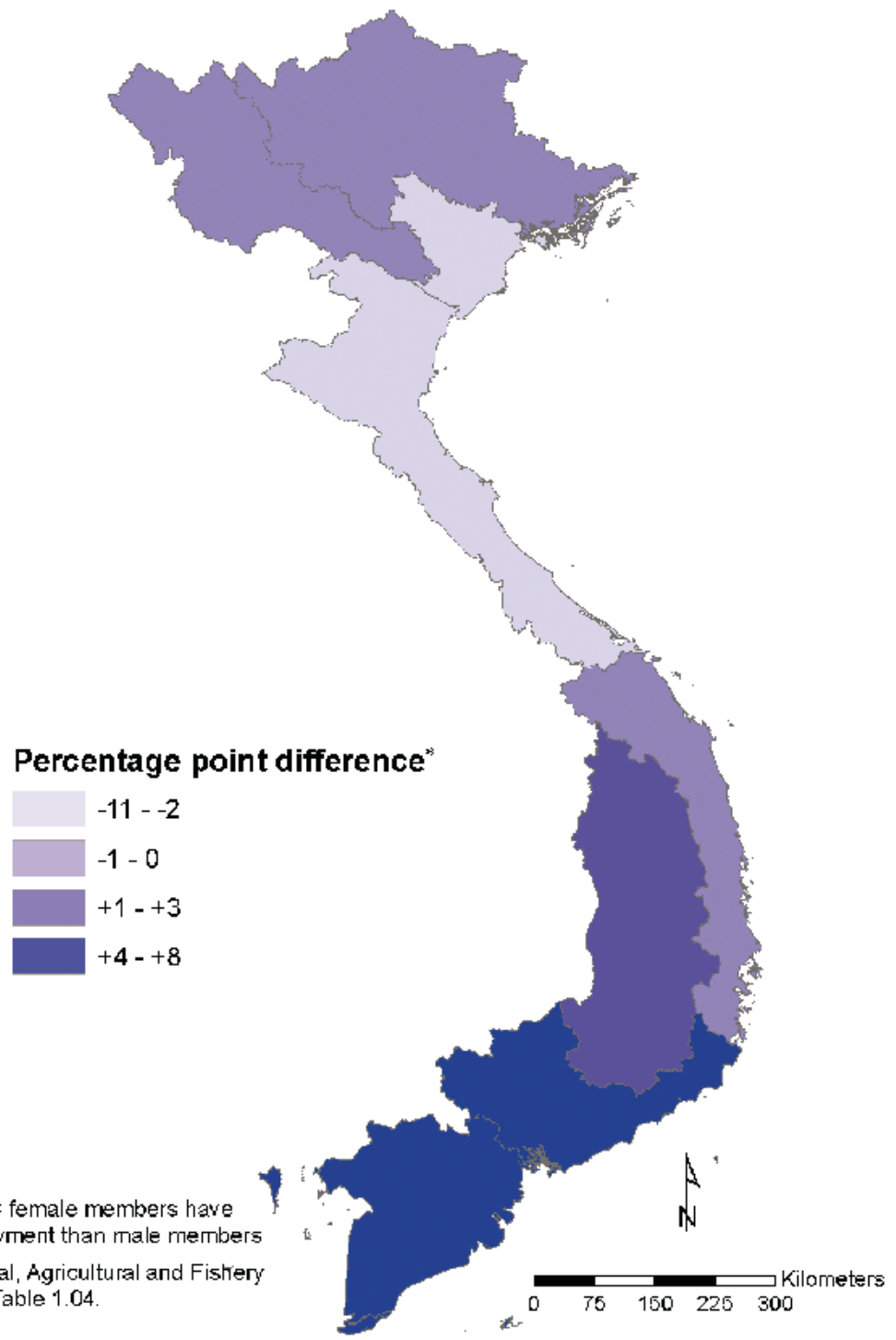
Agricultural labourers include people of working age and above working age but still working, whose main or secondary occupation is agricultural production, whether employed or self-employed. Students, pupils and young people below 15 years of age are excluded. The total number of agricultural labourers in Vietnam is 24 693 900, of which 12 376 995 (50.1%) are male and 12 316 905 (49.9%) are female. The number of male agricultural labourers ranges from 542 279 in the North West region to 3 271 943 in the Mekong River Delta. The number of female agricultural labourers ranges from 542 978 in the North West region to 2 944 205 in the Mekong River Delta. The share of men and women participating in the agricultural labour force is almost equal across the regions. In the Red River Delta and the North East regions women slightly dominate the agricultural labour force whereas in the South Central Coast, Central Highlands, South East and Mekong River Delta regions men slightly dominate the agricultural labour force (Chart 3.1, and Map 3.1 and Map 3.2).

The average age is 37 for both male and female agricultural labourers. The average age for male labourers ranges between 34 in the North West region to 40 in the Red River Delta and the North Central Coast regions. The average age of female agricultural labourers varies between 33 years in the North West region and 39 in the Red River Delta, North and South Central Coast regions.

CHART 3.1 | Sex distribution of agricultural labourers



MAP 3.1 | Percentage point difference between male and female household members that are self-employed in the agricultural sector



MAP 3.2 | Percentage point difference between male and female household members that are employed in the agricultural sector

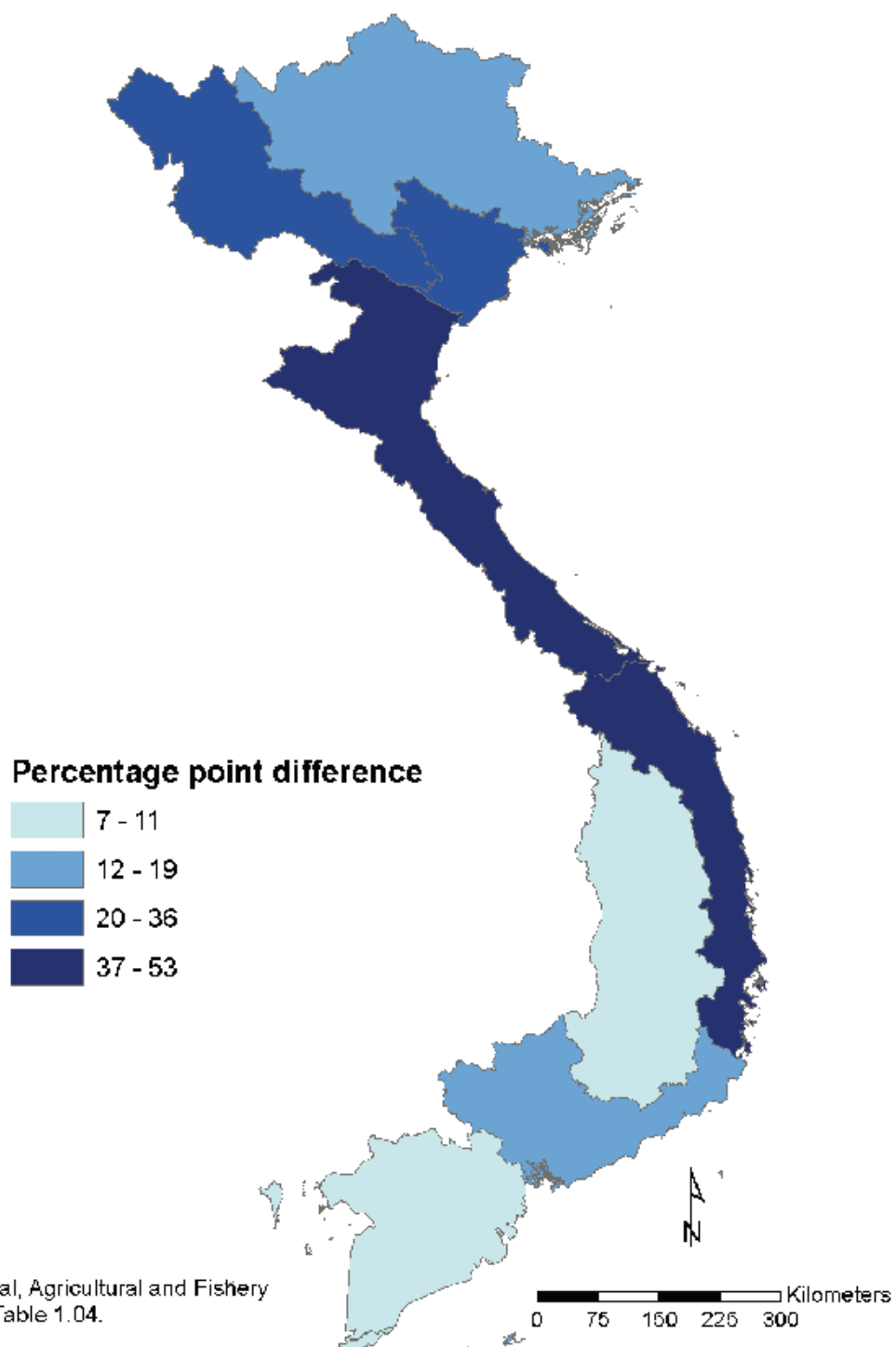


TABLE 3.1 | Agricultural labourers by sex, age and region

| Region | Number of agricultural labourers | | | Female participation in agricultural labour (%) | Average age agricultural labourer | | |
|---------------------|----------------------------------|-------------------|-------------------|---|-----------------------------------|-----------|-----------|
| | Total | Male | Female | | Total | Male | Female |
| National | 24 693 900 | 12 376 995 | 12 316 905 | 49.9 | 37 | 37 | 37 |
| Red River Delta | 4 680 692 | 2 088 918 | 2 591 774 | 55.4 | 39 | 40 | 39 |
| North East | 3 567 393 | 1 763 759 | 1 803 634 | 50.6 | 36 | 36 | 36 |
| North West | 1 085 257 | 542 279 | 542 978 | 50.0 | 33 | 34 | 33 |
| North Central Coast | 3 465 721 | 1 729 005 | 1 736 716 | 50.1 | 39 | 40 | 39 |
| South Central Coast | 1 908 633 | 976 605 | 932 028 | 48.8 | 39 | 39 | 39 |
| Central Highlands | 1 754 603 | 906 838 | 847 765 | 48.3 | 36 | 36 | 35 |
| South East | 2 015 453 | 1 097 648 | 917 805 | 45.5 | 37 | 37 | 37 |
| Mekong River Delta | 6 216 148 | 3 271 943 | 2 944 205 | 47.4 | 36 | 36 | 36 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

3.2 LAND

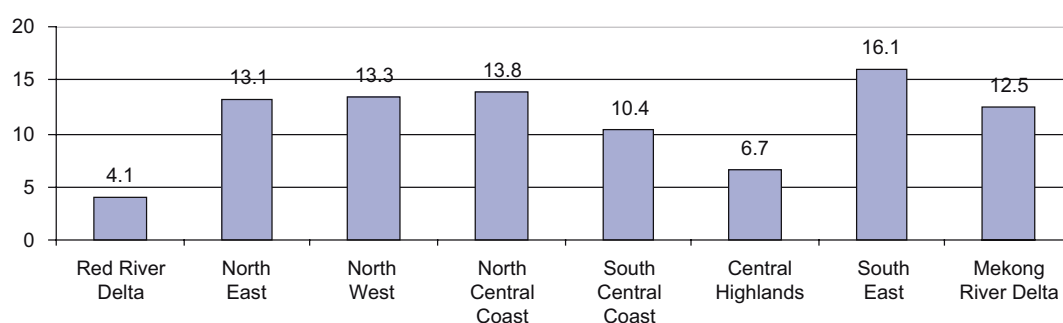
3.2.1 Land access

At national level, 75 percent of male and 62 percent of female headed households in rural areas have access to agricultural land; a difference of 13 percentage points (Table 3.2, Chart 3.2 and Map 3.3). Particularly in the South East region, fewer (16 percentage points) female headed households have access to agricultural land compared to male headed households. In the Red River Delta and the Central Highlands male and female headed households have more equal access to land with a percentage point difference of only 4 and 7.

3.2.2 Land area

At national level, the average area of agricultural land available for households in rural areas is 0.63 hectare. Female headed households have an average of 0.48 ha compared to 0.66 ha for male headed households, which is about 27 percent less land per household (Table 3.3. and Chart 3.3.). Particularly in the North West and North Central Coast regions, female headed households have less agricultural land available compared to male headed households. In the North West region this is 38 percent less land per female headed household and in the North Central Coast region female headed households have 35 percent less agricultural land. The difference in land size is smallest

CHART 3.2 | Percentage point difference in land access between male and female headed households in rural areas



MAP 3.3 | Percentage point difference in access to agricultural land between male and female headed households

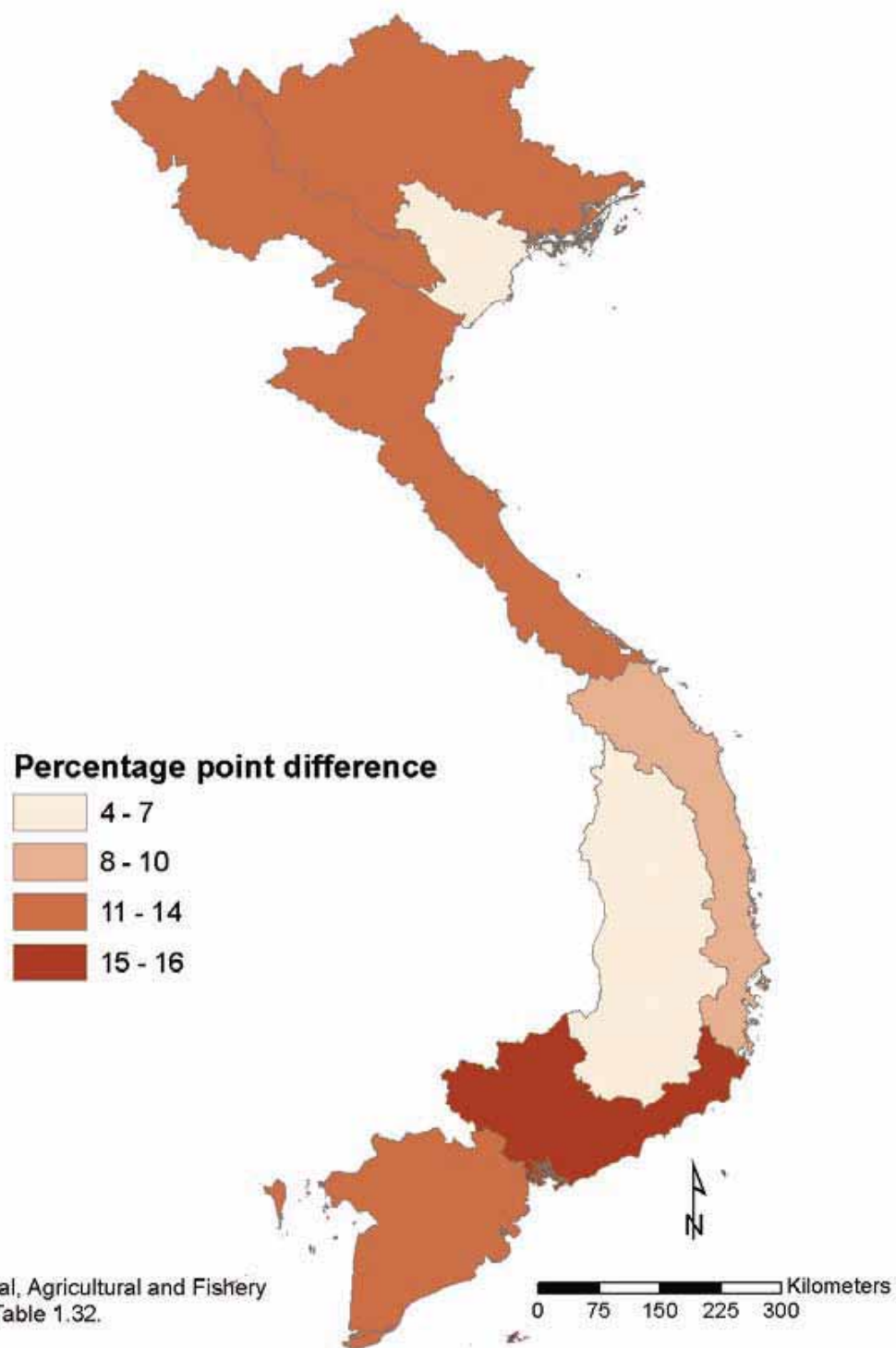


TABLE 3.2 | Agricultural land access among male and female headed households

| Region | Percentage of households in rural areas with access to agricultural land | | |
|---------------------|--|------------------------|--------------------------|
| | Total | Male headed households | Female headed households |
| National | 72.1 | 74.5 | 62.3 |
| Red River Delta | 61.1 | 62.0 | 57.9 |
| North East | 85.3 | 87.4 | 74.3 |
| North West | 91.7 | 93.1 | 79.8 |
| North Central Coast | 77.1 | 79.6 | 65.9 |
| South Central Coast | 71.2 | 73.6 | 63.1 |
| Central Highlands | 89.5 | 90.6 | 83.9 |
| South East | 56.5 | 60.4 | 44.3 |
| Mekong River Delta | 73.7 | 76.2 | 63.7 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

in the Mekong River Delta where female headed households have 19 percent less agricultural land compared to male headed households.

CHART 3.3 | Average agricultural land area per household, by sex of household head (ha)



3.3 IMPROVED TECHNOLOGIES

3.3.1 Irrigation

The 2006 census collected basic data related to irrigation for a number of selected crops. These included rice, maize, winter crops, tea, coffee, peppers and fruit trees. Both male and female headed households in rural areas irrigate mostly rice, peppers, fruit trees, maize, coffee, and winter crops. Overall, female headed households have a slightly higher proportion of planted area under irrigation (Table 3.4 and Annex 1). This trend is consistent for most crops throughout the regions. However, the total average area irrigated for these crops is smaller among female headed households: an average of 0.37 ha land is irrigated compared to 0.52 ha for male headed households (Table 3.5). The difference between male and female headed households in average area irrigated is especially large in the Central Highlands and the Mekong River Delta. Female headed rural households

TABLE 3.3 | Average agricultural land area for male and female headed agricultural households, by region (ha)

| Region | Male headed households | Female headed households | Percentage difference |
|---------------------|------------------------|--------------------------|-----------------------|
| National | 0.66 | 0.48 | 27.3 |
| Red River Delta | 0.24 | 0.18 | 25.0 |
| North East | 0.49 | 0.33 | 32.7 |
| North West | 2.11 | 1.31 | 37.9 |
| North Central Coast | 0.42 | 0.32 | 23.8 |
| South Central Coast | 0.50 | 0.32 | 36.0 |
| Central Highlands | 1.38 | 1.02 | 26.1 |
| South East | 1.33 | 0.98 | 26.3 |
| Mekong River Delta | 1.15 | 0.93 | 19.1 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 3.4 | Percentage of planted area under irrigation for male and female headed households, by crops (national level)*

| | Total | Male headed households | Female headed households |
|--------------------|-------|------------------------|--------------------------|
| Summer-august rice | 91.3 | 91.9 | 91.2 |
| Winter rice | 78.9 | 78.4 | 82.3 |
| Winter-spring rice | 96.7 | 96.6 | 97.3 |
| Maize | 19.0 | 18.4 | 25.6 |
| Winter crops | 64.5 | 63.5 | 72.2 |
| Tea | 10.5 | 10.0 | 16.1 |
| Coffee | 89.8 | 90.7 | 81.4 |
| Peppers | 95.6 | 95.6 | 95.4 |
| Fruit trees | 66.1 | 65.0 | 73.7 |

* Table 1 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

have respectively 0.22 and 0.37 hectares less irrigated area compared to male headed rural households (Map 3.4). At national level, the difference in average area irrigated between male and female headed rural households is 0.15 ha.

3.3.2 Farm equipment

The 2006 census also collected household ownership data on a number of selected farm equipment and machineries, including tractor, force generator, motorised insect sprayer and water pump (Table 3.6 and Annex 1). Overall, ownership of these selected machineries is low among both male and female headed agricultural households. The main machineries owned include small tractors and water pumps. Across the regions a smaller proportion of female headed agricultural households own small tractors or water pumps. At national level, 7 percent of male headed agricultural households own small tractors compared to 2 percent for female headed households. An exceptions in tractor ownership is the Central Highlands, where respectively 40 percent of male headed and 21 of female headed agricultural households own small tractors.

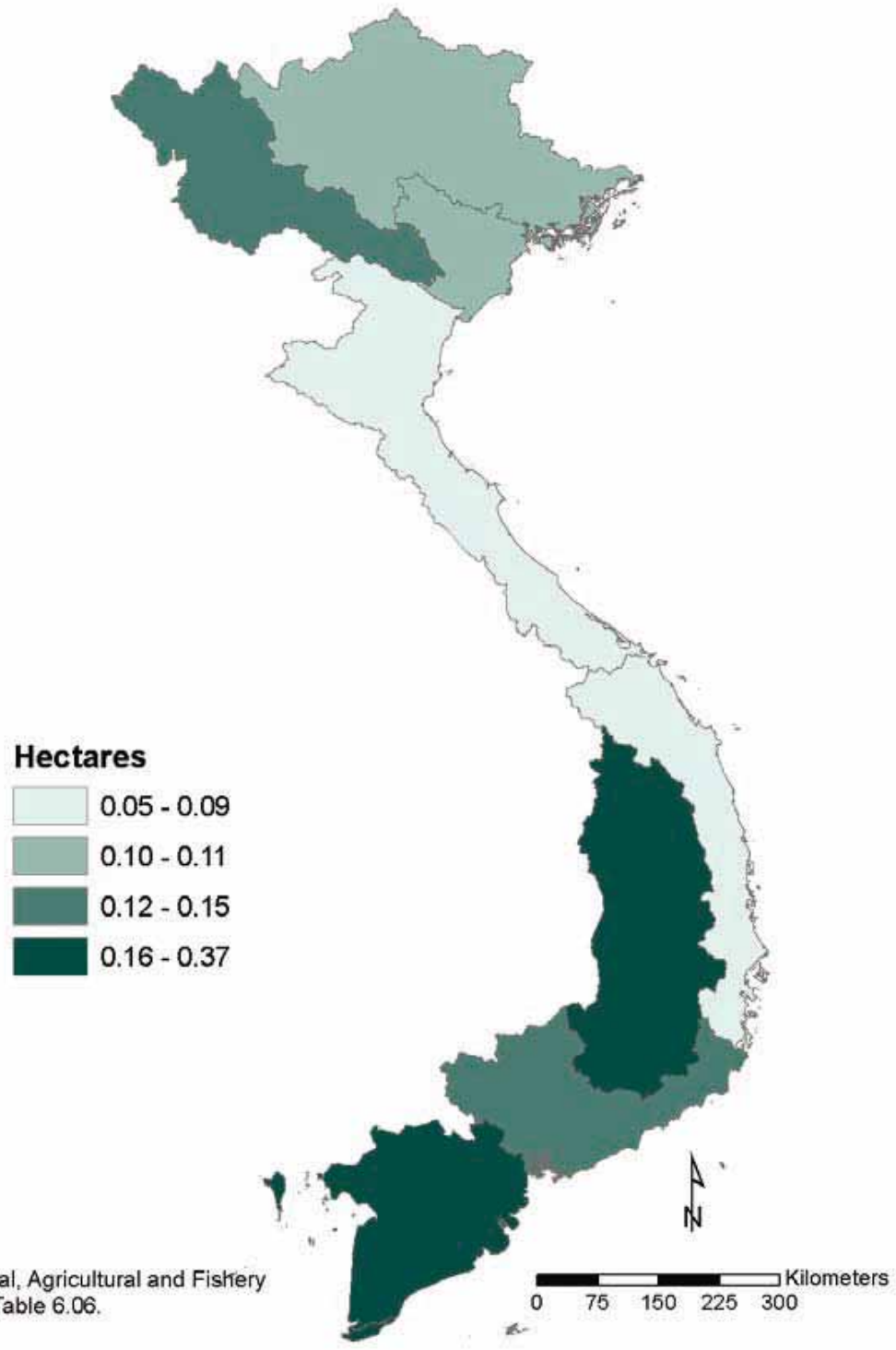
Further, the 2006 census collected data on a number of selected equipment and machineries for agro-processing purposes owned by rural households. These include rice milling machine with engine, rice dryer, milling machine, wood power machine, animal food processing machine, and aquaculture food processing machine. Only very few households own any of the selected agro-processing machineries (Table 3.7 and Annex 1). A small proportion (2%) of rural households own motorised rice milling machines, mostly male headed: 4 percent compared to 0.5 percent among female headed households. Only in the North East region, the proportion of rice milling ownership is higher compared to the national level: 8 percent among male headed households compared to 2 percent among female headed households.

TABLE 3.5 | Average irrigated land area (ha) among male and female headed households

| Region | Total | Male headed households | Female headed households |
|---------------------|-------------|------------------------|--------------------------|
| National | 0.50 | 0.52 | 0.37 |
| Red River Delta | 0.34 | 0.36 | 0.27 |
| North East | 0.31 | 0.32 | 0.21 |
| North West | 0.27 | 0.29 | 0.16 |
| North Central Coast | 0.27 | 0.28 | 0.20 |
| South Central Coast | 0.28 | 0.29 | 0.24 |
| Central Highlands | 0.64 | 0.67 | 0.45 |
| South East | 0.33 | 0.37 | 0.21 |
| Mekong River Delta | 1.04 | 1.11 | 0.75 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

MAP 3.4 | Difference in mean area irrigated between male and female headed households



Source: 2006 Rural, Agricultural and Fishery Census Table 6.06.

MAP 3.5 | Percent difference in mean area irrigated between male and female headed households

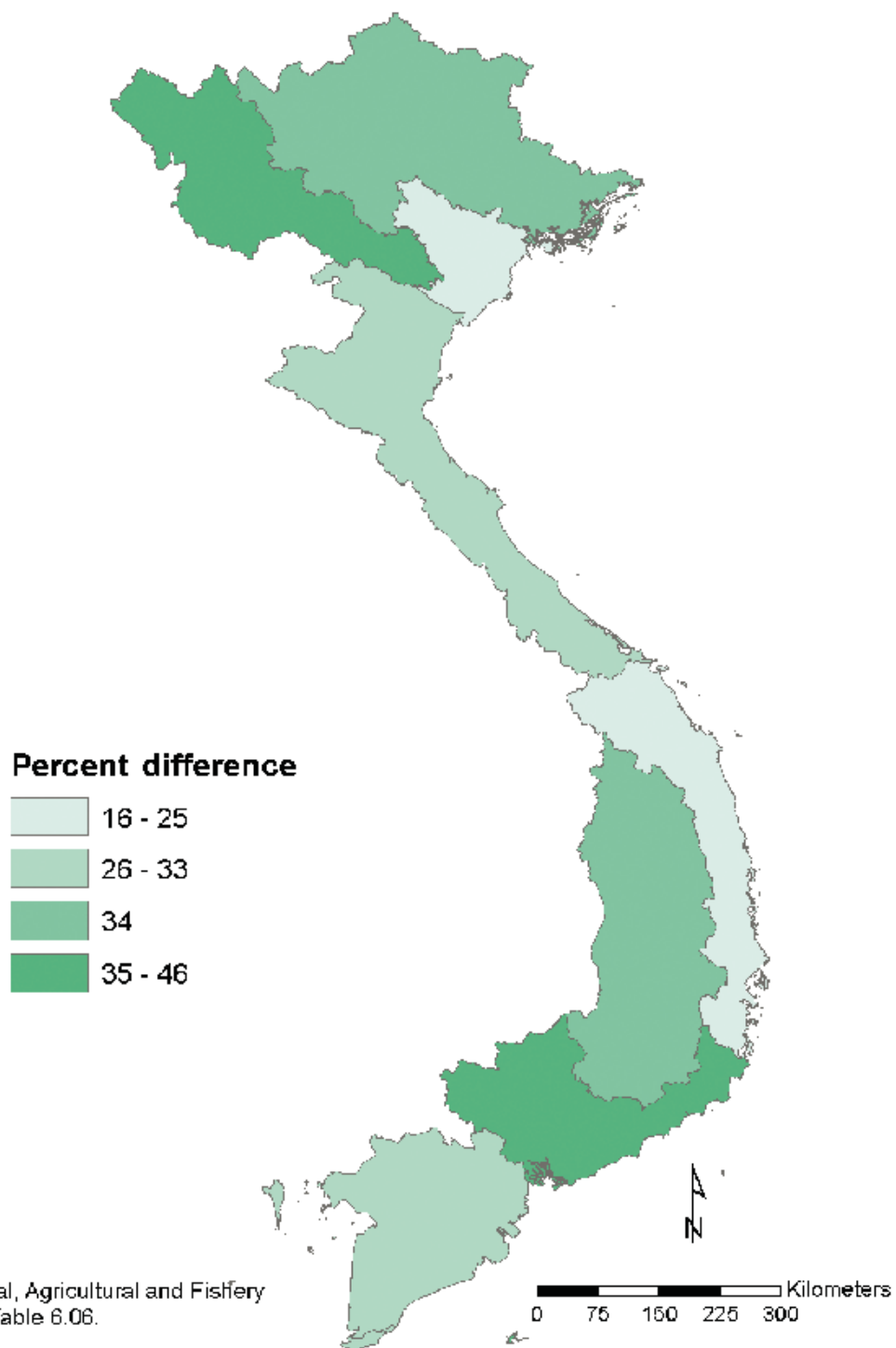


TABLE 3.6 | Access to selected tools and machineries, by sex of the household head*

| | Male headed household (%) | Female headed household (%) | Total (%) |
|---|---------------------------|-----------------------------|-----------|
| Heavy ploughing machines, tractor (> 35 CV) | 0.4 | 0.2 | 0.4 |
| Medium ploughing machines, tractor (12 CV- 35 CV) | 2.4 | 0.8 | 2.1 |
| Small ploughing machine, tractor (12 CV and less) | 6.6 | 2.2 | 5.8 |
| Force generator | 3.0 | 0.4 | 1.7 |
| Generator | 0.9 | 0.0 | 0.5 |
| Motored insecticide sprayer | 0.7 | 0.1 | 0.4 |
| Water pump for agriculture production | 10.7 | 1.7 | 6.3 |

* Table 2 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 3.7 | Access to selected agro-processing equipment, by sex of the household head*

| | Male headed household | Female headed household | Total |
|---|-----------------------|-------------------------|-------|
| Rice milling machine with engine | 3.7 | 0.5 | 2.2 |
| Dryer/oven | 0.4 | 0.0 | 0.2 |
| Milling machine | 1.4 | 0.1 | 0.8 |
| Wood power machine (power-saw, planer...) | 0.3 | 0.0 | 0.1 |
| Animal food processing machines | 0.2 | 0.0 | 0.1 |
| Aquaculture food processing machines | 0.1 | 0.0 | 0.0 |

* Table 3 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

3.3.3 Fishery equipment

The 2006 census collected ownership data on a number of fishing boats, including non-powered boats and powered boats. At national level, 641 220 male headed households have members whose main employment source is aquaculture, or 5 percent of all male headed households. Almost 6 percent (55 528) of all female headed households have members actively engaged in aquaculture. For regional data on aquaculture as a household livelihood source, please refer to Chapter 4.

Overall, most rural households actively involved in aquaculture (i.e. at least one household member reported aquaculture as their main source of income) own powered boats (88%) rather than non-powered boats (6%). About 88 percent of male headed and 89 percent of female headed households actively involved in aquaculture own powered boats. Across the regions there is no noteworthy difference between male and female headed households actively involved in aquaculture in terms of ownership of powered boats.

3.4 INFORMATION AND COMMUNICATION

3.4.1 Communication technologies

The 2006 census collected agricultural household data on ownership of one or more of the following communication devices: television, radio, telephone, mobile phone, computer, and internet (Table 3.9 and Annex 1). At national and regional level, the most common owned communication device for both male and female headed agricultural households is a colour television. Over 64 percent of male headed agricultural households own a colour television, compared to 54 percent of female headed households. The percentage point difference in colour television ownership

TABLE 3.8 | Access to fishing boats among male and female headed agricultural households, by region

| Region | Male headed households | | Female headed households | |
|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|
| | Non-powered fishing boats | Powered fishing boats | Non-powered fishing boats | Powered fishing boats |
| National | 6.2 | 87.5 | 5.2 | 88.6 |
| Red river delta | 8.5 | 84.0 | 11.2 | 83.7 |
| North East | 3.0 | 87.4 | 2.3 | 89.0 |
| North West | 9.1 | 80.6 | 13.0 | 78.3 |
| North Central Coast | 7.7 | 88.0 | 7.5 | 87.7 |
| South Central Coast | 5.8 | 90.6 | 5.1 | 91.9 |
| Central Highlands | 25.0 | 75.0 | - | - |
| South East | 6.3 | 88.9 | 4.9 | 89.6 |
| Mekong River delta | 4.8 | 83.7 | 4.7 | 87.2 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

is largest in the Red River Delta (14%), North Central Coast (14%), and the South Central Coast (17%) regions (Map 3.5). Household ownership of the other selected communication devices is low, including for mobile phones. In exception of colour television, the difference in ownership of all other communication devices between male and female headed agricultural households is relatively small.

3.4.2 Information access

The 2006 census collected data on information access from different sources, including agriculture extension, mass media and other sources (i.e. relatives/friends, services, neighbours, meetings, etc). At national level, 41 percent of all rural households received information from agricultural extension workers 12 months prior to the census, of which 43 percent are male headed and 35 percent female headed (Chart 3.4 and Table 3.10). Mass media is another important information source for 57 percent of the rural households. Male headed households have greater access to mass media: 51 percent of male headed households received information through mass media compared to 45 percent among female headed households.

The main topics for which male and female headed rural households received information are: new varieties (40%), pest and disease control (42%), animal disease control (35%), and fertiliser application (37%). Few rural households in 2006 reported receiving information on poultry disease control, credit and markets.

The common source of information provision differs by topic. For information related to new varieties, 41 percent of the male and 34 percent of the female headed households received most information from agricultural extension

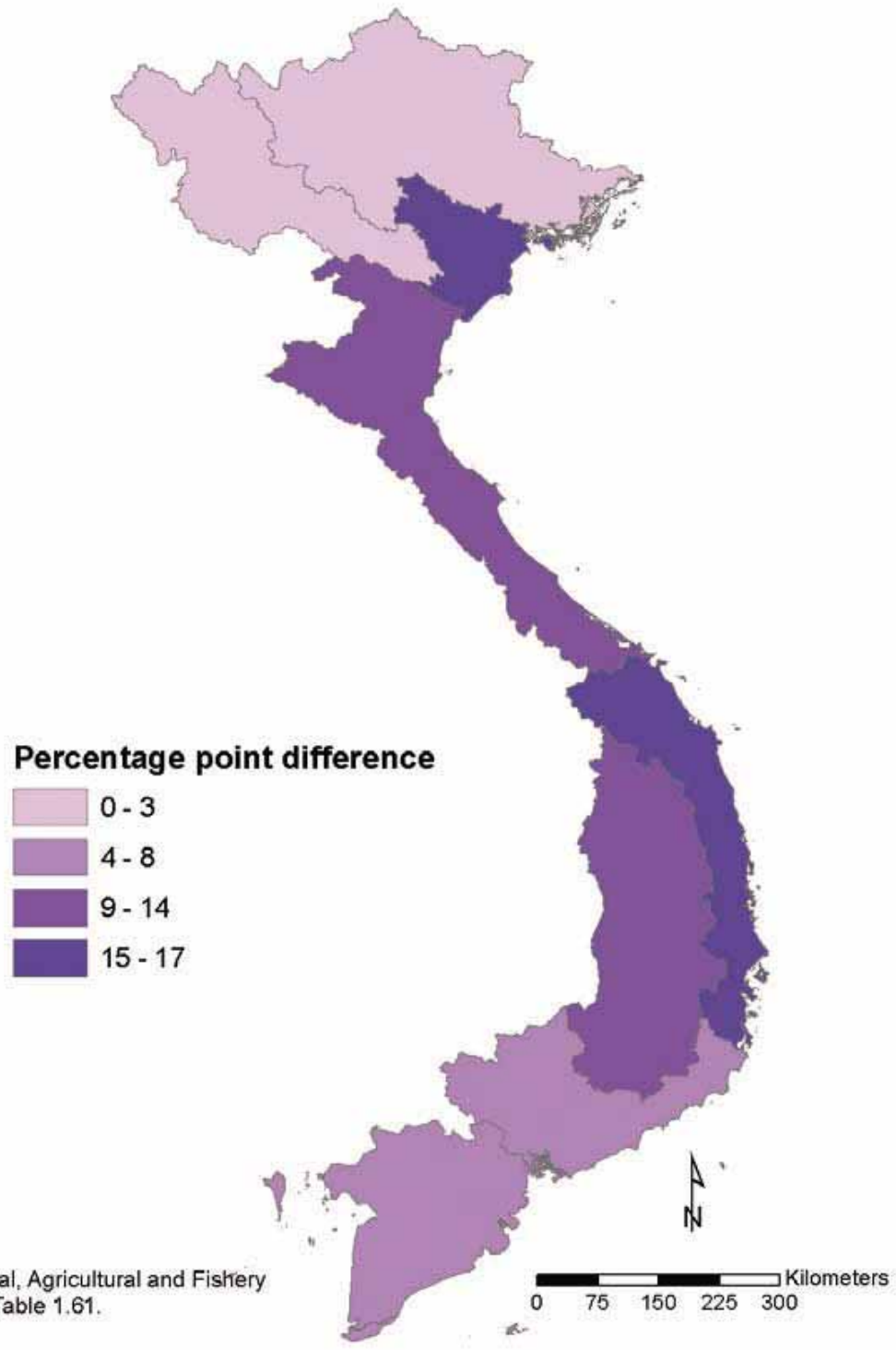
TABLE 3.9 | Access to communication devices, by sex of household head (%)*

| Region | Male headed household | Female headed household | Total |
|-------------------------------|-----------------------|-------------------------|-------|
| National | | | |
| Colour TV | 63.7 | 54.3 | 62.1 |
| B/W TV | 8.3 | 7.8 | 8.2 |
| Radio cassette | 14.0 | 11.9 | 13.6 |
| Desk phone | 10.5 | 10.3 | 10.5 |
| Mobile phone | 4.6 | 3.6 | 4.4 |
| Computer | 0.6 | 0.6 | 0.6 |
| Computer with internet access | 0.0 | 0.0 | 0.0 |

* Table 4 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

MAP 3.6 | Percentage point difference between male and female headed households in ownership of colour television



officers. For pest and disease control, both, agricultural extension officers (42%) and the mass media (34%), are the common sources of information provision for rural households. For animal disease control and fertiliser application, also agriculture extension officers (35% and 37% respectively) and mass media (29% and 33%) are the main sources of information for both male and female headed households.

The pattern of receiving information by different information sources and topics is similar between male and female headed rural households, however overall a smaller proportion of female headed households received information compared to male headed households, regardless of the source and topic.

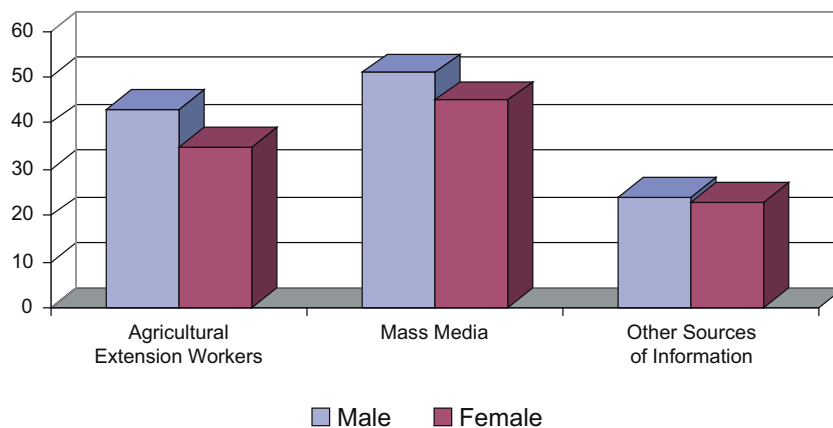
3.5 CREDIT

The 2006 census collected data on loans for production and business purposes and the source of these loans¹. At national level, only 31 percent of rural households took a loan for production or business purposes. Proportionally, fewer female headed households accessed loans: 24 percent in comparison to 33 percent of male headed households (Chart 3.5, Table 3.11 and Annex 1).

The proportion of female headed households obtaining loans differs per region and ranges between 13 percent in the Red River Delta to 33 percent in the Central Highlands and the Mekong River Delta regions. Likewise, the difference between male and female headed households varies among the regions, with only 3 percentage point difference in the North West Region and 11 percentage point difference in the Red River Delta, North Central Coast and Central Highlands regions (Map 3.6).

The most common source for obtaining a loan among rural households is the social policy bank, especially in the Central Highlands region. A third of the interviewed male headed households and almost a quarter of the female headed households, who took a loan, obtained their loan from the social policy bank. Beside the social policy bank, male and female headed households also obtained loans from the Agriculture & Rural Development Bank (8% and 6%, respectively) and other banks² (16% and 10%, respectively).

CHART 3.4 | Percent access to information sources among male and female headed households in rural areas



¹ Includes: Social Policy Bank, Agriculture & Rural Development Bank, Other Banks, Credit agencies, Social Policy Agencies, Employment Support Fund, Private Lender, Material Supplier (debt purchase), Material Supplier (debt purchase), Relatives/Friends, Other Sources.

² Includes private bank, army bank, etc.

TABLE 3.10 | Access to agricultural information, by source of information (%)

| Information source/type | Male headed households | Female headed households |
|--|------------------------|--------------------------|
| Agricultural extension workers | 42.7 | 35.4 |
| New variety of cultivars | 41.4 | 33.7 |
| New variety of animal breeding | 21.5 | 16.3 |
| New variety of aquatic breeding | 5.1 | 2.7 |
| Pest control | 42.7 | 35.4 |
| Animal disease control | 35.9 | 28.4 |
| Disease prevention and treatment for poultry | 5.0 | 2.9 |
| Fertilizer application | 38.5 | 32.0 |
| Feed/ Nutrition for animal husbandry | 14.3 | 10.9 |
| Feed/ Nutrition for aquaculture | 3.8 | 3.1 |
| Weather | 6.2 | 5.5 |
| Credit approach | 4.5 | 3.2 |
| Market information | 5.0 | 4.2 |
| Mass media | 51.4 | 44.6 |
| New variety of cultivars | 27.4 | 24.1 |
| New variety of animal breeding | 21.4 | 17.5 |
| New variety of aquatic breeding | 5.1 | 3.0 |
| Pest control | 34.6 | 31.1 |
| Animal disease control | 30.0 | 25.0 |
| Disease prevention and treatment for poultry | 4.5 | 2.8 |
| Fertilizer application | 34.0 | 30.3 |
| Feed/ Nutrition for animal husbandry | 19.0 | 15.6 |
| Feed/ Nutrition for aquaculture | 4.4 | 2.8 |
| Weather | 51.4 | 44.6 |
| Credit approach | 11.3 | 8.8 |
| Market information | 35.1 | 30.1 |
| Other information sources | 24.0 | 22.8 |
| New variety of cultivars | 16.5 | 14.7 |
| New variety of animal breeding | 14.4 | 11.8 |
| New variety of aquatic breeding | 3.5 | 2.2 |
| Pest control | 18.6 | 18.0 |
| Animal disease control | 14.4 | 12.0 |
| Disease prevention and treatment for poultry | 2.7 | 1.6 |
| Fertilizer application | 24.0 | 22.8 |
| Feed/ Nutrition for animal husbandry | 13.3 | 11.0 |
| Feed/ Nutrition for aquaculture | 2.8 | 1.7 |
| Weather | 9.0 | 8.2 |
| Credit approach | 12.4 | 8.9 |
| Market information | 23.6 | 21.5 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 3.5 | Percentage of male and female headed households taking loans for production and business purposes, by region

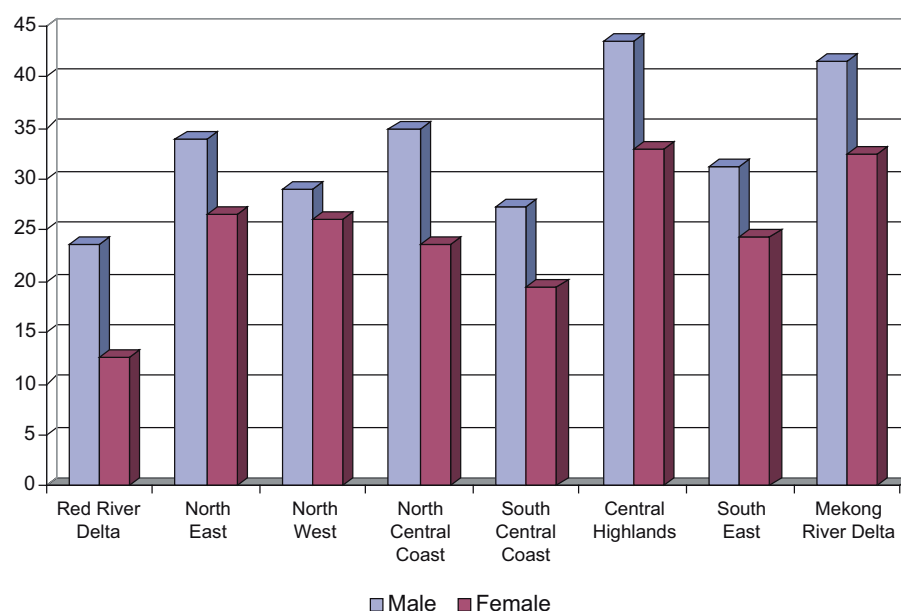


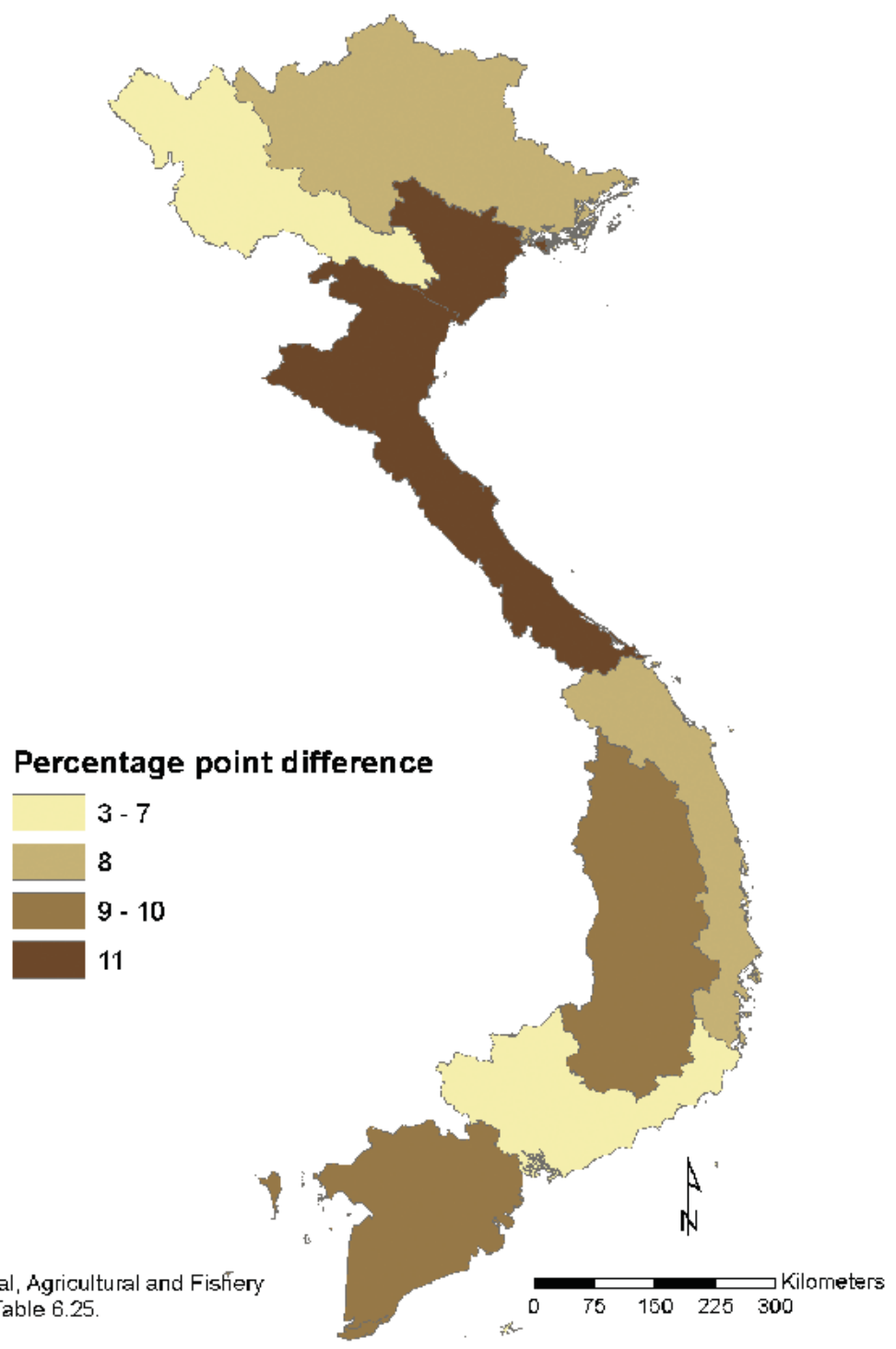
TABLE 3.11 | Percentage of rural households obtaining loans, by sex and source*

| | Male headed household | Female headed household | Total |
|--------------------------------------|-----------------------|-------------------------|-------|
| Social Policy Bank | 32.9 | 23.9 | 31.3 |
| Agriculture & Rural Development Bank | 8.2 | 5.8 | 7.8 |
| Other Banks | 15.5 | 10.2 | 14.6 |
| Credit agencies | 0.7 | 0.5 | 0.7 |
| Social Politic Agencies | 1.3 | 0.9 | 1.2 |
| Employment Support Fund | 1.0 | 1.0 | 1.0 |
| Private Lender | 0.3 | 0.3 | 0.3 |
| Material Supplier (debt purchase) | 2.0 | 1.5 | 1.9 |
| Relatives/Friends | 5.0 | 4.2 | 4.8 |
| Other Sources | 3.1 | 2.1 | 3.0 |

* Table 4 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

MAP 3.7 | Percentage point difference between male and female headed households in acquiring a loan



Source: 2006 Rural, Agricultural and Fisheries Census Table 6.25.

CHAPTER 4

Livelihood strategies

This chapter presents gender statistics on livelihood strategies, i.e. the combination of different activities which male and female headed agricultural households undertake on the basis of their assets (Chapters 2 and 3). In particular, the chapter presents data on livelihood strategies such as rural employment, crop production, livestock production, fishery and commercial farming.

4.1 RURAL EMPLOYMENT

4.1.1 Rural employment

In 2006, 31 902 343 rural people at working age reported to have jobs in the last 12 months out of a total rural population at working age of 35 381 202, or 90 percent. People at working age include men aged between 15 and 60 years and women aged between 15 and 55. This means that for the 2006 census the number of people at working age comprises men born from July 1946 to June 1991 and women born from July 1951 to June 1991. Out of the employed rural population at working age, 16 490 988 (52%) are male and 15 411 355 (48%) female. Jobs in this context refer to both self-employed (and thus no regular salary or unpaid) and employed by others. At national level and across all regions slightly more (1 to 6 percentage points) rural men have jobs compared to rural women (Table 4.1 and Annex 1). At national level, the main working sector for employed rural men of working age is agriculture (10 476 530), followed by industry (1 512 643), trading (1 121 383) and aquaculture (1 013 368). Rural women of working age are mostly employed in agriculture (10 716 417), followed by trading (1 708 408) and industry (1 397 743). Transportation, construction and to a lesser extent aquaculture and forestry are primary working sectors dominated by rural men. Rural women, on the other hand, are more involved in trading than men. Out of the total rural population of working age who reported trading as their main income source, 60 percent are female and 40 percent male. Particularly in the North Central Coast, South Central Coast, Central Highlands, South, and the Mekong River Delta regions twice as many rural women gain income through trading than rural men (map 4.1).

TABLE 4.1 | Number and percent of people at working age with jobs by sex and primary working sector

| | Number of rural people at working age reported to have jobs | | | Percentage of rural people at working age reported to have jobs | | |
|------------------------|---|-------------------|-------------------|---|-------------|-------------|
| | Total | Male | Female | Total | Male | Female |
| National | 31 902 343 | 16 490 988 | 15 411 355 | 100.0 | 51.7 | 48.3 |
| Agriculture | 21 192 947 | 10 476 530 | 10 716 417 | 100.0 | 49.4 | 50.6 |
| Forestry | 97 833 | 60 976 | 36 857 | 100.0 | 62.3 | 37.7 |
| Aquaculture | 1 563 833 | 1 013 368 | 550 465 | 100.0 | 64.8 | 35.2 |
| Industry | 2 910 386 | 1 512 643 | 1 397 743 | 100.0 | 52.0 | 48.0 |
| Construction | 1 032 655 | 934 546 | 98 109 | 100.0 | 90.5 | 9.5 |
| Trading | 2 829 791 | 1 121 383 | 1 708 428 | 100.0 | 39.6 | 60.4 |
| Transportation | 446 456 | 405 620 | 40 836 | 100.0 | 90.9 | 9.1 |
| Other Service Activity | 1 828 442 | 965 922 | 862 520 | 100.0 | 52.8 | 47.2 |

* Table 6 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

MAP 4.1 | Percentage point difference between male and female household with members who reported trading as primary income source

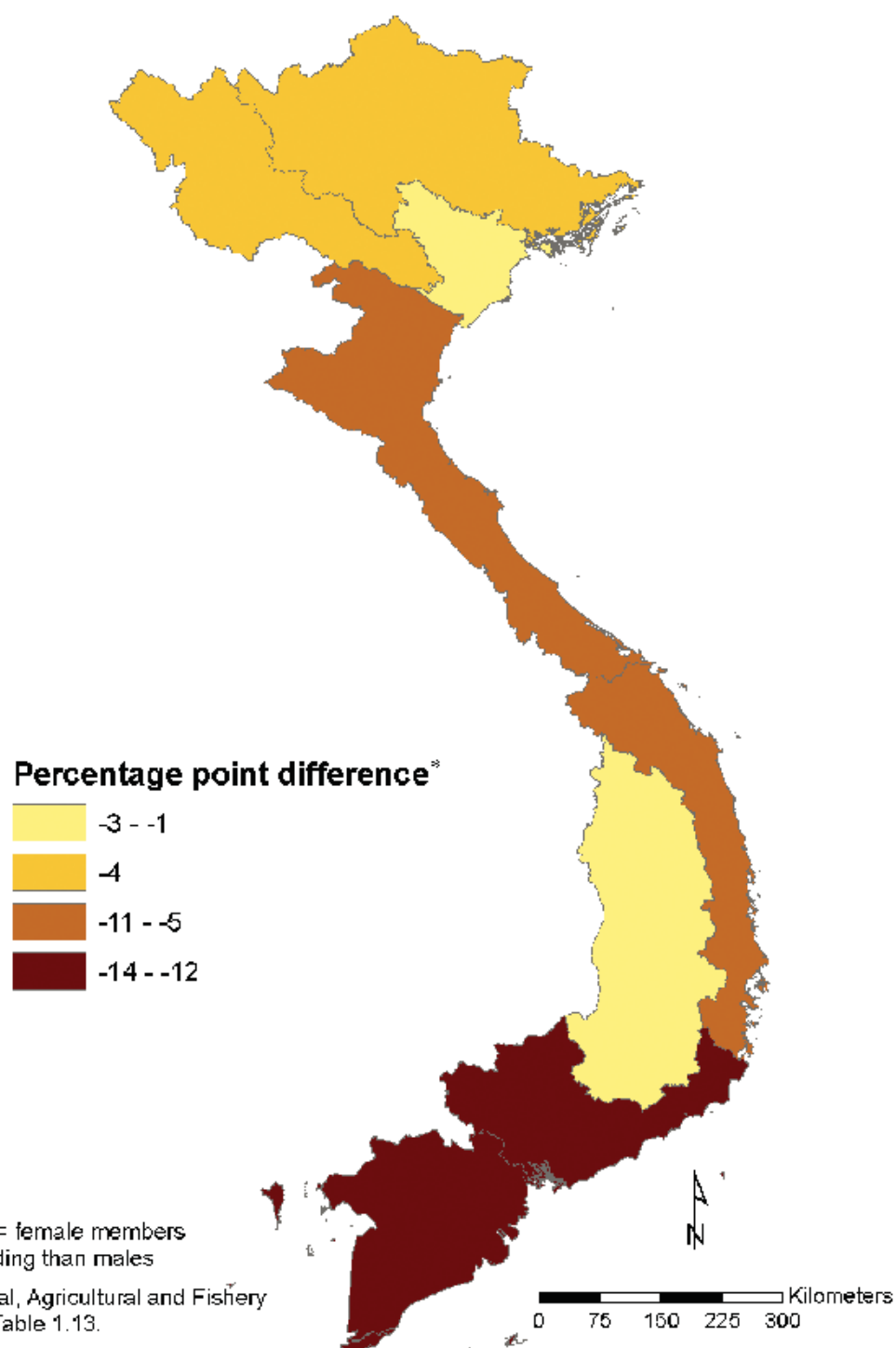


TABLE 4.2 | Percentage of rural households with at least one member with a job, by sex of the household head and primary working sector

| | Total | Male | Female |
|------------------------|-------|------|--------|
| Agriculture | 68.4 | 68.1 | 69.8 |
| Forestry | 0.3 | 0.4 | 0.3 |
| Aquaculture | 5.1 | 5.7 | 2.2 |
| Industry | 6.5 | 6.6 | 6.1 |
| Construction | 4.1 | 4.9 | 0.6 |
| Trading | 8.1 | 6.8 | 14.0 |
| Transportation | 1.8 | 2.2 | 0.3 |
| Other Service Activity | 5.7 | 5.4 | 6.8 |

* Table 7 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

4.1.2 Rural employment by sex of household head

About 97 percent of all male headed households have at least one member employed during the last 12 months (i.e. self-employed or employed by others), regardless of age. For female headed households in rural areas this is 88 percent. The main working sector for members of male headed household in rural areas is agriculture (68%), followed by trading (7%) and industry (7%). Like-wise, the main employment sector for members of female headed households in rural areas is agriculture (70%). Trading is another important source of employment for female headed households and proportionally twice as many female headed households have at least one member earning income from trading compared to male headed households (Table 4.2).

4.2. CROP PRODUCTION

4.2.1 Area planted

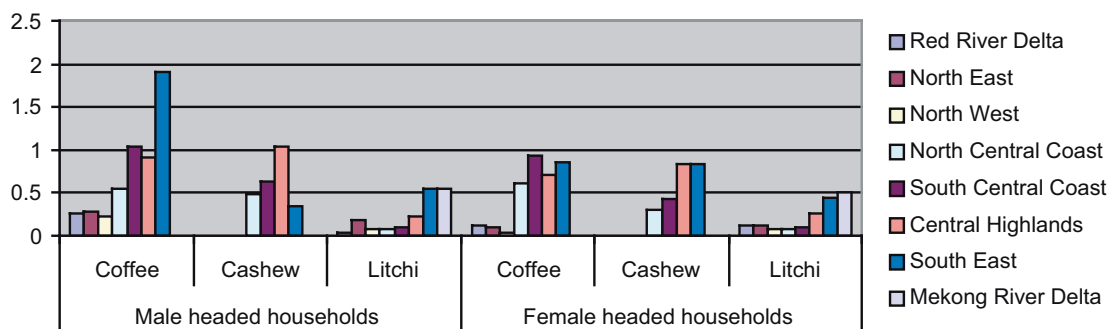
The 2006 census collected data on main crops, including rice, tea, coffee, rubber, cashew, pepper, coconut, orange, mandarin, mango, longan, litchi/rambutan, and grapefruit. At national level, there is no notable difference between male and female headed households in the proportion of households cultivating certain crops. This is true for all crops included in the census. The average area cultivated with these main crops does, however, differ between male

TABLE 4.3 | Average area planted (ha) by households, by sex of household head and type of crops.

| Crops | Male headed households | Female headed households | Total | Percentage difference in area cultivated |
|---------------------|------------------------|--------------------------|-------|--|
| Tea | 0.25 | 0.22 | 0.24 | 12.0 |
| Coffee | 0.90 | 0.72 | 0.88 | 20.0 |
| Rubber | 1.74 | 1.43 | 1.69 | 17.8 |
| Cashew | 1.07 | 0.79 | 1.03 | 26.2 |
| Pepper | 0.25 | 0.20 | 0.25 | 20.0 |
| Coconut | 0.20 | 0.20 | 0.20 | 0.0 |
| Orange, mandarin | 0.18 | 0.16 | 0.17 | 11.1 |
| Mango | 0.17 | 0.15 | 0.16 | 11.8 |
| Longan/Dragon's eye | 0.16 | 0.14 | 0.16 | 12.5 |
| Litchi, rambutan | 0.17 | 0.14 | 0.17 | 17.6 |
| Grapefruit, pomelo | 0.11 | 0.10 | 0.10 | 9.1 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 4.1 | Average area cultivated with coffee, cashew and litchi, by sex of household head and region



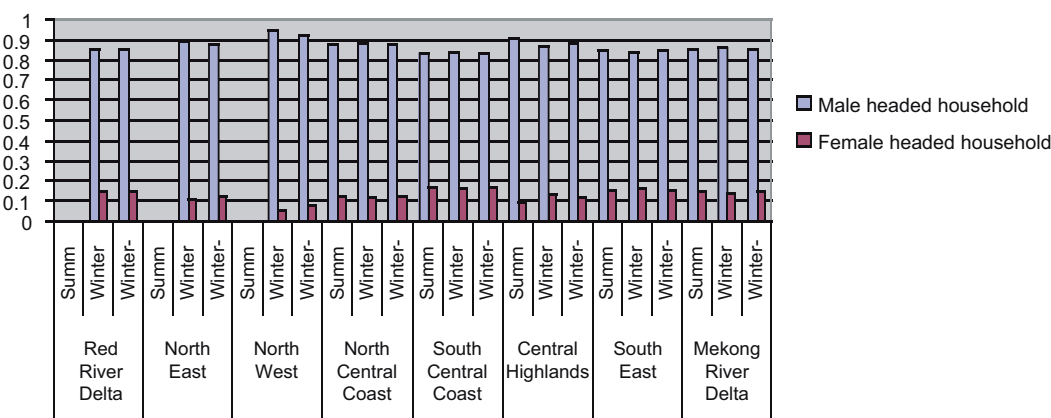
and female headed households. For all main crops, male headed households cultivate larger areas compared to female headed households. In particular for coffee, rubber, cashew, pepper and litchi, the area cultivated of male headed households is 18 to 20 percent larger than female headed households (Table 4.3 and Chart 4.1).

4.2.2 Rice production

Throughout the regions, the average area cultivated with rice differs significantly between male and female headed households (Table 4.4, Chart 4.2 and Map 4.2). While at national level the average area planted with summer-august rice (2005) is 0.85 hectare for male headed households, female headed households cultivated only 0.15 hectare. At the regional level, there are noteworthy differences between male and female headed households in the area cultivated with rice, especially in the North West and Central Highlands regions. In the North West region the area cultivated with winter crop rice (2005) and winter spring crop rice (2006) is respectively 89 percent and 84 percent larger compared to female headed households. In the Central Highlands, the area cultivated with summer-august crop rice (2005) by male headed households is more than 80 percent larger as the area cultivated with summer-august crop rice (2005) by female headed households.

The 2006 census also collected data on sources of rice seed supply among rural households, including self supply, breeding cultivars company, agriculture extension center, cooperative, private dealer, and other sources. The source of seed supply varies by type of rice. For the summer-august rice, 47 percent of rural households use self-supply as the main source of rice seed, followed by other sources (13%) and cooperatives (12%). For winter rice and winter

CHART 4.2 | Average area cultivated with rice among male and female headed rural households, by type of rice and region



MAP 4.2 | Percentage difference in mean area planted with winter rice between male and female headed households

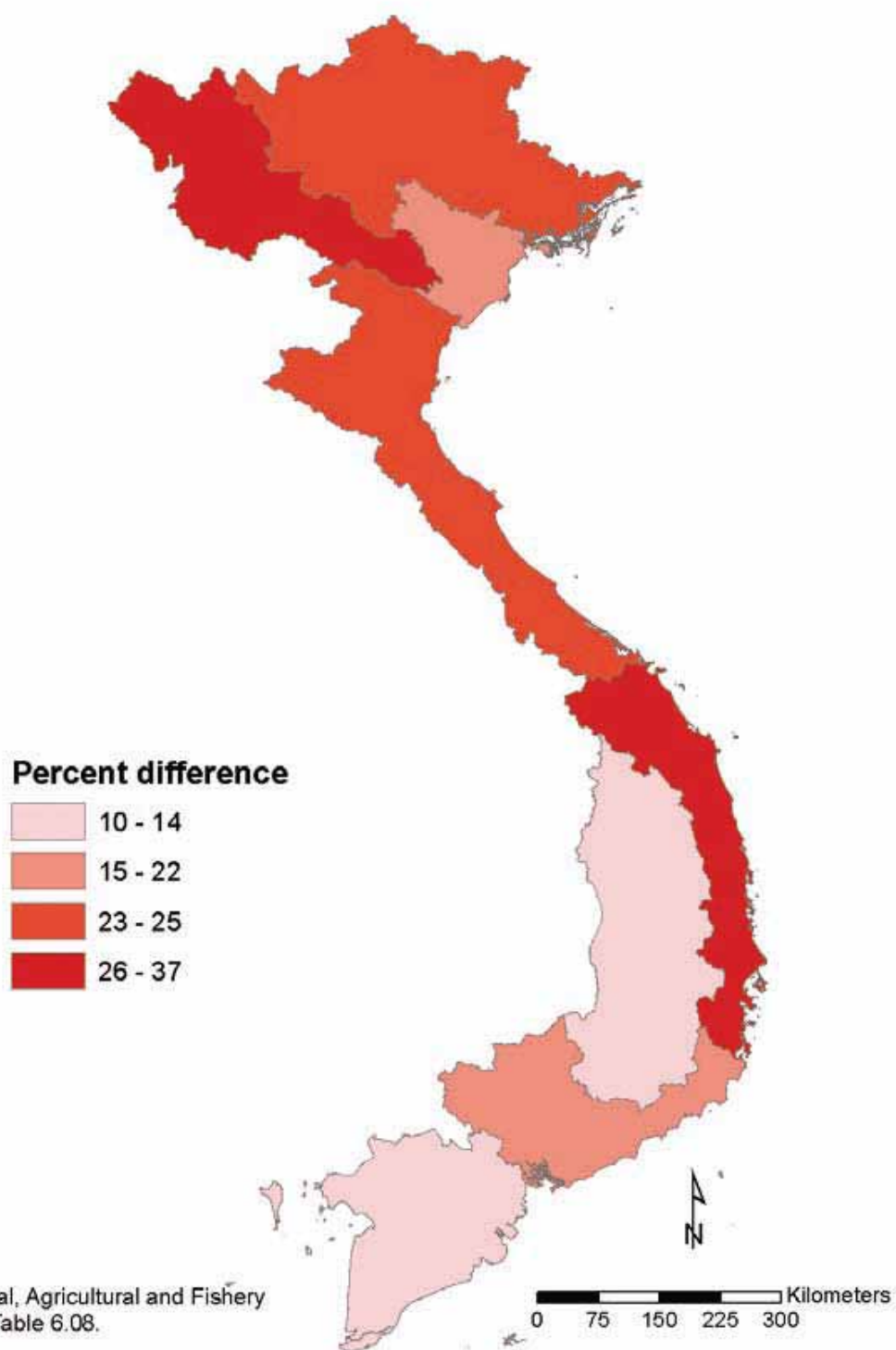


TABLE 4.4 | Sources of rice variety by sex of household head and type of rice

| Source of rice seed supply | Male headed | Female headed |
|------------------------------|-------------|---------------|
| Summer-August rice | | |
| Household Self supply | 47 | 47 |
| Breeding cultivars company | 10 | 10 |
| Agriculture extension center | 8 | 8 |
| Cooperative | 12 | 12 |
| Private dealer | 9 | 9 |
| Other sources | 13 | 13 |
| Winter rice | | |
| Household Self supply | 28 | 28 |
| Breeding cultivars company | 15 | 12 |
| Agriculture extension center | 14 | 11 |
| Cooperative | 25 | 29 |
| Private dealer | 13 | 13 |
| Other sources | 5 | 6 |
| Winter-Spring rice | | |
| Household Self supply | 23 | 23 |
| Breeding cultivars company | 16 | 14 |
| Agriculture extension center | 14 | 12 |
| Cooperative | 27 | 30 |
| Private dealer | 13 | 13 |
| Other sources | 8 | 8 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

spring rice only 28 and 25 percent, respectively, of the rural households obtain rice seed from their own household. Across the different rice types, there is no real difference between male and female headed rural households in terms of source of seed supply.

4.2.3 Marketing

Marketing of agricultural produce and livestock is relatively low for both male and female headed households in rural areas across the regions. Among the main commodities sold by rural households are rice, pigs, poultry

CHART 4.3 | Percentage of male and female headed households in rural areas selling rice, pigs and poultry, by type of buyer

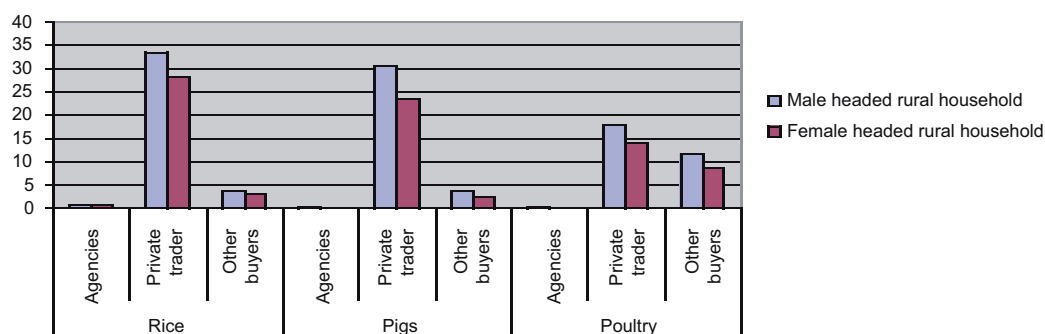


TABLE 4.5 | Percentage of male and female headed households in rural areas selling rice, pigs and poultry, by type of buyer

| | Male headed household | Female headed household |
|----------------|-----------------------|-------------------------|
| Rice | | |
| Agencies | 0.7 | 0.6 |
| Private trader | 33.5 | 28.2 |
| Other buyers | 3.8 | 3.2 |
| Pigs | | |
| Agencies | 0.2 | 0.1 |
| Private trader | 30.6 | 23.3 |
| Other buyers | 3.9 | 2.5 |
| Poultry | | |
| Agencies | 0.2 | 0.1 |
| Private trader | 17.9 | 14.0 |
| Other buyers | 11.7 | 8.6 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 4.6 | Percentage of male and female headed households selling rice and pigs to private traders, by region

| Region | Male headed household | Female headed household | Total |
|----------------------------|-----------------------|-------------------------|-------|
| National | | | |
| Rice | 33.5 | 28.2 | 32.6 |
| Pigs | 30.6 | 23.3 | 29.4 |
| Red River Delta | | | |
| Rice | 45.0 | 40.0 | 44.1 |
| Pigs | 38.2 | 29.7 | 36.7 |
| North East | | | |
| Rice | 18.9 | 11.7 | 17.9 |
| Pigs | 47.0 | 36.7 | 45.6 |
| North West | | | |
| Rice | 17.6 | 10.1 | 16.9 |
| Pigs | 33.1 | 20.2 | 31.7 |
| North Central Coast | | | |
| Rice | 29.1 | 25.9 | 28.6 |
| Pigs | 45.5 | 37.5 | 44.3 |
| South Central Coast | | | |
| Rice | 35.7 | 35.1 | 35.6 |
| Pigs | 32.3 | 31.9 | 32.2 |
| Central Highlands | | | |
| Rice | 20.2 | 12.8 | 19.2 |
| Pigs | 20.9 | 19.5 | 20.7 |
| South East | | | |
| Rice | 20.3 | 15.4 | 19.3 |
| Pigs | 11.3 | 8.9 | 10.8 |
| Mekong River Delta | | | |
| Rice | 45.8 | 35.5 | 43.8 |
| Pigs | 17.3 | 12.5 | 16.4 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 4.7 | Percentage of male and female headed households selling poultry to private traders and other buyers, by region

| Region | Male headed household | Female headed household | Total |
|----------------------------|-----------------------|-------------------------|-------|
| National | | | |
| Private trader | 17.9 | 14.0 | 17.3 |
| Other buyer | 11.7 | 8.6 | 11.2 |
| Red River Delta | | | |
| Private trader | 22.4 | 18.2 | 21.7 |
| Other buyer | 12.8 | 11.9 | 12.6 |
| North East | | | |
| Private trader | 27.5 | 20.1 | 26.5 |
| Other buyer | 20.8 | 15.9 | 20.2 |
| North West | | | |
| Private trader | 23.4 | 20.6 | 23.1 |
| Other buyer | 28.8 | 19.3 | 27.8 |
| North Central Coast | | | |
| Private trader | 21.9 | 19.6 | 21.6 |
| Other buyer | 18.2 | 14.0 | 17.5 |
| South Central Coast | | | |
| Private trader | 26.0 | 24.4 | 25.7 |
| Other buyer | 10.1 | 7.3 | 9.6 |
| Central Highlands | | | |
| Private trader | 12.6 | 8.9 | 12.1 |
| Other buyer | 9.0 | 9.8 | 9.1 |
| South East | | | |
| Private trader | 9.4 | 6.0 | 8.7 |
| Other buyer | 2.9 | 2.4 | 2.8 |
| Mekong River Delta | | | |
| Private trader | 7.7 | 7.0 | 7.6 |
| Other buyer | 4.6 | 3.4 | 4.4 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

and depending on the region maize. In the Central Highlands region, coffee is the main product sold by both male and female headed households and in South East region cashews are among the main products sold. The census included information on the type of buyers. These include agencies, private traders, and other buyers (i.e. consumers, relatives, neighbours). Both male and female headed households mainly sell their products to private traders (Table 4.5 and Chart 4.3)

At national level, 33 percent of all rural households sell rice to private traders. Proportionally, slightly more male headed households (34%) sell rice compared to female headed households (28%). This trend is consistent for all regions, where between 1 and 10 percentage points more male headed households sell rice than female headed households (Table 4.6).

About 31 percent of all male headed and 23 percent of all female headed households sell pigs to private traders. Also across the regions, proportionally fewer female headed households sell pigs compared to male headed household, ranging from 0.4 percentage points less in the South Central Coast region to 13 percentage points less in the North West region.

Unlike pigs and rice, rural households use more different channels for selling poultry, including private traders and other buyers (i.e. consumers, relatives, neighbours). At national level, 18 percent of male headed households sell poultry to private traders compared to 14 percent of all female headed households (Table 4.7).

Across the regions only a slightly higher proportion of male headed households sell poultry to private traders compared to female headed households, ranging from 0.7 percentage points more in the Mekong River Delta region to 8 percentage points more in the North East region. About 12 percent of all male headed households in rural areas and 9 percent of all female headed households sell poultry to other buyers in their own community or nearby neighbourhood. These other buyers are particularly important in the North West, North East, and the North Central Coast regions. In the North West, North East and North Central Coast regions, respectively 29 percent, 21 percent and 18 percent of the male headed households sell poultry to other buyers. For female headed households these numbers are 19 percent, 16 percent and 14 percent, respectively.

4.3 AGRICULTURAL PRACTICES

The 2006 Rural, Agriculture, and Fishery Census collected data on the use of agricultural inputs for rice cultivation (Table 4.8). At national level, almost a third of the rural households cultivating rice applied fertiliser with no noted difference between male and female headed households. Further, between 28 percent and 32 percent of all male and female headed households that cultivate rice applied pesticides for summer-august rice, winter rice and winter-spring rice crops and about a quarter used herbicides. Only a small proportion of male and female headed households applied growth stimulus (7 to 15 percent) and organic manure (0.4 to 2 percent). There are no remarkable differences between male and female headed households in the application of inputs for rice cultivation, regardless of the type of input used.

TABLE 4.8 | Input application for rice cultivation by sex, of household head and type of input (%)

| | Male headed | Female headed | Total |
|------------------------|-------------|---------------|-------|
| Fertilizers | | | |
| Summer – august rice | 29.3 | 29.2 | 29.3 |
| Winter rice | 34.8 | 34.9 | 34.9 |
| Winter – spring rice | 33.7 | 33.7 | 33.7 |
| Pesticides | | | |
| Summer – august rice | 28.1 | 28.1 | 28.1 |
| Winter rice | 32.4 | 32.8 | 32.5 |
| Winter – spring rice | 31.5 | 31.7 | 31.6 |
| Herbicides | | | |
| Summer – august rice | 27.7 | 27.8 | 27.7 |
| Winter rice | 24.2 | 24.9 | 24.3 |
| Winter – spring rice | 26.0 | 26.5 | 26.1 |
| Growth stimulus | | | |
| Summer – august rice | 14.3 | 14.5 | 14.3 |
| Winter rice | 4.9 | 5.2 | 4.9 |
| Winter – spring rice | 7.0 | 7.0 | 7.0 |
| Organic manure | | | |
| Summer – august rice | 0.5 | 0.4 | 0.4 |
| Winter rice | 1.8 | 1.3 | 1.7 |
| Winter – spring rice | 1.3 | 0.9 | 1.2 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 4.9 | Proportion of households owning livestock and average number of livestock owned, by type of livestock and sex of household head

| Livestock | Proportion of households owning livestock | | | Average number of livestock owned* | | |
|---------------------------|---|---------------|-------|------------------------------------|---------------|-------|
| | Male headed | Female headed | Total | Male headed | Female headed | Total |
| Buffalo | 14.5 | 6.4 | 13.1 | 2.0 | 1.8 | 1.9 |
| Cattle/Cow | 24.9 | 17.7 | 23.7 | 2.5 | 2.3 | 2.4 |
| Pigs | 56.9 | 47.0 | 52.2 | 4.2 | 3.5 | 4.1 |
| Chickens (non-industrial) | 68.5 | 66.1 | 68.1 | 19.8 | 16.5 | 19.2 |
| Ducks | 14.7 | 10.3 | 14.0 | 34.1 | 23.0 | 32.7 |
| Goose | 8.5 | 6.0 | 8.1 | 13.8 | 11.3 | 13.5 |
| Goats/sheep | 2.6 | 1.2 | 2.3 | 6.7 | 6.7 | 6.7 |

* Among those households owning livestock.

Source: GSO 2006 Rural, Agricultural and Fishery Census

4.4 LIVESTOCK PRODUCTION

4.4.1 Livestock ownership

The proportion of male and female headed households who own livestock differs by the type of livestock. The most common types of livestock owned by both male and female headed households include cattle, pigs and chickens (Table 4.9). Overall, the difference between male and female headed households at national level in terms of the proportion of households owning livestock is small, regardless of the type of livestock, and ranges from 1 percent (goats) to maximum 10 percent (pigs).

The difference in the average number of livestock owned between male and female headed households owning livestock is also small. An exception is the ownership of ducks. Male headed households own an average of 11 more ducks than female headed households; a difference of 32 percent.

4.4.2 Cattle production

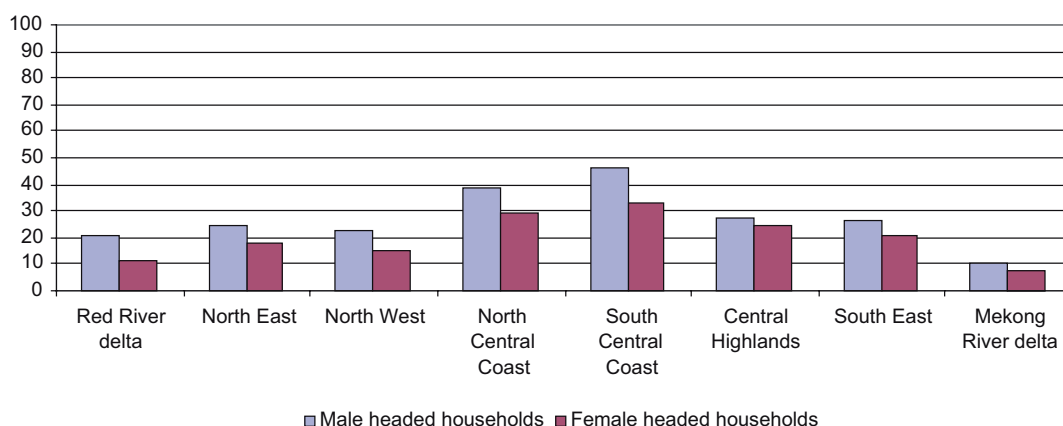
About 24 percent of households in rural areas keep cattle; 25 percent are headed by male and 18 percent by female (Table 4.10 and Chart 4.4). Proportionally, most cattle owners come from the South and North Central Coast

TABLE 4.10 | Percentage of households owning cattle and average number of cattle owned, by sex and region

| | Male headed households | | Female headed households | |
|---------------------|------------------------|------------|--------------------------|------------|
| | Percentage | Average | Percentage | Average |
| National | 24.9 | 2.5 | 17.7 | 2.3 |
| Red River Delta | 21.2 | 1.7 | 11.5 | 1.5 |
| North East | 24.4 | 2.2 | 18.0 | 1.8 |
| North West | 22.5 | 2.9 | 14.8 | 2.6 |
| North Central Coast | 39.0 | 2.0 | 29.5 | 1.8 |
| South Central Coast | 46.1 | 3.0 | 32.8 | 2.6 |
| Central Highlands | 27.4 | 3.6 | 24.1 | 3.3 |
| South East | 26.0 | 3.6 | 21.2 | 3.6 |
| Mekong River Delta | 10.7 | 2.6 | 7.7 | 2.5 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 4.4 | Percentage of male and female headed households owing cattle, by region



regions. In the South Central Coast region 46 percent of the male headed and 30 percent of the female headed households own cattle; almost twice as much as the national percentage.

The Mekong River Delta region has the lowest proportion of households owning cattle; only 11 percent of male headed and 8 percent of female headed households own cattle. The difference between male and female headed households in the proportion of households owning cattle is relatively small and ranges from 3 percentage points in the Mekong River Delta region and the Central Highlands to 13 percent in the South Central Coast region.

At national level, there is no notable difference between male and female headed households in terms of the number of cattle owned: male headed households own an average of 2.5 cattle compared to 2.3 for female headed households (Table 4.9 and Chart 4.5). The average number of cattle owned by male headed households varies from 1.7 in the Red River Delta to 3.6 in the Central Highlands and the South East regions. For female headed households, the average number of cattle owned ranges between 1.5 in the Red River Delta region and 3.6 in the South East region.

CHART 4.5 | Average number of cattle owned by male and female headed households, by region

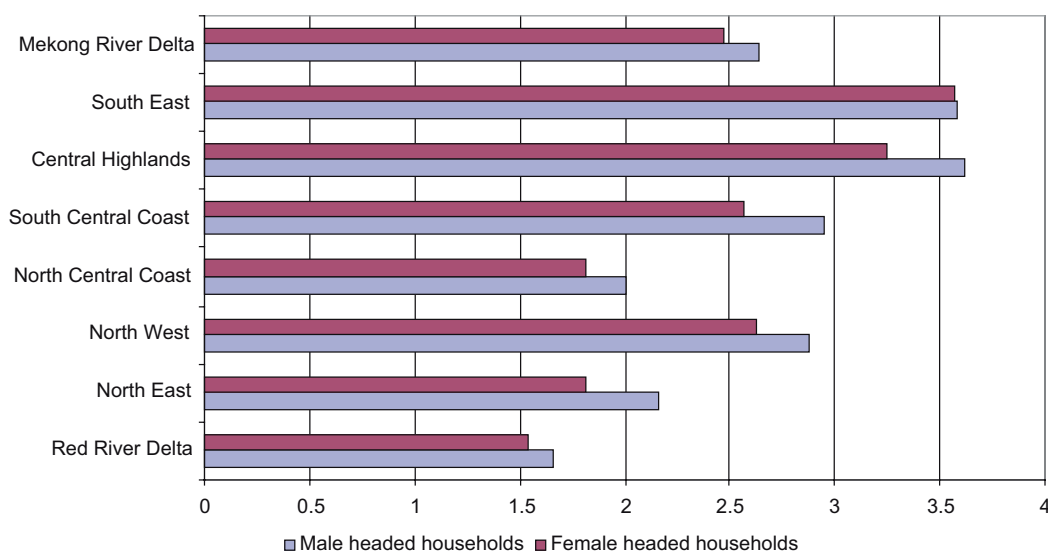


TABLE 4.11 | Percentage of households selling cattle in last 12 months and average number of cattle sold, by sex of household head and region

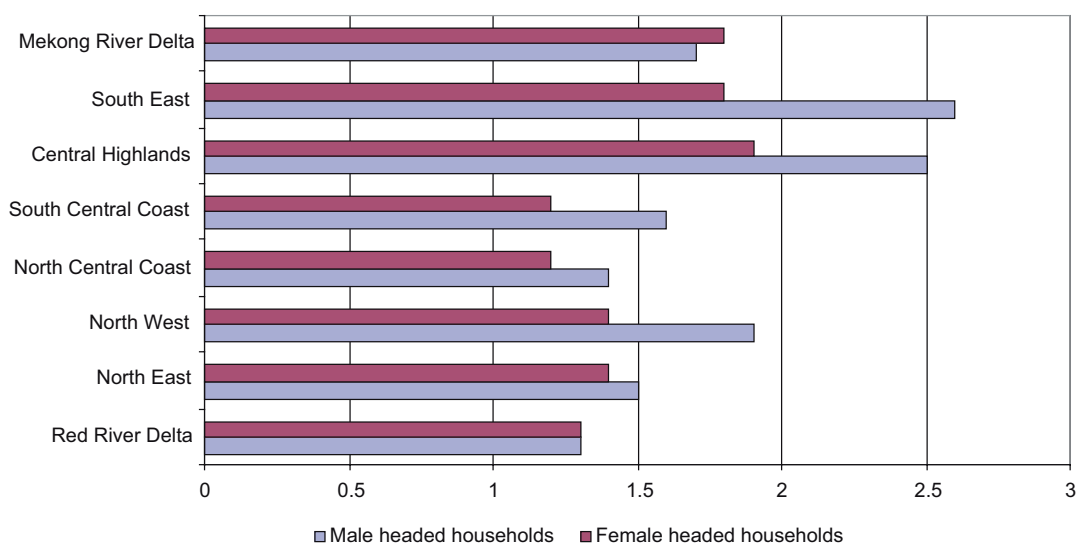
| | Male headed households | | Female headed households | |
|---------------------|------------------------|---------|--------------------------|---------|
| | Percentage | Average | Percentage | Average |
| National | 19.4 | 1.7 | 18.8 | 1.4 |
| Red River Delta | 28.0 | 1.3 | 20.6 | 1.3 |
| North East | 8.6 | 1.5 | 11.8 | 1.4 |
| North West | 6.9 | 1.9 | 8.5 | 1.4 |
| North Central Coast | 22.2 | 1.4 | 22.8 | 1.2 |
| South Central Coast | 27.0 | 1.6 | 23.7 | 1.2 |
| Central Highlands | 26.5 | 2.5 | 23.7 | 1.9 |
| South East | 22.0 | 2.6 | 16.1 | 1.8 |
| Mekong River Delta | 22.4 | 1.7 | 21.3 | 1.8 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

At national level, 19 percent of the rural households with cattle, sold cattle during the past 12 months (Table 4.11). There is no notable difference between male and female headed households across the regions in terms of the proportion selling cattle. The proportion of households selling cattle among male headed households engaged in cattle production is relatively higher in the Red River Delta region, where 28 percent sold cattle during a 12 months reference period and low in the North East (9%) and North West (7%) regions. For female headed households, the proportion selling cattle is highest in the South Central region (24%) and the Central Highlands (24%) and lowest in the North West region (9%).

In the past 12 months male headed households owing cattle sold an average of 1.7 cattle compared to 1.4 among female headed households (Chart 4.6). Among male headed households, the highest average number of cattle sold is in the South East region (2.6). For female headed households the highest average number sold is in the Central Highlands (1.9).

CHART 4.6 | Average number of cattle sold by male and female headed households owning cattle, by region



4.4.3 Pig production

Among rural households, 57 percent male headed and 47 percent female headed own pigs (Table 4.12). The proportion of households with pigs differs strongly across the regions. The North East region has the highest proportion of male headed households keeping pigs (80%); nearly four times as much as in the South East region where 23 percent of the male headed households own pigs. For female headed households pig ownership ranges from 22 percent in the South East region to 68 percent in the North Central Coast region. In addition, the percentage point difference between male and female headed households in pig ownership differs strongly between the regions and ranges between 1 in the South Central Coast and South East regions to 19 percent in the Red River Delta.

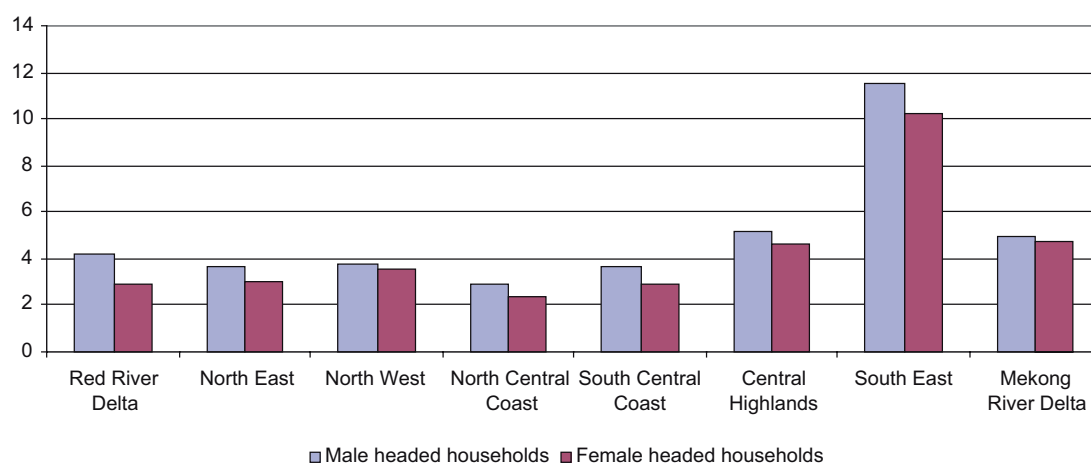
At national level, male headed households own an average of 4.2 pigs compared to 3.5 for female headed households (Chart 4.7). The average number of pigs owned by male headed households is highest in the South East (11.5) and lowest in the North Central Coast (3.0). Likewise, female headed households in the South East region own the highest average number of pigs (10.2), whereas female headed households in the North Central Coast region own the lowest average number of pigs (2.4). The difference between male and female headed households in the average number of pigs owned differs per region and is lowest in the North West and the Mekong River Delta regions and highest in the Red River Delta region. In the North West and Mekong River Delta regions male headed households own 5 percent more pigs compared to female headed households whereas in the Red River Delta male headed households own 32 percent more pigs (Map 4.3).

TABLE 4.12 | Percentage of households owning pigs and average number of pigs owned, by sex and region

| | Male headed households | | Female headed households | |
|---------------------|------------------------|---------|--------------------------|---------|
| | Percentage | Average | Percentage | Average |
| National | 56.9 | 4.2 | 47.0 | 3.5 |
| Red River Delta | 71.4 | 4.2 | 52.7 | 2.9 |
| North East | 80.0 | 3.7 | 65.7 | 3.0 |
| North West | 69.7 | 3.8 | 54.0 | 3.6 |
| North Central Coast | 76.0 | 3.0 | 67.8 | 2.4 |
| South Central Coast | 58.2 | 3.6 | 59.5 | 3.0 |
| Central Highlands | 34.0 | 5.2 | 29.7 | 4.6 |
| South East | 23.3 | 11.5 | 21.8 | 10.2 |
| Mekong River Delta | 31.4 | 5.0 | 28.7 | 4.7 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 4.7 | Average number of pigs owned by male and female headed households, by region



MAP 4.3 | Difference in mean number of pigs between male and female headed households

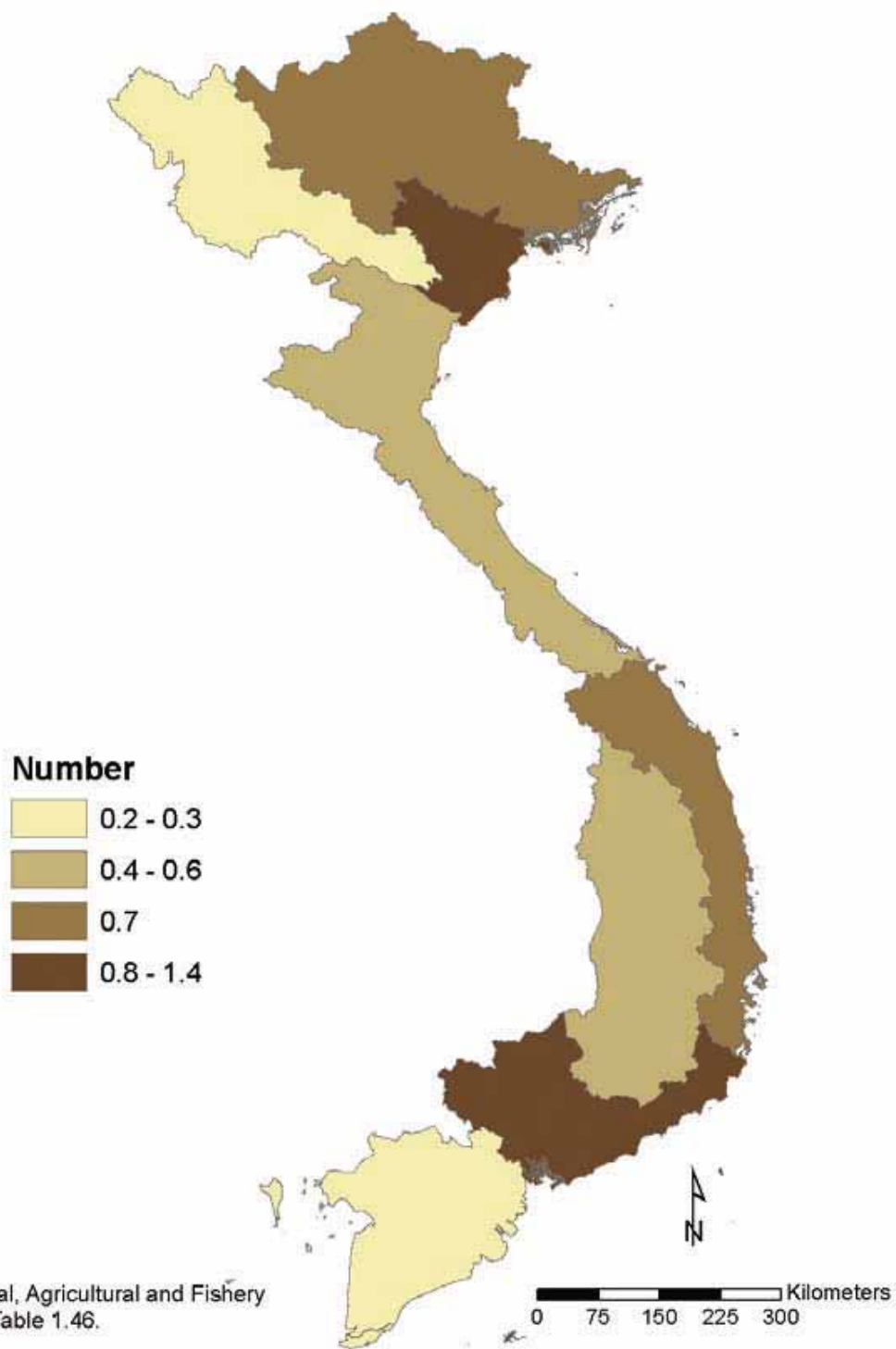


TABLE 4.13 | Percentage of households keeping poultry and average number owned, by sex, kind of poultry and region

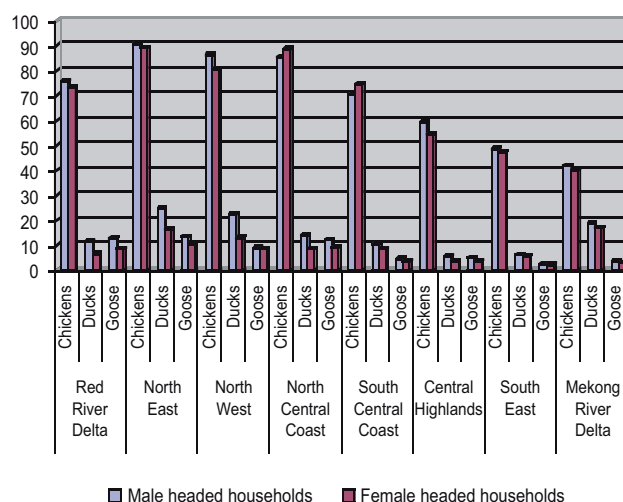
| | Male headed households | | Female headed households | |
|----------------------------|------------------------|---------|--------------------------|---------|
| | Percentage | Average | Percentage | Average |
| National | | | | |
| Chickens (non industrial) | 68.5 | 19.8 | 66.1 | 16.5 |
| Ducks | 14.7 | 34.1 | 10.3 | 22.9 |
| Goose | 8.5 | 13.8 | 6.0 | 11.3 |
| Red River Delta | | | | |
| Chickens (non industrial) | 75.7 | 22.6 | 73.3 | 17.3 |
| Ducks | 11.3 | 47.0 | 6.3 | 21.2 |
| Goose | 12.8 | 20.4 | 8.2 | 15.1 |
| North East | | | | |
| Chickens (non industrial) | 90.7 | 25.0 | 89.1 | 21.7 |
| Ducks | 24.7 | 14.8 | 16.4 | 12.8 |
| Goose | 13.2 | 12.9 | 10.5 | 12.1 |
| North West | | | | |
| Chickens (non industrial) | 86.4 | 20.6 | 80.5 | 19.2 |
| Ducks | 22.5 | 12.0 | 12.9 | 12.4 |
| Goose | 8.8 | 10.7 | 8.3 | 12.4 |
| North Central Coast | | | | |
| Chickens (non industrial) | 85.4 | 17.7 | 88.9 | 14.7 |
| Ducks | 14.0 | 26.1 | 8.3 | 15.0 |
| Goose | 12.1 | 10.7 | 8.9 | 9.4 |
| South Central Coast | | | | |
| Chickens (non industrial) | 70.2 | 13.1 | 74.6 | 11.0 |
| Ducks | 10.2 | 41.0 | 8.3 | 19.9 |
| Goose | 4.5 | 5.8 | 3.6 | 5.2 |
| Central Highlands | | | | |
| Chickens (non industrial) | 59.5 | 16.5 | 54.4 | 13.8 |
| Ducks | 5.3 | 23.2 | 3.5 | 13.6 |
| Goose | 4.6 | 8.8 | 3.5 | 7.7 |
| South East | | | | |
| Chickens (non industrial) | 48.7 | 22.7 | 47.1 | 22.3 |
| Ducks | 5.9 | 38.8 | 5.3 | 24.4 |
| Goose | 2.4 | 6.7 | 2.0 | 5.6 |
| Mekong River Delta | | | | |
| Chickens (non industrial) | 41.7 | 14.4 | 39.9 | 13.7 |
| Ducks | 18.7 | 50.9 | 16.9 | 32.6 |
| Goose | 3.4 | 8.5 | 3.0 | 7.9 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

4.4.4 Poultry production

According to the 2006 Census, about 69 percent of male headed households in rural areas keep chickens, 15 percent own ducks and 9 percent own goose. Only slightly fewer female headed households raise poultry compared to male headed households. About 66 percent of female headed households in rural areas raise chickens, 10 percent keep ducks and 6 percent raise goose (Table 4.13 and Chart 4.8). The difference between male and female headed households in

CHART 4.8 | Percentage of male and female headed households that own poultry, ducks and goose



terms of the proportion engaged in poultry production is small across the regions. The maximum difference between male and female headed households in chicken production as a livelihood source is 5 percentage points (Central Highlands), for duck production 10 percent (North West region) and for goose 5 percent (Red River Delta).

Table 4.14 and Table 8 in Annex 1 show the percentage of male and female headed households engaged in (non industrial) poultry production that sold poultry products in a 12 months reference period. According to the table, about 49 percent of male headed households raising broiler chickens, sold one or more live or slaughtered chicken in a 12 months reference period compared to 39 percent of female headed households. Across the regions, the North West and North East regions have the highest proportions of male and female headed households selling broiler chickens. In the North West region, 78 percent of male headed and 64 percent of female headed households raising broiler chickens sold one or more during a 12 months reference period. This is in sharp contrast with the Mekong River Delta region, where only 26 percent of male headed and 22 percent of female headed households raising broiler chickens, sold slaughtered or live chickens.

Likewise, proportionally fewer female headed households sold eggs during the 12 months reference period: 15 percent sold eggs compared to 21 percent among male headed households keeping egg-laying hens. The North West and North East regions have the highest proportions of male and female headed households selling eggs

TABLE 4.14 | Percentage of households selling poultry products, by sex of household head and kind of poultry*

| | Male headed households | Female headed households |
|---------------------------------|------------------------|--------------------------|
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 48.6 | 39.1 |
| Egg-laying hens | 2.3 | 1.9 |
| Ducks | 0.4 | 0.1 |
| Goose | 0.4 | 0.1 |
| Eggs sold | | |
| Broiler chickens | 4.8 | 4.1 |
| Egg-laying hens | 20.9 | 14.9 |
| Ducks | 2.7 | 1.1 |
| Goose | 0.5 | 0.4 |

* Table 8 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

during a 12 month reference period. In the North West region, 50 percent of male headed and 34 percent of female headed households raising egg-laying hens sold eggs. For the North East region, these numbers are 48 and 40 percent, respectively.

4.5 FISHERY

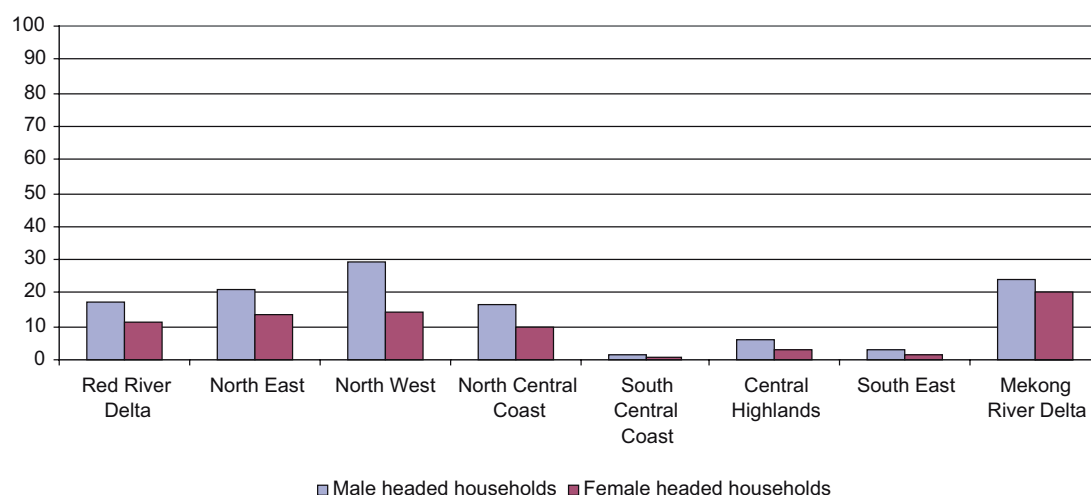
The most common forms of aquaculture are fish culture and shrimp culture. At national level, 1 768 114 (15%) of all households are engaged in fish culture, of which 1 553 795 (16%) are headed by men and 214 319 (11%) by women (Table 4.15). The proportion of male headed households engaged in fish culture as a livelihood source is highest in the North West region (29%) and lowest in the South East region (3%). For female headed households, the Mekong River Delta has the highest proportion of female headed households engaged in fish culture. Across the regions, male headed households are slightly more engaged in fish culture than female headed households. In exception of the North West region, where almost 16 percentage points more male headed households rely on fish culture as a livelihood activity than female headed households, the difference between male and female headed households engaged in fish culture is small and ranges between 0.8 and 8 percentage points (Chart 4.8 and Map 4.4).

TABLE 4.15 | Percentage of households engaged in fish culture, by sex and region

| | Male headed households | Female headed households |
|---------------------|------------------------|--------------------------|
| National | 16.3 | 11.0 |
| Red River Delta | 17.1 | 11.0 |
| North East | 21.0 | 13.4 |
| North West | 29.1 | 14.3 |
| North Central Coast | 16.2 | 9.7 |
| South Central Coast | 1.4 | 0.6 |
| Central Highlands | 6.1 | 3.3 |
| South East | 3.3 | 1.7 |
| Mekong River Delta | 23.7 | 20.5 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 4.9 | Percentage of male and female headed households engaged in fish culture, by region



MAP 4.4 | Percentage point difference between male and female headed households that have access to fish culture area

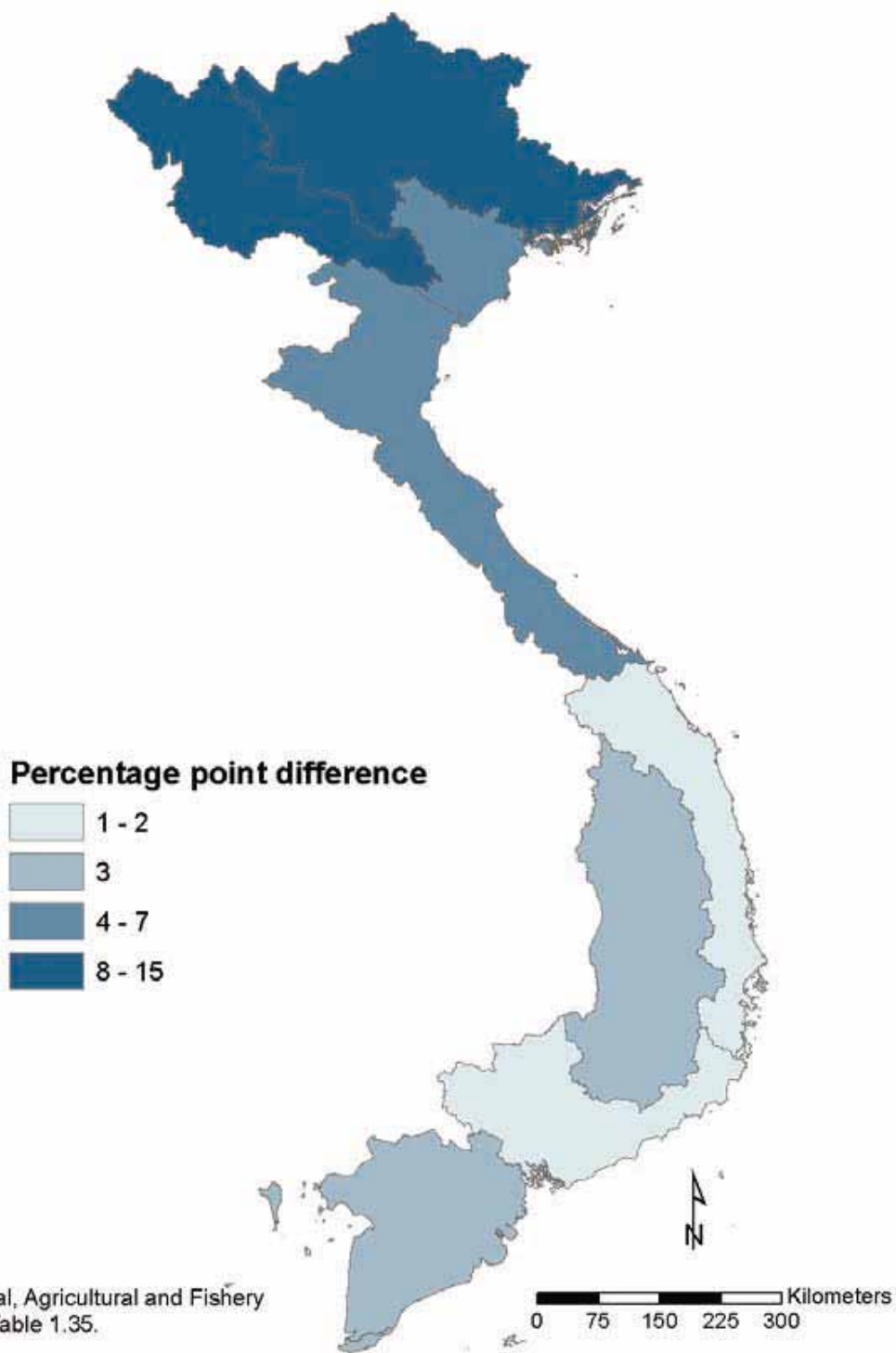


TABLE 4.16 | Average area of fish culture owned by male and female headed households engaged in fish culture, by region (hectares)

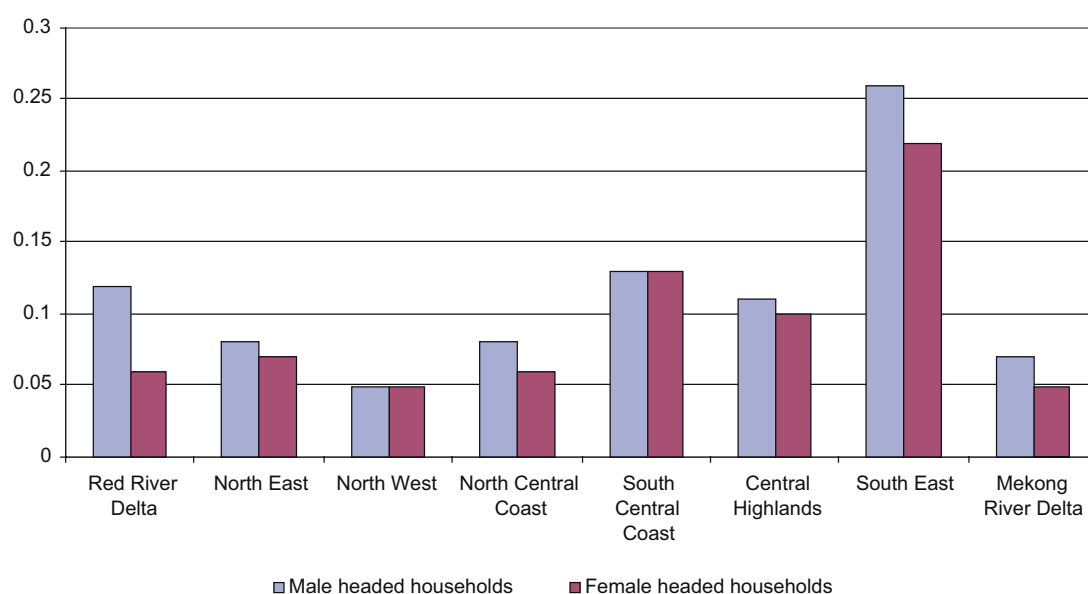
| | Male headed households | Female headed households |
|---------------------|------------------------|--------------------------|
| National | 0.09 | 0.06 |
| Red River Delta | 0.12 | 0.06 |
| North East | 0.08 | 0.07 |
| North West | 0.05 | 0.05 |
| North Central Coast | 0.08 | 0.06 |
| South Central Coast | 0.13 | 0.13 |
| Central Highlands | 0.11 | 0.10 |
| South East | 0.26 | 0.22 |
| Mekong River Delta | 0.07 | 0.05 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

The average area of fish culture per household is 0.09 hectares (or 900 m²) for male headed households and 0.06 hectares (600 m²) for female headed households (Table 4.16). Except for the Red River Delta region, the difference in average area fish culture between male and female headed households is small (Chart 4.10). At regional level, the average fish culture area is largest in the South East region for both male and female headed households, and smallest in the North West and the Mekong River Delta regions.

Only about 312 245 of all rural households are engaged in shrimp culture, of which 282 499 are male headed (or 3% of all male headed households) and 38 746 female headed (2% of all female headed households). Across the regions only a slightly higher proportion of male headed households are engaged in shrimp culture than female headed households. Overall, shrimp culture is mainly restricted to the Mekong River Delta, where 12 percent of male headed and 8 percent of female headed households have taken up shrimp culture as a livelihood activity (Table 4.17).

CHART 4.10 | Average area of fish culture owned by male and female headed households engaged in fish culture, by region



4.6 COMMERCIAL FARMING

According to the 2006 Rural, Agriculture, and Fishery Census, Vietnam has 113 699 commercial farms. Of the total commercial farms, 103 773 (91%) are owned by male headed households and 9 926 (9%) by female headed households (Table 4.18 and Chart 4.11). Almost half (54 444 or 48%) of all commercial farms are located in the Mekong River Delta. Other commercial farms are concentrated in the South East region (15%) and the Red River Delta (12%). Also, across the regions, commercial farms are dominantly owned by male headed households with only few female headed households owning commercial farms. The greatest number of commercial farms owned by female headed households is in the Mekong River Delta, while the South East region has the highest proportion of female headed households owning commercial farms.

TABLE 4.17 | Percentage of male and female headed households engaged in shrimp culture, by region

| | Male headed households | Female headed households |
|---------------------|------------------------|--------------------------|
| National | | |
| Red River Delta | 0.4 | 0.1 |
| North East | 0.1 | - |
| North West | - | - |
| North Central Coast | 0.7 | 0.2 |
| South Central Coast | 1.6 | 0.6 |
| Central Highlands | - | - |
| South East | 0.6 | 0.4 |
| Mekong River Delta | 11.8 | 7.8 |

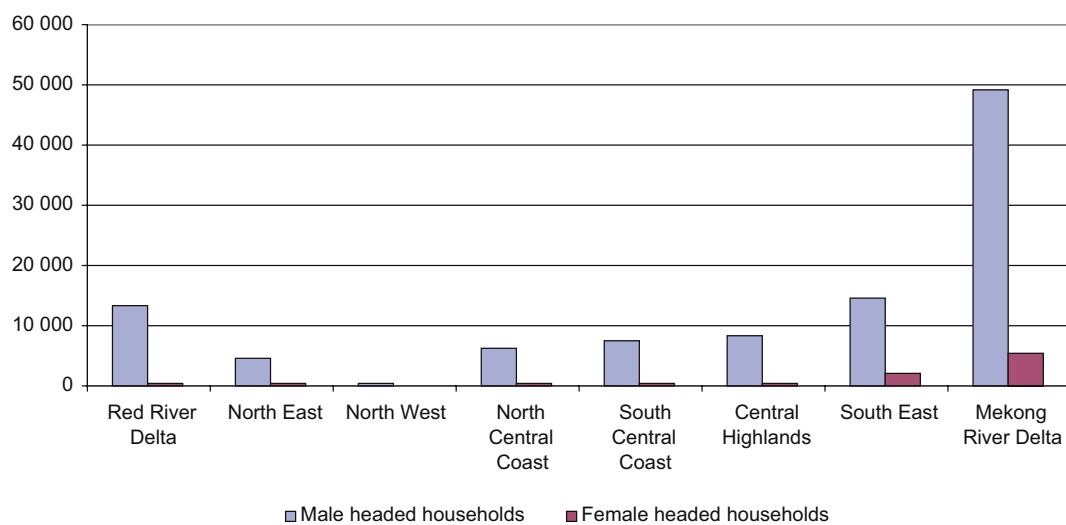
Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 4.18 | Percentage of commercial farms, by sex and age group of the farm owner

| | All commercial farms | Male-headed commercial farms | Female-headed commercial farms |
|----------------------|----------------------|------------------------------|--------------------------------|
| Whole Country | 100.0 | 91.3 | 8.7 |
| Red River Delta | 100.0 | 95.7 | 4.3 |
| North East | 100.0 | 94.0 | 6.0 |
| North West | 100.0 | 93.9 | 6.1 |
| North Central Coast | 100.0 | 93.3 | 6.7 |
| South Central Coast | 100.0 | 93.4 | 6.6 |
| Central Highlands | 100.0 | 93.5 | 6.5 |
| South East | 100.0 | 87.1 | 12.9 |
| Mekong River Delta | 100.0 | 90.3 | 9.7 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

CHART 4.11 | Number of commercial farms owned by male and female headed households, by region



CHAPTER 5

Livelihood outcomes

This chapter concentrates on the outcomes of livelihood strategies households in rural areas pursue (Chapter 4) on the basis of their assets (Chapters 2 and 3). People often pursue a range of livelihood outcomes such as improved food and nutrition security, income security, good health, high status, reduced vulnerability, and so forth. This chapter presents sex-disaggregated data on a number of livelihood outcomes included in the 2006 Census. These are: housing conditions, access to safe drinking water and sanitation, access to electricity and sources of fuel for cooking.

5.1 HOUSING CONDITIONS

More than half of all agricultural households in rural areas live in semi-solid houses. Other type of housing includes solid houses (12%), wood framed houses (15%), and temporary houses (12%). The difference between male and female headed households in type of housing is small. The type of housing is region specific. For example, the proportion of solid housing is relatively high in the Red River district where 31 percent of male headed and 22 percent of female headed households live in solid houses. Semi-solid houses can be found particularly in the South Central Coast region (72% for male headed and 71% for female headed households) while wooden framed houses are most found in the Mekong River Delta, North East and North West regions (Table 5.1 and Table 9 in Annex 1).

5.2 Access to safe drinking water sources

About 56 percent of all agricultural households have access to safe/improved drinking water sources (i.e. tap water, bought water, drilling well water, constructed well water), leaving a large proportion of agricultural households with no access to safe drinking water sources. Those with access to safe drinking water include 55 percent of all male headed agricultural households and 58 percent of all female headed households (Table 5.2 and Table 10 in Annex 1). Access to safe drinking water sources is particularly low in the North West region, where 24 percent of

TABLE 5.1 | Type of housing among male and female-headed households (%)*

| | All households | Male-headed | Female-headed |
|------------------------------|----------------|-------------|---------------|
| National | | | |
| Solid | 12.0 | 12.4 | 9.9 |
| Semi-solid | 52.4 | 51.8 | 54.8 |
| Wood frame with cottage roof | 14.5 | 14.9 | 12.8 |
| Temporary | 12.4 | 12.2 | 13.5 |

* Regional data can be found in Table 9 of Annex 1.

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 5.2 | Access to drinking water, by sex of household head and source*

| | Male-headed | Female-headed |
|--|-------------|---------------|
| Tap water | 6.1 | 7.1 |
| Bought water (in tank/jar/bottle/etc.) | 0.3 | 0.3 |
| Drilling well water | 22.1 | 22.8 |
| Constructed well water | 26.4 | 27.8 |

* Table 10 in Annex 1 presents regional data.

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 5.3 | Access to electricity, by sex of household head and source of supply (%)

| | All households | Male-headed | Female-headed |
|----------------------------|----------------|-------------|---------------|
| National | | | |
| Do not use electricity | 6.5 | 6.7 | 5.5 |
| National electricity cable | 82.7 | 82.2 | 84.7 |
| Other sources | 2.1 | 2.3 | 0.9 |
| Red River Delta | | | |
| Do not use electricity | 0.1 | 0.1 | 0.1 |
| National electricity cable | 83.8 | 82.7 | 88.4 |
| Other sources | 0.1 | 0.1 | 0 |
| North East | | | |
| Do not use electricity | 8.4 | 8.9 | 5 |
| National electricity cable | 82.3 | 81.4 | 87.7 |
| Other sources | 5.3 | 5.9 | 1.8 |
| North West | | | |
| Do not use electricity | 23.5 | 24.2 | 16.9 |
| National electricity cable | 63.7 | 62.6 | 74.9 |
| Other sources | 10.7 | 11.3 | 4.5 |
| North Central Coast | | | |
| Do not use electricity | 3.0 | 3.2 | 2.4 |
| National electricity cable | 90.0 | 89.7 | 91.8 |
| Other sources | 1.5 | 1.7 | 0.5 |
| South Central Coast | | | |
| Do not use electricity | 3.1 | 3.1 | 3.4 |
| National electricity cable | 85.0 | 84.8 | 85.9 |
| Other sources | 1.3 | 1.4 | 0.8 |
| Central Highlands | | | |
| Do not use electricity | 12.3 | 12.4 | 11.5 |
| National electricity cable | 83.2 | 83.1 | 84.1 |
| Other sources | 1.9 | 2.0 | 1.2 |
| South East | | | |
| Do not use electricity | 8.0 | 8.2 | 7.2 |
| National electricity cable | 76.7 | 77.2 | 74.7 |
| Other sources | 2.7 | 2.9 | 2.0 |
| Mekong River Delta | | | |
| Do not use electricity | 10.3 | 10.2 | 10.7 |
| National electricity cable | 81.2 | 81.6 | 79.6 |
| Other sources | 1.3 | 1.3 | 1.0 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

male headed households and 37 percent of female headed households have safe drinking water. The South Central Coast, North Central Coast and South East regions have high access to safe drinking water among male and female headed households, ranging from 68 percent to 80 percent. The difference between male and female headed households in access to safe drinking water is small (3 percentage points). In exception of the Central Highlands, South East and the Mekong River Delta regions, proportionally more female headed households have access to safe drinking water than male headed households. The difference between male and female headed households is largest in the North West and North East regions where respectively 13 and 11 percent more female headed households have access to safe drinking water than male headed households.

5.3 SOURCES OF ENERGY

5.3.1. Source of electricity

Access to electricity for lighting through the public network is common among 83 percent of all agricultural households. A further 2 percent have access to electricity through other sources like a generator or battery. About 85 percent of male headed households and 86 percent of female headed households have access to electricity for lighting through the national grid and other sources. Access to electricity is highest in the North Central Coast region (91 percent of male headed and 92 percent of female headed households have access), and lowest in the North West region. In the latter, 74 percent of male headed and 79 percent of female headed households have access to electricity.

5.3.2. Main fuel used for cooking

Less than 1 percent of all agricultural households have access to electricity for cooking. The main source used by both male and female headed agricultural households is wood: 63 percent of male headed and 60 percent of female headed agricultural households use wood as the source of energy for cooking (Table 5.4 and Table 11 in Annex 1). The use of wood for cooking is particularly important for male and female headed households in the North East, North West and Central Highlands regions where over 80 percent use wood. On the contrary, in the Red River Delta region relatively few male headed (19%) and female headed households (21%) use wood as their main fuel for cooking. The difference in main fuel used for cooking between male and female headed households is small across the regions. The greatest difference between male and female headed households is in the North East region, where 7 percentage point more male headed households use wood compared to female headed households.

TABLE 5.4 | Main fuel used for cooking, by sex of household head (%)*

| | All households | Male-headed | Female-headed |
|---------------------|----------------|-------------|---------------|
| National | | | |
| Gas | 9.7 | 9.7 | 9.7 |
| Electricity | 0.8 | 0.8 | 0.8 |
| Coal | 6.4 | 6.4 | 6.2 |
| Wood | 62.2 | 62.6 | 60.2 |
| Other types of fuel | 12.1 | 11.7 | 14.1 |

* Table 11 in Annex 1 presents regional level data.

Source: GSO 2006 Rural, Agricultural and Fishery Census



CHAPTER 6

Conclusions

6.1 GENDER INEQUALITY

This National Gender Profile presented a range of sex-disaggregated data in order to analyse differences between male and female headed households in rural areas. About a fifth of all rural households in Vietnam are headed by women. Female headship is especially low among the Dao and the Gia-Rai and relatively higher among the Muong and the Kho me. The **most significant source of gender inequality** between male and female headed households in the agricultural sector that could be identified on basis of the 2006 Rural, Agriculture, and Fishery Census, is **agricultural land**. This includes inequalities in access to land, land size, irrigated land, and cultivated land. National level results show 13 percentage points fewer female headed households in rural areas have access to agricultural land compared to male headed households. The average size of land that female headed households have access to is about 27 percent smaller than land of male headed households. In the North West region the land size of female headed households is even 38 percent smaller. Further, the size of irrigated land among female headed households is 41 percent less compared to male headed households. Consequently, female headed households cultivate smaller areas compared to male headed households. For rice cultivation, the area cultivated by female headed households is almost six times smaller compared to male-headed households.

Another significant source of **gender inequality** in the agricultural sector is **the ownership of commercial farms**. National level data show that less than a tenth of all commercial farms in Vietnam are owned by female headed households.

Other notable but slighter **gender inequalities** that could be identified through re-tabulating existing 2006 census data included **access to information and communication, access to loans and livestock production**. About 8 percentage points fewer female headed households received information from agricultural extension workers. In addition, 6 percentage points less female headed households had access to mass media as a source of information.

At national level 7 percentage points less female headed households took a loan for production or business purposes compared to male headed households. Further, 9 percentage points less female headed households accessed the social policy bank – the most common source for obtaining a loan.

National level data showed that overall the difference in livestock production between male and female headed households is small. Nevertheless, some interesting differences could be noted. For example, 10 percentage points more male headed households own pigs compared to female headed households, male headed households own 32 percent more ducks, and male headed households sell 10 percent more poultry products than female headed households.

6.2 THE WAY FORWARD

With this National Gender Profile a first important step towards gender statistics for the agricultural sector has been taken. Through re-tabulating and analysing existing data, important differences between male and female headed households have been identified. But still important gender statistics are lacking due to unreliable data, missing totals disaggregated by sex needed to compute for averages and percentages, and the type of data items included in the census. Gender and rural livelihoods cover a wider range of topics than can be captured by an agricultural census alone. While agricultural census data provide an important part of the picture, important data items are missing for understanding gender inequalities related to rural livelihoods. Notable data items not adequately covered by the 2006 census are those related to multiple income sources and their respective importance for livelihood security, total income, social capital, and food security. Other important aspects of gender inequality not adequately captured by the census include the terms of access to assets and intra-household allocation of, and control over, the different assets.

Some of these data gaps might be adjusted by adopting the concept of sub-holder in the census. At present, comparison is made between male and female headed households and little is known about the role and contribution of rural women within male headed households or the decision-making processes and the different levels of management that exist within a household. A sub-holding refers to a single agricultural activity or a group of activities (e.g. plot, field, kitchen garden, or a livestock operation) that on behalf of the agricultural holder is managed by a particular person or group of persons in the holder's household – the sub-holder. The introduction of the sub-holder allows for analysis of intra-household labour division and decision-making, and the specific roles and contributions of male and female household members to the holding's overall production (FAO, 2007). For example sub-holder data gives information on the number of women responsible for specific agricultural activities and their characteristics, time spent on holding, division of managerial responsibility, women's role in decision-making, and so forth.

ANNEX 1

Regional Data

TABLE 1 | Percentage of planted area under irrigation for male and female headed households, by crop and region

| Region | Male headed households | Female headed households | Total |
|------------------------|------------------------|--------------------------|-------|
| National | | | |
| Summer-august rice | 91.9 | 91.2 | 91.3 |
| Winter rice | 78.4 | 82.3 | 78.9 |
| Winter-spring rice | 96.6 | 97.3 | 96.7 |
| Maize | 18.4 | 25.6 | 19.0 |
| Winter crops | 63.5 | 72.2 | 64.5 |
| Tea | 10.0 | 16.1 | 10.5 |
| Coffee | 90.7 | 81.4 | 89.8 |
| Peppers | 95.6 | 95.4 | 95.6 |
| Fruit trees | 65.0 | 73.7 | 66.1 |
| Red river delta | | | |
| Summer-august rice | - | - | - |
| Winter rice | 99.0 | 99.2 | 99.1 |
| Winter-spring rice | 99.2 | 99.4 | 99.2 |
| Maize | 70.7 | 75.5 | 71.3 |
| Winter crops | 95.7 | 95.3 | 95.6 |
| Tea | 29.7 | 100.0 | 36.7 |
| Coffee | 100.0 | - | 100.0 |
| Peppers | - | - | - |
| Fruit trees | 78.6 | 78.1 | 81.0 |
| North East | | | |
| Summer-august rice | - | - | - |
| Winter rice | 86.5 | 87.7 | 86.6 |
| Winter-spring rice | 93.9 | 93.8 | 93.9 |
| Maize | 16.8 | 27.7 | 17.6 |
| Winter crops | 62.4 | 72.2 | 63.4 |
| Tea | 7.7 | 8.4 | 7.8 |
| Coffee | - | - | - |
| Peppers | - | - | - |
| Fruit trees | 31.1 | 31.2 | 31.1 |
| North West | | | |
| Summer-august rice | - | - | - |
| Winter rice | 57.1 | 77.5 | 57.9 |
| Winter-spring rice | 95.4 | 95.6 | 95.4 |
| Maize | 3.6 | 2.0 | 3.5 |
| Winter crops | 11.5 | 9.0 | 11.4 |
| Tea | 0.3 | - | 0.3 |
| Coffee | - | - | - |
| Peppers | - | - | - |
| Fruit trees | 6.3 | 33.9 | 6.0 |

TABLE 1 | Percentage of planted area under irrigation for male and female headed households, by crop and region

| Region | Male headed households | Female headed households | Total |
|----------------------------|------------------------|--------------------------|-------|
| North Central Coast | | | |
| Summer-august rice | 97.2 | 98.0 | 97.3 |
| Winter rice | 69.0 | 81.2 | 70.2 |
| Winter-spring rice | 93.4 | 93.2 | 93.3 |
| Maize | 25.4 | 41.8 | 26.9 |
| Winter crops | 36.3 | 36.8 | 36.3 |
| Tea | 1.2 | - | 1.2 |
| Coffee | 15.8 | 2.2 | 10.7 |
| Peppers | 59.2 | 72.1 | 62.2 |
| Fruit trees | 18.0 | 35.0 | 19.4 |
| South Central Coast | | | |
| Summer-august rice | 99.4 | 99.9 | 99.5 |
| Winter rice | 63.9 | 71.6 | 65.0 |
| Winter-spring rice | 94.6 | 97.1 | 95.0 |
| Maize | 18.6 | 18.9 | 18.6 |
| Winter crops | 26.6 | 17.1 | 25.7 |
| Tea | - | - | - |
| Coffee | 71.8 | 100.0 | 78.1 |
| Peppers | 61.9 | 75.0 | 62.9 |
| Fruit trees | 8.6 | 6.0 | 8.4 |
| Central Highlands | | | |
| Summer-august rice | 67.3 | 64.9 | 67.1 |
| Winter rice | 57.8 | 55.1 | 57.5 |
| Winter-spring rice | 90.3 | 85.3 | 89.9 |
| Maize | 9.4 | 12.2 | 9.6 |
| Winter crops | 62.9 | 80.9 | 65.9 |
| Tea | 39.9 | 76.0 | 43.4 |
| Coffee | 91.8 | 87.8 | 91.4 |
| Peppers | 96.4 | 97.9 | 96.5 |
| Fruit trees | 60.2 | 87.8 | 66.8 |
| South East | | | |
| Summer-august rice | 84.2 | 89.6 | 84.9 |
| Winter rice | 77.6 | 84.1 | 78.5 |
| Winter-spring rice | 93.8 | 95.5 | 94.0 |
| Maize | 26.0 | 25.8 | 26.0 |
| Winter crops | 23.2 | 2.2 | 19.9 |
| Tea | - | - | - |
| Coffee | 98.7 | 96.5 | 98.5 |
| Peppers | 98.7 | 99.5 | 98.8 |
| Fruit trees | 79.4 | 66.6 | 77.4 |

TABLE 1 | Percentage of planted area under irrigation for male and female headed households, by crop and region

| Region | Male headed households | Female headed households | Total |
|---------------------------|------------------------|--------------------------|-------|
| Mekong River Delta | | | |
| Summer-august rice | 91.5 | 91.5 | 91.5 |
| Winter rice | 72.6 | 73.2 | 72.7 |
| Winter-spring rice | 97.7 | 98.2 | 97.8 |
| Maize | 99.8 | 100.0 | 99.8 |
| Winter crops | 96.5 | 90.6 | 95.8 |
| Tea | - | - | - |
| Coffee | - | 100.0 | 100.0 |
| Peppers | 96.9 | 97.6 | 97.0 |
| Fruit trees | 90.2 | 91.2 | 90.3 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 2 | Access to selected tools and machineries, by sex of the household head and region (%)

| Region | Male headed household | Female headed household | Total |
|--|-----------------------|-------------------------|-------|
| National | | | |
| Heavy ploughing machines, tractor (more than 35 CV) | 0.4 | 0.2 | 0.4 |
| Middle ploughing machines, tractor (from 12 CV to 35 CV) | 2.4 | 0.8 | 2.1 |
| Small ploughing machine, tractor (12 CV and less) | 6.6 | 2.2 | 5.8 |
| Force generator | 3.0 | 0.4 | 1.7 |
| Generator | 0.9 | 0.0 | 0.5 |
| Motored Insecticide sprayer | 0.7 | 0.1 | 0.4 |
| Water pump for agriculture, forestry, aquaculture production | 10.7 | 1.7 | 6.3 |
| Red River Delta | | | |
| Heavy ploughing machines, tractor | 0.0 | 0.0 | 0.0 |
| Middle ploughing machines, tractor | 0.6 | 0.1 | 0.5 |
| Small ploughing machine, tractor | 3.0 | 0.4 | 2.5 |
| Force generator | 1.2 | 0.1 | 0.7 |
| Generator | 0.1 | 0.0 | 0.1 |
| Motored Insecticide sprayer | 0.2 | 0.0 | 0.1 |
| Water pump | 3.7 | 0.4 | 2.0 |
| North East | | | |
| Heavy ploughing machines, tractor | 0.1 | 0.0 | 0.1 |
| Middle ploughing machines, tractor | 1.7 | 0.4 | 1.4 |
| Small ploughing machine, tractor | 14.2 | 3.6 | 14.2 |
| Force generator | 4.3 | 0.6 | 2.5 |
| Generator | 2.6 | 0.1 | 1.4 |
| Motored Insecticide sprayer | 0.2 | 0.0 | 0.1 |
| Water pump | 8.3 | 1.1 | 4.8 |
| North West | | | |
| Heavy ploughing machines, tractor | 0.1 | 0.1 | 0.1 |
| Middle ploughing machines, tractor | 0.5 | 0.1 | 0.4 |
| Small ploughing machine, tractor | 3.8 | 1.2 | 3.5 |
| Force generator | 1.1 | 0.1 | 0.6 |
| Generator | 5.5 | 0.2 | 2.9 |
| Motored Insecticide sprayer | 0.1 | 0.0 | 0.0 |
| Water pump | 0.4 | 0.1 | 0.2 |
| North Central Coast | | | |
| Heavy ploughing machines, tractor | 0.1 | 0.0 | 0.1 |
| Middle ploughing machines, tractor | 0.9 | 0.2 | 2.7 |
| Small ploughing machine, tractor | 3.1 | 0.6 | 0.6 |
| Force generator | 0.9 | 0.1 | 0.5 |
| Generator | 1.0 | 0.0 | 0.5 |
| Motored Insecticide sprayer | 0.1 | 0.0 | 0.0 |
| Water pump | 1.7 | 0.2 | 1.0 |

TABLE 2 | Access to selected tools and machineries, by sex of the household head and region (%)

| Region | Male headed household | Female headed household | Total |
|------------------------------------|-----------------------|-------------------------|-------|
| South Central Coast | | | |
| Heavy ploughing machines, tractor | 0.2 | 0.0 | 0.1 |
| Middle ploughing machines, tractor | 0.9 | 0.2 | 0.7 |
| Small ploughing machine, tractor | 1.7 | 0.4 | 1.4 |
| Force generator | 1.7 | 0.2 | 1.0 |
| Generator | 0.2 | 0.0 | 0.1 |
| Motored Insecticide sprayer | 0.1 | 0.0 | 0.0 |
| Water pump | 9.5 | 1.8 | 5.8 |
| Central Highlands | | | |
| Heavy ploughing machines, tractor | 1.6 | 0.6 | 1.5 |
| Middle ploughing machines, tractor | 23.5 | 9.7 | 21.1 |
| Small ploughing machine, tractor | 39.7 | 20.8 | 36.3 |
| Force generator | 2.7 | 0.3 | 1.5 |
| Generator | 0.2 | 0.0 | 0.1 |
| Motored Insecticide sprayer | 1.7 | 0.2 | 1.0 |
| Water pump | 19.7 | 2.4 | 11.4 |
| South East | | | |
| Heavy ploughing machines, tractor | 2.1 | 0.8 | 1.9 |
| Middle ploughing machines, tractor | 4.2 | 1.7 | 3.7 |
| Small ploughing machine, tractor | 9.1 | 4.2 | 8.1 |
| Force generator | 3.0 | 0.5 | 1.8 |
| Generator | 0.5 | 0.1 | 0.3 |
| Motored Insecticide sprayer | 2.0 | 0.3 | 1.2 |
| Water pump | 18.1 | 3.7 | 11.2 |
| Mekong River Delta | | | |
| Heavy ploughing machines, tractor | 0.9 | 0.4 | 0.8 |
| Middle ploughing machines, tractor | 2.1 | 0.9 | 1.9 |
| Small ploughing machine, tractor | 6.0 | 2.9 | 5.5 |
| Force generator | 5.3 | 0.8 | 3.2 |
| Generator | 0.2 | 0.0 | 0.1 |
| Motored Insecticide sprayer | 1.0 | 0.2 | 0.6 |
| Water pump | 18.6 | 3.3 | 11.3 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 3 | Access to selected agro-processing tools and machineries, by sex of the household head and region

| Region | Male headed household | Female headed household | Total |
|---|-----------------------|-------------------------|-------|
| National | | | |
| Rice milling machine with engine | 3.7 | 0.5 | 2.2 |
| Dryer/oven | 0.4 | 0.0 | 0.2 |
| Milling machine | 1.4 | 0.1 | 0.8 |
| Wood power machine (power-saw, planer...) | 0.3 | 0.0 | 0.1 |
| Animal food processing machine (pulverizator, mixer, divider, etc.) | 0.2 | 0.0 | 0.1 |
| Aquaculture food processing machines (pulverizator, mixer etc) | 0.1 | 0.0 | 0.0 |
| Red River delta | | | |
| Rice milling machine with engine | 5.8 | 0.8 | 3.3 |
| Dryer/oven | 0.1 | 0.0 | 0.0 |
| Milling machine | 1.0 | 0.1 | 0.5 |
| Wood power machine | 0.4 | 0.0 | 0.2 |
| Animal food processing machine | 0.2 | 0.0 | 0.1 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| North East | | | |
| Rice milling machine with engine | 8.2 | 1.2 | 4.8 |
| Dryer/oven | 2.2 | 0.3 | 1.3 |
| Milling machine | 5.1 | 0.3 | 2.7 |
| Wood power machine | 0.5 | 0.0 | 0.2 |
| Animal food processing machine | 0.6 | 0.0 | 0.3 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| North West | | | |
| Rice milling machine with engine | 0.4 | 0.0 | 0.2 |
| Dryer/oven | 0.1 | 0.0 | 0.0 |
| Milling machine | 3.9 | 0.1 | 2.0 |
| Wood power machine | 0.2 | 0.0 | 0.1 |
| Animal food processing machine | 0.2 | 0.0 | 0.0 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| North Central Coast | | | |
| Rice milling machine with engine | 6.7 | 0.8 | 3.9 |
| Dryer/oven | 0.0 | 0.0 | 0.0 |
| Milling machine | 1.5 | 0.1 | 0.2 |
| Wood power machine | 0.5 | 0.0 | 0.2 |
| Animal food processing machine | 0.3 | 0.0 | 0.0 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| South Central Coast | | | |
| Rice milling machine with engine | 2.9 | 0.4 | 1.7 |
| Dryer/oven | 0.0 | 0.0 | 0.0 |
| Milling machine | 0.4 | 0.0 | 0.2 |
| Wood power machine | 0.1 | 0.0 | 0.1 |
| Animal food processing machine | 0.1 | 0.0 | 0.0 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |

TABLE 3 | Access to selected agro-processing tools and machineries, by sex of the household head and region

| Region | Male headed household | Female headed household | Total |
|--------------------------------------|-----------------------|-------------------------|-------|
| Central Highlands | | | |
| Rice milling machine with engine | 0.4 | 0.0 | 0.2 |
| Dryer/oven | 0.2 | 0.0 | 0.1 |
| Milling machine | 0.9 | 0.1 | 0.5 |
| Wood power machine | 0.2 | 0.0 | 0.1 |
| Animal food processing machine | 0.2 | 0.0 | 0.1 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| South East | | | |
| Rice milling machine with engine | 0.3 | 0.0 | 0.2 |
| Dryer/oven | 0.0 | 0.0 | 0.0 |
| Milling machine | 0.2 | 0.0 | 0.1 |
| Wood power machine | 0.1 | 0.0 | 0.1 |
| Animal food processing machine | 0.1 | 0.0 | 0.0 |
| Aquaculture food processing machines | 0.0 | 0.0 | 0.0 |
| Mekong River Delta | | | |
| Rice milling machine with engine | 1.1 | 0.1 | 0.6 |
| Dryer/oven | 0.1 | 0.0 | 0.1 |
| Milling machine | 0.1 | 0.0 | 0.1 |
| Wood power machine | 0.1 | 0.0 | 0.0 |
| Animal food processing machine | 0.1 | 0.0 | 0.1 |
| Aquaculture food processing machines | 0.2 | 0.0 | 0.1 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 4 | Access to selected communication devices among male and female headed agricultural households, by region (%)

| Region | Male headed household | Female headed household | Total |
|----------------------------|-----------------------|-------------------------|-------|
| National | | | |
| Colour TV | 63.7 | 54.3 | 62.1 |
| B/W TV | 8.3 | 7.8 | 8.2 |
| Radio cassette | 14.0 | 11.9 | 13.6 |
| Desk phone | 10.5 | 10.3 | 10.5 |
| Mobile phone | 4.6 | 3.6 | 4.4 |
| Computer | 0.6 | 0.6 | 0.6 |
| With internet access | 0.0 | 0.0 | 0.0 |
| Red river delta | | | |
| Colour TV | 71.8 | 56.8 | 68.4 |
| B/W TV | 3.5 | 5.7 | 3.9 |
| Radio cassette | 9.9 | 7.9 | 9.4 |
| Desk phone | 11.4 | 9.9 | 11.1 |
| Mobile phone | 3.6 | 2.4 | 3.4 |
| Computer | 0.3 | 0.4 | 0.4 |
| With internet access | 0.0 | 0.0 | 0.0 |
| North East | | | |
| Colour TV | 55.0 | 51.7 | 54.5 |
| B/W TV | 11.4 | 11.0 | - |
| Radio cassette | 12.2 | 8.5 | 11.7 |
| Desk phone | 5.6 | 8.3 | 6.0 |
| Mobile phone | 2.3 | 2.8 | 2.8 |
| Computer | 0.1 | 0.3 | 0.2 |
| With internet access | 0.0 | 0.0 | 0.0 |
| North West | | | |
| Colour TV | 43.0 | 44.3 | 43.0 |
| B/W TV | 10.1 | 8.8 | 10.0 |
| Radio cassette | 18.8 | 11.8 | 18.0 |
| Desk phone | 2.6 | 6.4 | 3.0 |
| Mobile phone | 1.0 | 1.8 | 1.0 |
| Computer | 0.1 | 0.2 | 0.1 |
| With internet access | 0.0 | 0.0 | 0.0 |
| North Central Coast | | | |
| Colour TV | 68.3 | 64.5 | 66.1 |
| B/W TV | 5.3 | 5.3 | 5.3 |
| Radio cassette | 12.5 | 10.3 | 12.1 |
| Desk phone | 8.4 | 8.9 | 8.5 |
| Mobile phone | 2.4 | 2.2 | 2.4 |
| Computer | 0.3 | 0.3 | 0.3 |
| With internet access | 0.0 | 0.0 | 0.0 |

TABLE 4 | Access to selected communication devices among male and female headed agricultural households, by region (%)

| Region | Male headed household | Female headed household | Total |
|----------------------------|-----------------------|-------------------------|-------|
| South Central Coast | | | |
| Colour TV | 69.2 | 52.2 | 65.8 |
| B/W TV | 2.4 | 2.8 | 2.5 |
| Radio cassette | 9.1 | 7.0 | 8.7 |
| Desk phone | 10.1 | 6.8 | 9.4 |
| Mobile phone | 3.6 | 2.3 | 3.4 |
| Computer | 0.6 | 0.4 | 0.6 |
| With internet access | 0.0 | 0.0 | 0.0 |
| Central Highlands | | | |
| Colour TV | 65.7 | 56.8 | 64.4 |
| B/W TV | 7.5 | 5.8 | 7.3 |
| Radio cassette | 9.9 | 8.3 | 9.7 |
| Desk phone | 10.7 | 9.4 | 10.5 |
| Mobile phone | 6.4 | 4.6 | 6.1 |
| Computer | 1.4 | 1.2 | 1.4 |
| With internet access | 0.1 | 0.1 | 0.1 |
| South East | | | |
| Colour TV | 67.2 | 58.9 | 65.6 |
| B/W TV | 8.2 | 6.5 | 7.6 |
| Radio cassette | 13.0 | 11.8 | 12.8 |
| Desk phone | 17.7 | 15.5 | 17.3 |
| Mobile phone | 9.7 | 7.0 | 9.1 |
| Computer | 2.0 | 1.7 | 2.0 |
| With internet access | 0.1 | 0.1 | 0.1 |
| Mekong River Delta | | | |
| Colour TV | 58.5 | 52.1 | 57.4 |
| B/W TV | 15.0 | 13.1 | 14.7 |
| Radio cassette | 23.0 | 21.5 | 22.7 |
| Desk phone | 13.2 | 12.3 | 13.1 |
| Mobile phone | 7.1 | 5.0 | 6.7 |
| Computer | 0.6 | 0.6 | 0.6 |
| With internet access | 0.0 | 0.0 | 0.0 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 5 | Percentage of male and female headed rural households obtaining loans, by source and region

| Region | Male headed household | Female headed household | Total |
|------------------------------------|-----------------------|-------------------------|-------|
| National | | | |
| Social Policy Bank | 32.9 | 23.9 | 31.3 |
| Agriculture&Rural Development Bank | 8.2 | 5.8 | 7.8 |
| Other Banks | 15.5 | 10.2 | 14.6 |
| Credit agencies | 0.7 | 0.5 | 0.7 |
| Social Politic Agencies | 1.3 | 0.9 | 1.2 |
| Employment Support Fund | 1.0 | 1.0 | 1.0 |
| Private Lender | 0.3 | 0.3 | 0.3 |
| Material Supplier (debt purchase) | 2.0 | 1.5 | 1.9 |
| Relatives/Friends | 5.0 | 4.2 | 4.8 |
| Other Sources | 3.1 | 2.1 | 3.0 |
| Red river delta | | | |
| Social Policy Bank | 23.5 | 13.6 | 21.6 |
| Agriculture&Rural Development Bank | 5.1 | 3.1 | 4.8 |
| Other Banks | 10.0 | 3.7 | 8.9 |
| Credit agencies | 0.6 | 0.1 | 0.5 |
| Social Politic Agencies | 1.6 | 0.9 | 1.5 |
| Employment Support Fund | 1.5 | 1.5 | 1.5 |
| Private Lender | 0.2 | - | 0.2 |
| Material Supplier (debt purchase) | 1.5 | 0.9 | 1.4 |
| Relatives/Friends | 2.5 | 1.7 | 2.4 |
| Other Sources | 3.4 | 1.7 | 3.1 |
| North East | | | |
| Social Policy Bank | 33.8 | 26.6 | 32.7 |
| Agriculture&Rural Development Bank | 14.0 | 10.6 | 13.5 |
| Other Banks | 13.3 | 9.5 | 12.8 |
| Credit agencies | 0.2 | 0.4 | 0.2 |
| Social Politic Agencies | 0.8 | 0.4 | 0.7 |
| Employment Support Fund | 1.1 | 0.9 | 1.1 |
| Private Lender | 0.2 | 0.3 | 0.2 |
| Material Supplier (debt purchase) | 1.5 | 1.1 | 1.4 |
| Relatives/Friends | 2.4 | 2.2 | 2.4 |
| Other Sources | 3.7 | 3.4 | 3.7 |
| North West | | | |
| Social Policy Bank | 29.0 | 26.1 | 28.7 |
| Agriculture&Rural Development Bank | 15.5 | 8.8 | 14.8 |
| Other Banks | 8.1 | 8.8 | 8.2 |
| Credit agencies | 0.2 | 0.8 | 0.3 |
| Social Politic Agencies | 0.6 | 1.3 | 0.6 |
| Employment Support Fund | 0.9 | - | 0.8 |
| Private Lender | 0.2 | - | 0.2 |
| Material Supplier (debt purchase) | 0.5 | 1.3 | 0.6 |
| Relatives/Friends | 1.8 | 3.8 | 1.8 |
| Other Sources | 2.5 | 2.1 | 2.5 |

TABLE 5 | Percentage of male and female headed rural households obtaining loans, by source and region.

| Region | Male headed household | Female headed household | Total |
|------------------------------------|-----------------------|-------------------------|-------|
| North Central Coast | | | |
| Social Policy Bank | 34.8 | 23.7 | 33.1 |
| Agriculture&Rural Development Bank | 11.0 | 8.5 | 10.6 |
| Other Banks | 15.9 | 8.7 | 14.8 |
| Credit agencies | 0.5 | 0.3 | 0.5 |
| Social Politic Agencies | 2.1 | 1.3 | 1.9 |
| Employment Support Fund | 1.4 | 1.2 | 1.4 |
| Private Lender | 0.6 | 0.4 | 0.6 |
| Material Supplier (debt purchase) | 2.3 | 1.9 | 2.2 |
| Relatives/Friends | 3.6 | 2.8 | 3.5 |
| Other Sources | 3.6 | 2.2 | 3.4 |
| South Central Coast | | | |
| Social Policy Bank | 27.2 | 19.4 | 25.8 |
| Agriculture&Rural Development Bank | 9.5 | 6.0 | 8.9 |
| Other Banks | 9.7 | 5.7 | 9.0 |
| Credit agencies | 0.4 | 0.4 | 0.4 |
| Social Politic Agencies | 1.1 | 1.1 | 1.1 |
| Employment Support Fund | 1.2 | 1.3 | 1.2 |
| Private Lender | 0.2 | 0.3 | 0.2 |
| Material Supplier (debt purchase) | 2.0 | 2.1 | 2.0 |
| Relatives/Friends | 4.0 | 3.1 | 3.9 |
| Other Sources | 1.6 | 1.2 | 1.5 |
| Central Highlands | | | |
| Social Policy Bank | 43.4 | 33.0 | 42.0 |
| Agriculture&Rural Development Bank | 12.1 | 11.9 | 12.1 |
| Other Banks | 18.5 | 13.2 | 17.8 |
| Credit agencies | 0.4 | 0.4 | 0.4 |
| Social Politic Agencies | 1.0 | 0.4 | 0.9 |
| Employment Support Fund | 0.9 | 0.4 | 0.8 |
| Private Lender | 0.3 | - | 0.3 |
| Material Supplier (debt purchase) | 2.8 | 1.1 | 2.6 |
| Relatives/Friends | 9.1 | 6.3 | 8.7 |
| Other Sources | 4.7 | 3.7 | 4.6 |
| South East | | | |
| Social Policy Bank | 31.1 | 24.4 | 29.7 |
| Agriculture&Rural Development Bank | 6.3 | 5.0 | 6.0 |
| Other Banks | 16.7 | 12.2 | 15.7 |
| Credit agencies | 1.0 | 0.3 | 0.8 |
| Social Politic Agencies | 1.1 | 0.9 | 1.0 |
| Employment Support Fund | 0.6 | 0.7 | 0.6 |
| Private Lender | 0.3 | 0.6 | 0.4 |
| Material Supplier (debt purchase) | 1.8 | 1.4 | 1.7 |
| Relatives/Friends | 3.9 | 3.3 | 3.7 |
| Other Sources | 2.6 | 1.9 | 2.5 |

TABLE 5 | Percentage of male and female headed rural households obtaining loans, by source and region.

| Region | Male headed household | Female headed household | Total |
|------------------------------------|-----------------------|-------------------------|-------|
| Mekong River Delta | | | |
| Social Policy Bank | 41.5 | 32.5 | 39.8 |
| Agriculture&Rural Development Bank | 4.6 | 4.3 | 4.5 |
| Other Banks | 24.1 | 16.6 | 22.7 |
| Credit agencies | 1.2 | 0.8 | 1.2 |
| Social Politic Agencies | 0.6 | 0.9 | 0.7 |
| Employment Support Fund | 0.6 | 0.9 | 0.7 |
| Private Lender | 0.3 | 0.3 | 0.3 |
| Material Supplier (debt purchase) | 2.8 | 2.1 | 2.7 |
| Relatives/Friends | 10.1 | 8.5 | 9.8 |
| Other Sources | 2.8 | 2.0 | 2.7 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 6 | Number and percentages of people at working age reported to have jobs in the last 12 months by sex and primary working sector

| Region | Number rural people at working age reported to have jobs | | | Percentage of rural people at working age reported to have jobs | | |
|----------------------------|--|-------------------|-------------------|---|-------------|-------------|
| | Total | Male | Female | Total | Male | Female |
| National | 31 902 343 | 16 490 988 | 15 411 355 | 100.0 | 51.7 | 48.3 |
| Agriculture | 21 192 947 | 10 476 530 | 10 716 417 | 100.0 | 49.4 | 50.6 |
| Forestry | 97 833 | 60 976 | 36 857 | 100.0 | 62.3 | 37.7 |
| Aquaculture | 1 563 833 | 1 013 368 | 550 465 | 100.0 | 64.8 | 35.2 |
| Industry | 2 910 386 | 1 512 643 | 1 397 743 | 100.0 | 52.0 | 48.0 |
| Construction | 1 032 655 | 934 546 | 98 109 | 100.0 | 90.5 | 9.5 |
| Trading | 2 829 791 | 1 121 383 | 1 708 428 | 100.0 | 39.6 | 60.4 |
| Transportation | 446 456 | 405 620 | 40 836 | 100.0 | 90.9 | 9.1 |
| Other Service Activity | 1 828 442 | 965 922 | 862 520 | 100.0 | 52.8 | 47.2 |
| Red River Delta | 6 852 831 | 3 471 744 | 3 381 087 | 100.0 | 50.7 | 49.3 |
| Agriculture | 4 050 479 | 1 798 203 | 2 252 276 | 100.0 | 44.4 | 55.6 |
| Forestry | 4 051 | 2 585 | 1 466 | 100.0 | 63.8 | 36.2 |
| Aquaculture | 128 729 | 82 757 | 45 972 | 100.0 | 64.3 | 35.7 |
| Industry | 1 027 893 | 578 169 | 449 724 | 100.0 | 56.2 | 43.8 |
| Construction | 395 027 | 354 060 | 40 967 | 100.0 | 89.6 | 10.4 |
| Trading | 686 914 | 313 449 | 373 465 | 100.0 | 45.6 | 54.4 |
| Transportation | 122 626 | 111 722 | 10 904 | 100.0 | 91.1 | 9.9 |
| Other Service Activity | 437 112 | 230 799 | 206 313 | 100.0 | 52.8 | 57.2 |
| North East | 3 973 007 | 2 035 222 | 1 937 785 | 100.0 | 51.2 | 48.8 |
| Agriculture | 3 295 927 | 1 635 902 | 1 660 025 | 100.0 | 49.6 | 50.4 |
| Forestry | 22 964 | 13 756 | 9 208 | 100.0 | 59.9 | 40.1 |
| Aquaculture | 39 893 | 25 304 | 14 589 | 100.0 | 63.4 | 36.6 |
| Industry | 148 678 | 93 293 | 55 385 | 100.0 | 62.7 | 37.3 |
| Construction | 68 609 | 61 033 | 7 576 | 100.0 | 89.0 | 11.0 |
| Trading | 157 140 | 70 974 | 86 166 | 100.0 | 45.2 | 54.8 |
| Transportation | 32 661 | 29 569 | 3 092 | 100.0 | 90.5 | 9.5 |
| Other Service Activity | 207.135 | 105 391 | 101 744 | 100.0 | 50.9 | 49.1 |
| North West | 1 144 950 | 579 453 | 565 497 | 100.0 | 50.6 | 49.4 |
| Agriculture | 1 045 218 | 521 284 | 523 924 | 100.0 | 49.9 | 50.1 |
| Forestry | 5 268 | 3 078 | 2 190 | 100.0 | 58.4 | 41.6 |
| Aquaculture | 2 194 | 1 493 | 701 | 100.0 | 68.0 | 32.0 |
| Industry | 9 714 | 6 120 | 3 594 | 100.0 | 63.0 | 37.0 |
| Construction | 6 103 | 5 347 | 756 | 100.0 | 87.6 | 12.4 |
| Trading | 23 534 | 11 235 | 12 299 | 100.0 | 47.7 | 52.3 |
| Transportation | 4 026 | 3 836 | 190 | 100.0 | 95.3 | 4.7 |
| Other Service Activity | 48 893 | 27 060 | 21 833 | 100.0 | 55.3 | 44.7 |
| North Central Coast | 4 098 528 | 2 100 996 | 1 997 532 | 100.0 | 51.3 | 48.7 |
| Agriculture | 2 964 241 | 1 438 338 | 1 525 903 | 100.0 | 48.5 | 51.5 |
| Forestry | 22 404 | 15 039 | 7 364 | 100.0 | 67.1 | 32.9 |
| Aquaculture | 149 381 | 117 694 | 31 687 | 100.0 | 78.8 | 21.2 |

TABLE 6 | Number and percentages of people at working age reported to have jobs in the last 12 months by sex and primary working sector

| Region | Number rural people at working age reported to have jobs | | | Percentage of rural people at working age reported to have jobs | | |
|----------------------------|--|------------------|------------------|---|-------------|-------------|
| | Total | Male | Female | Total | Male | Female |
| Industry | 261 376 | 144 894 | 116 482 | 100.0 | 55.4 | 44.6 |
| Construction | 121 683 | 111 229 | 10 454 | 100.0 | 91.4 | 8.6 |
| Trading | 296 106 | 107 843 | 188 263 | 100.0 | 36.4 | 63.6 |
| Transportation | 44 003 | 39 278 | 4 725 | 100.0 | 89.3 | 10.7 |
| Other Service Activity | 239 335 | 126 681 | 112 654 | 100.0 | 52.9 | 47.1 |
| South Central Coast | 2 492 696 | 1 294 414 | 1 198 282 | 100.0 | 51.9 | 48.1 |
| Agriculture | 1 490 517 | 716 718 | 773 799 | 100.0 | 48.1 | 51.9 |
| Forestry | 10 523 | 7 069 | 3 454 | 100.0 | 67.2 | 32.8 |
| Aquaculture | 185 152 | 147 115 | 38 037 | 100.0 | 79.5 | 20.5 |
| Industry | 250 498 | 121 729 | 128 769 | 100.0 | 48.6 | 51.4 |
| Construction | 114 169 | 105 538 | 8 631 | 100.0 | 92.4 | 7.6 |
| Trading | 245 616 | 76 598 | 169 018 | 100.0 | 31.2 | 68.8 |
| Transportation | 32 439 | 30 374 | 2 065 | 100.0 | 93.6 | 6.4 |
| Other Service Activity | 163 782 | 89 273 | 74 509 | 100.0 | 54.5 | 45.5 |
| Central Highlands | 1 878 780 | 975 987 | 902 793 | 100.0 | 51.9 | 48.1 |
| Agriculture | 1 658 939 | 861 340 | 797 599 | 100.0 | 51.9 | 48.1 |
| Forestry | 3 326 | 2 245 | 1 081 | 100.0 | 67.5 | 32.5 |
| Aquaculture | 1 843 | 1 207 | 636 | 100.0 | 65.5 | 34.5 |
| Industry | 31 573 | 17 081 | 14 492 | 100.0 | 54.1 | 45.9 |
| Construction | 15 509 | 13 728 | 1 781 | 100.0 | 88.5 | 11.5 |
| Trading | 74 945 | 28 466 | 46 479 | 100.0 | 38.0 | 62.0 |
| Transportation | 9 772 | 9 288 | 484 | 100.0 | 95.0 | 5.0 |
| Other Service Activity | 82 873 | 42 632 | 40 241 | 100.0 | 51.4 | 48.6 |
| South East | 3 387 365 | 1 788 193 | 1 599 172 | 100.0 | 52.8 | 57.2 |
| Agriculture | 1 744 529 | 924 276 | 820 253 | 100.0 | 53.0 | 47.0 |
| Forestry | 9 424 | 6 144 | 3 280 | 100.0 | 65.2 | 34.8 |
| Aquaculture | 124 597 | 100 605 | 23 992 | 100.0 | 80.7 | 19.3 |
| Industry | 575 846 | 264 866 | 310 980 | 100.0 | 46.0 | 54.0 |
| Construction | 128 852 | 119 160 | 9 692 | 100.0 | 92.5 | 7.5 |
| Trading | 452 436 | 167 333 | 285 103 | 100.0 | 37.0 | 63.0 |
| Transportation | 68 672 | 64 577 | 4 095 | 100.0 | 94.0 | 6.0 |
| Other Service Activity | 283 009 | 141 232 | 141 777 | 100.0 | 49.9 | 50.1 |
| Mekong River Delta | 8 074 186 | 4 424 979 | 3 829 207 | 100.0 | 52.6 | 47.4 |
| Agriculture | 4 943 097 | 2 580 469 | 2 362 628 | 100.0 | 52.2 | 47.8 |
| Forestry | 19 874 | 11 060 | 8 814 | 100.0 | 55.7 | 44.3 |
| Aquaculture | 932 044 | 537 193 | 394 851 | 100.0 | 57.6 | 42.4 |
| Industry | 604 808 | 286 491 | 318 317 | 100.0 | 47.4 | 52.6 |
| Construction | 182 703 | 164 451 | 18 252 | 100.0 | 90.0 | 10.0 |
| Trading | 893 100 | 345 485 | 547 615 | 100.0 | 38.7 | 61.3 |
| Transportation | 132 257 | 116 976 | 15 281 | 100.0 | 88.4 | 11.6 |
| Other Service Activity | 366 303 | 202 854 | 163 449 | 100.0 | 55.4 | 44.6 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 7 | Percentage of rural households with at least one member reported to have jobs in the last 12 months, by sex of the household head and primary working sector

| Region | Percentage of household heads and reported to have jobs | | |
|----------------------------|---|------|--------|
| | Total | Male | Female |
| National | | | |
| Agriculture | 68.4 | 68.1 | 69.8 |
| Forestry | 0.3 | 0.4 | 0.3 |
| Aquaculture | 5.1 | 5.7 | 2.2 |
| Industry | 6.5 | 6.6 | 6.1 |
| Construction | 4.1 | 4.9 | 0.6 |
| Trading | 8.1 | 6.8 | 14.0 |
| Transportation | 1.8 | 2.2 | 0.3 |
| Other Service Activity | 5.7 | 5.4 | 6.8 |
| Red River Delta | | | |
| Agriculture | 60.8 | 57.6 | 74.9 |
| Forestry | 0.1 | 0.1 | 0.0 |
| Aquaculture | 2.2 | 2.6 | 0.6 |
| Industry | 11.2 | 12.3 | 6.3 |
| Construction | 7.7 | 9.2 | 0.9 |
| Trading | 9.3 | 9.2 | 9.7 |
| Transportation | 2.4 | 2.9 | 0.2 |
| Other Service Activity | 6.3 | 6.1 | 7.3 |
| North East | | | |
| Agriculture | 82.3 | 82.8 | 80.1 |
| Forestry | 0.7 | 0.7 | 0.6 |
| Aquaculture | 1.1 | 1.2 | 0.6 |
| Industry | 3.1 | 3.3 | 2.4 |
| Construction | 2.1 | 2.3 | 0.5 |
| Trading | 4.3 | 3.6 | 7.7 |
| Transportation | 1.1 | 1.2 | 0.2 |
| Other Service Activity | 5.3 | 4.9 | 8.0 |
| North West | | | |
| Agriculture | 89.1 | 90.0 | 81.9 |
| Forestry | 0.5 | 0.5 | 0.6 |
| Aquaculture | 0.4 | 0.4 | 0.3 |
| Industry | 0.8 | 0.8 | 1.1 |
| Construction | 0.7 | 0.7 | 0.3 |
| Trading | 2.5 | 2.1 | 6.1 |
| Transportation | 0.6 | 0.6 | 0.1 |
| Other Service Activity | 5.4 | 5.0 | 9.6 |
| North Central Coast | | | |
| Agriculture | 73.7 | 72.9 | 77.7 |
| Forestry | 0.6 | 0.7 | 0.4 |
| Aquaculture | 4.5 | 5.3 | 0.7 |

TABLE 7 | Percentage of rural households with at least one member reported to have jobs in the last 12 months, by sex of the household head and primary working sector

| Region | Percentage of household heads and reported to have jobs | | |
|----------------------------|---|------|--------|
| | Total | Male | Female |
| Industry | 4.5 | 4.8 | 3.2 |
| Construction | 3.5 | 4.1 | 0.4 |
| Trading | 6.0 | 5.1 | 10.2 |
| Transportation | 1.4 | 1.6 | 0.2 |
| Other Service Activity | 5.8 | 5.5 | 7.2 |
| South Central Coast | | | |
| Agriculture | 65.1 | 62.9 | 73.3 |
| Forestry | 0.5 | 0.5 | 0.3 |
| Aquaculture | 8.6 | 10.5 | 1.6 |
| Industry | 6.1 | 6.4 | 5.3 |
| Construction | 5.1 | 6.4 | 0.6 |
| Trading | 7.5 | 5.8 | 14.0 |
| Transportation | 1.5 | 1.9 | 0.2 |
| Other Service Activity | 5.5 | 5.7 | 4.8 |
| Central Highlands | | | |
| Agriculture | 88.4 | 88.9 | 85.6 |
| Forestry | 0.2 | 0.2 | 0.1 |
| Aquaculture | 0.1 | 0.1 | 0.1 |
| Industry | 1.4 | 1.4 | 1.3 |
| Construction | 1.0 | 1.2 | 0.3 |
| Trading | 3.6 | 3.1 | 6.8 |
| Transportation | 0.7 | 0.8 | 0.1 |
| Other Service Activity | 4.6 | 4.4 | 5.8 |
| South East | | | |
| Agriculture | 55.9 | 57.8 | 49.3 |
| Forestry | 0.3 | 0.4 | 0.3 |
| Aquaculture | 4.4 | 5.4 | 1.1 |
| Industry | 11.0 | 10.0 | 14.2 |
| Construction | 4.5 | 5.7 | 0.6 |
| Trading | 13.3 | 10.0 | 24.4 |
| Transportation | 2.7 | 3.4 | 0.4 |
| Other Service Activity | 7.9 | 7.3 | 9.7 |
| Mekong River Delta | | | |
| Agriculture | 63.9 | 64.4 | 61.5 |
| Forestry | 0.2 | 0.3 | 0.2 |
| Aquaculture | 11.3 | 12.5 | 6.7 |
| Industry | 4.9 | 4.5 | 6.3 |
| Construction | 2.6 | 3.1 | 0.5 |
| Trading | 10.3 | 8.1 | 19.6 |
| Transportation | 2.2 | 2.7 | 0.4 |
| Other Service Activity | 4.5 | 4.5 | 4.7 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 8 | Percentage of households selling poultry products, by sex of household head, kind of poultry and region

| | Male headed households | Female headed households |
|---------------------------------|------------------------|--------------------------|
| NATIONAL | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 48.6 | 39.1 |
| Egg-laying hens | 2.3 | 1.9 |
| Ducks | 0.4 | 0.1 |
| Goose | 0.4 | 0.1 |
| Eggs sold | | |
| Broiler chickens | 4.8 | 4.1 |
| Egg-laying hens | 20.9 | 14.9 |
| Ducks | 2.7 | 1.1 |
| Goose | 0.5 | 0.4 |
| RED RIVER DELTA | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 53.4 | 47.0 |
| Egg-laying hens | 1.4 | 1.4 |
| Ducks | 0.2 | 0.0 |
| Goose | 7.8 | 4.5 |
| Eggs sold | | |
| Broiler chickens | 1.3 | 1.6 |
| Egg-laying hens | 20.7 | 16.4 |
| Ducks | 2.8 | 1.2 |
| Goose | 0.3 | 0.1 |
| NORTH EAST | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 74.4 | 64.2 |
| Egg-laying hens | 2.5 | 2.9 |
| Ducks | 0.5 | 0.2 |
| Goose | 8.0 | 6.1 |
| Eggs sold | | |
| Broiler chickens | 1.8 | 1.6 |
| Egg-laying hens | 47.8 | 40.2 |
| Ducks | 5.3 | 1.9 |
| Goose | 1.0 | 0.7 |
| NORTH WEST | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 78.2 | 63.9 |
| Egg-laying hens | 7.9 | 3.8 |
| Ducks | 1.1 | 0.0 |
| Goose | 6.7 | 6.7 |
| Eggs sold | | |
| Broiler chickens | 1.9 | 1.7 |
| Egg-laying hens | 49.7 | 34.0 |
| Ducks | 8.6 | 1.3 |
| Goose | 1.4 | 0.4 |

TABLE 8 | Percentage of households selling poultry products, by sex of household head, kind of poultry and region

| | Male headed households | Female headed households |
|---------------------------------|------------------------|--------------------------|
| NORTH CENTRAL COAST | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 61.7 | 53.0 |
| Egg-laying hens | 3.5 | 3.5 |
| Ducks | 0.5 | 0.1 |
| Goose | 5.3 | 3.3 |
| Eggs sold | | |
| Broiler chickens | 11.1 | 8.3 |
| Egg-laying hens | 28.5 | 24.0 |
| Ducks | 3.1 | 1.6 |
| Goose | 0.4 | 0.4 |
| SOUTH CENTRAL COAST | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 50.7 | 44.2 |
| Egg-laying hens | 2.8 | 1.6 |
| Ducks | 0.1 | 0.0 |
| Goose | 2.8 | 2.5 |
| Eggs sold | | |
| Broiler chickens | 7.0 | 7.1 |
| Egg-laying hens | 13.9 | 10.3 |
| Ducks | 1.5 | 1.2 |
| Goose | 1.0 | 0.6 |
| CENTRAL HIGHLANDS | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 53.7 | 46.6 |
| Egg-laying hens | 6.0 | 7.4 |
| Ducks | 0.2 | 0.2 |
| Goose | 3.2 | 3.0 |
| Eggs sold | | |
| Broiler chickens | 17.3 | 15.4 |
| Egg-laying hens | 22.9 | 20.8 |
| Ducks | 0.8 | 0.2 |
| Goose | 0.7 | 1.1 |
| SOUTH EAST | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 26.7 | 19.6 |
| Egg-laying hens | 1.3 | 1.2 |
| Ducks | 0.3 | 0.2 |
| Goose | 0.8 | 0.6 |
| Eggs sold | | |
| Broiler chickens | 5.8 | 4.8 |
| Egg-laying hens | 6.4 | 4.4 |
| Ducks | 0.9 | 0.5 |
| Goose | 0.3 | 0.3 |

TABLE 8 | Percentage of households selling poultry products, by sex of household head, kind of poultry and region

| | Male headed households | Female headed households |
|---------------------------------|------------------------|--------------------------|
| MEKONG RIVER DELTA | | |
| Poultry Slaughtered/Sold | | |
| Broiler chickens | 26.2 | 21.9 |
| Egg-laying hens | 0.7 | 0.5 |
| Ducks | 0.4 | 0.1 |
| Goose | 1.9 | 1.7 |
| Eggs sold | | |
| Broiler chickens | 2.9 | 0.1 |
| Egg-laying hens | 5.5 | 4.1 |
| Ducks | 1.9 | 1.0 |
| Goose | 0.3 | 0.3 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 9 | Type of housing among male and female-headed households (%)

| | All households | Male-headed | Female-headed |
|------------------------------|----------------|-------------|---------------|
| National | | | |
| Solid | 12.0 | 12.4 | 9.9 |
| Semi-solid | 52.4 | 51.8 | 54.8 |
| Wood frame with cottage roof | 14.5 | 14.9 | 12.8 |
| Temporary | 12.4 | 12.2 | 13.5 |
| Red River Delta | | | |
| Solid | 29.0 | 30.7 | 21.8 |
| Semi-solid | 52.0 | 49.8 | 62.0 |
| Wood frame with cottage roof | 0.7 | 0.6 | 1.0 |
| Temporary | 2.1 | 1.7 | 3.8 |
| North East | | | |
| Solid | 10.1 | 10.0 | 10.3 |
| Semi-solid | 50.5 | 50.2 | 52.6 |
| Wood frame with cottage roof | 24.2 | 25.0 | 19.3 |
| Temporary | 11.2 | 11.0 | 12.3 |
| North West | | | |
| Solid | 8.7 | 8.5 | 10.9 |
| Semi-solid | 48.0 | 48.2 | 45.7 |
| Wood frame with cottage roof | 19.9 | 20.4 | 15.6 |
| Temporary | 21.3 | 21.0 | 24.0 |
| North Central Coast | | | |
| Solid | 9.8 | 10.2 | 7.9 |
| Semi-solid | 69.2 | 68.9 | 70.6 |
| Wood frame with cottage roof | 7.7 | 7.8 | 7.2 |
| Temporary | 7.9 | 7.7 | 9.0 |
| South Central Coast | | | |
| Solid | 2.9 | 3.1 | 2.2 |
| Semi-solid | 72.2 | 72.4 | 71.3 |
| Wood frame with cottage roof | 6.9 | 6.9 | 6.9 |
| Temporary | 7.5 | 6.9 | 9.8 |
| Central Highlands | | | |
| Solid | 4.6 | 4.7 | 3.9 |
| Semi-solid | 64.1 | 64.2 | 63.7 |
| Wood frame with cottage roof | 17.5 | 17.7 | 16.5 |
| Temporary | 11.2 | 10.9 | 12.9 |
| South East | | | |
| Solid | 5.0 | 5.2 | 4.4 |
| Semi-solid | 55.1 | 55.4 | 53.8 |
| Wood frame with cottage roof | 14.7 | 15.1 | 12.9 |
| Temporary | 12.7 | 12.6 | 12.8 |

TABLE 9 | Type of housing among male and female-headed households (%)

| | All households | Male-headed | Female-headed |
|------------------------------|----------------|-------------|---------------|
| Mekong River Delta | | | |
| Solid | 6.2 | 6.3 | 5.7 |
| Semi-solid | 31.3 | 31.3 | 31.2 |
| Wood frame with cottage roof | 29.5 | 29.9 | 27.9 |
| Temporary | 25.7 | 25.5 | 26.5 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 10 | Access to drinking water, by sex of household head and source

| | Male-headed | Female-headed |
|--|-------------|---------------|
| National | | |
| Tap water | 6.1 | 7.1 |
| Bought water (in tank/jar/bottle/etc.) | 0.3 | 0.3 |
| Drilling well water | 22.1 | 22.8 |
| Constructed well water | 26.4 | 27.8 |
| Red River Delta | | |
| Tap water | 3.7 | 4.4 |
| Bought water (in tank/jar/bottle/etc.) | 0.1 | 0.1 |
| Drilling well water | 29.4 | 29.8 |
| Constructed well water | 11.8 | 13.8 |
| North East | | |
| Tap water | 1.9 | 3.7 |
| Bought water (in tank/jar/bottle/etc.) | 0.2 | 0.2 |
| Drilling well water | 7.8 | 8.4 |
| Constructed well water | 43.1 | 51.2 |
| North West | | |
| Tap water | 1.8 | 5.6 |
| Bought water (in tank/jar/bottle/etc.) | 0.1 | 0.1 |
| Drilling well water | 0.4 | 0.9 |
| Constructed well water | 21.5 | 30.6 |
| North Central Coast | | |
| Tap water | 3.6 | 3.4 |
| Bought water (in tank/jar/bottle/etc.) | 0.3 | 0.2 |
| Drilling well water | 21.9 | 20.2 |
| Constructed well water | 47.4 | 53.1 |
| South Central Coast | | |
| Tap water | 4.5 | 3.4 |
| Bought water (in tank/jar/bottle/etc.) | 0.4 | 0.3 |
| Drilling well water | 21.3 | 21.2 |
| Constructed well water | 53.4 | 57 |
| Central Highlands | | |
| Tap water | 3.0 | 3.5 |
| Bought water (in tank/jar/bottle/etc.) | 0.1 | 0.1 |
| Drilling well water | 4.7 | 4.0 |
| Constructed well water | 40.1 | 38 |
| South East | | |
| Tap water | 9.4 | 8.8 |
| Bought water (in tank/jar/bottle/etc.) | 1.7 | 1.4 |
| Drilling well water | 31.2 | 31.8 |
| Constructed well water | 30.1 | 25.9 |

TABLE 10 | Access to drinking water, by sex of household head and source

| | Male-headed | Female-headed |
|--|-------------|---------------|
| Mekong River Delta | | |
| Tap water | 14.2 | 15.4 |
| Bought water (in tank/jar/bottle/etc.) | 0.3 | 0.3 |
| Drilling well water | 30.8 | 27.5 |
| Constructed well water | 1.5 | 2.0 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

TABLE 11 | Main fuel used for cooking, by sex of household head (%)

| | All households | Male-headed | Female-headed |
|----------------------------|----------------|-------------|---------------|
| National | | | |
| Gas | 9.7 | 9.7 | 9.7 |
| Electricity | 0.8 | 0.8 | 0.8 |
| Coal | 6.4 | 6.4 | 6.2 |
| Wood | 62.2 | 62.6 | 60.2 |
| Other types of fuel | 12.1 | 11.7 | 14.1 |
| Red River Delta | | | |
| Gas | 6.9 | 6.9 | 6.8 |
| Electricity | 0.8 | 0.8 | 0.8 |
| Coal | 17.0 | 17.3 | 15.6 |
| Wood | 19.3 | 18.9 | 21.0 |
| Other types of fuel | 39.9 | 38.9 | 44.3 |
| North East | | | |
| Gas | 1.9 | 1.7 | 3.2 |
| Electricity | 0.2 | 0.2 | 0.3 |
| Coal | 7.3 | 7.0 | 9.4 |
| Wood | 80.9 | 81.9 | 74.7 |
| Other types of fuel | 5.6 | 5.4 | 7.0 |
| North West | | | |
| Gas | 1.5 | 1.3 | 3.8 |
| Electricity | 0.2 | 0.2 | 0.5 |
| Coal | 0.2 | 0.2 | 0.4 |
| Wood | 95.2 | 95.7 | 89.6 |
| Other types of fuel | 0.9 | 0.8 | 2.0 |
| North Central Coast | | | |
| Gas | 3.5 | 3.5 | 3.7 |
| Electricity | 0.4 | 0.4 | 0.4 |
| Coal | 2.4 | 2.4 | 1.9 |
| Wood | 76.3 | 76.4 | 75.3 |
| Other types of fuel | 12.1 | 11.8 | 13.3 |
| South Central Coast | | | |
| Gas | 10.1 | 11.0 | 6.9 |
| Electricity | 0.5 | 0.6 | 0.5 |
| Coal | 2.0 | 2.1 | 1.6 |
| Wood | 74.9 | 73.8 | 79.2 |
| Other types of fuel | 1.9 | 1.8 | 2.1 |
| Central Highlands | | | |
| Gas | 15.9 | 16.0 | 15.0 |
| Electricity | 0.5 | 0.5 | 0.6 |
| Coal | 0.4 | 0.4 | 0.4 |
| Wood | 80.3 | 80.3 | 80.6 |
| Other types of fuel | 0.3 | 0.3 | 0.4 |

TABLE 11 | Main fuel used for cooking, by sex of household head (%)

| | All households | Male-headed | Female-headed |
|---------------------------|----------------|-------------|---------------|
| South East | | | |
| Gas | 31.1 | 31.6 | 28.9 |
| Electricity | 0.9 | 0.9 | 0.9 |
| Coal | 5.5 | 5.6 | 4.9 |
| Wood | 49.4 | 49.6 | 48.7 |
| Other types of fuel | 0.5 | 0.5 | 0.5 |
| Mekong River Delta | | | |
| Gas | 12.7 | 12.9 | 11.8 |
| Electricity | 1.7 | 1.8 | 1.4 |
| Coal | 2.8 | 2.9 | 2.0 |
| Wood | 73.5 | 73.4 | 74.1 |
| Other types of fuel | 2.0 | 2.1 | 1.9 |

Source: GSO 2006 Rural, Agricultural and Fishery Census

