Republic of Rwanda

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

AGRICULTURE HOUSEHOLD SURVEY 2020

Gender Thematic Report

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Gender Thematic Report

May 2023

Agriculture household survey 2020 , Gender Report is produced by the National Institute of Statistics of Rwanda (NISR) in partnership with UN Women Rwanda.

Additional information about this Report may be obtained from NISR

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Recommended citation:

National Institute of Statistics of Rwanda (NISR), Agriculture household survey 2020, Gender Report , August 2023.

Foreword

The government of Rwanda needs updated information for monitoring progress on programs and policies, taking into account the gender aspects (as one of cross-cutting issue) as stipulated in the first National Strategy for Transformation (NST1) 2017-2024, Sustainable Development Goals (SDGs) as well as vision 2050. To monitor progress towards these goals and targets, relevant, reliable, coherent, timely and accessible gender statistics have to be produced to facilitate evidence-based policies and decisions making that take into account women and men in the community.

It is from the above background that the National Institute of Statistics of Rwanda (NISR) in collaboration with the Ministry of Gender and Family Promotion (MIGEPROF) and the Gender Monitoring Office (GMO) with the support of UN Women through ONE UN embarked on establishing and strengthening a comprehensive Gender Statistics Framework (GSF) resulting in the production of gender thematic reports from main surveys among others. The aim of the framework is not only to encourage policy debates in particular around gender gaps but also to provide quantitative evidence for planning, monitoring, and evaluation of gender-related programs.

In the same framework, NISR is pleased to publish a gender thematic report from the results of the second Agriculture Household Survey conducted at the end of the year 2020. This report is an important source of information on female and male headed agricultural households' situation in Rwandan. It will be used in the monitoring of Rwanda's agriculture policies and programs and will help to assist in addressing key agricultural issues, especially the ones affecting female headed agricultural households.

NISR congratulates all those who contributed in one way or the other in the production of this gender thematic report. In particular, NISR expresses its gratitude to UN Women and the European Union for their continuous support in gender statistics production and use.

The National Institute of Statistics of Rwanda invites policy makers especially those from gender machinery institutions, program managers, researchers, and all users to play an important role in using the valuable data related to female and male agricultural situation.

MURANGWA Yusuf
Director General
National Institute of Statistics of Rwanda

Acknowledgment

This report has been prepared with participation of a number of individuals and organizations. We would like to express our gratitude to all of them and sincere appreciation to our partner on gender statistics, UN Women, for the great support and inputs throughout the process of compiling and publishing this report.

We thank the technical staff from National Institute of Statistics of Rwanda (NISR) for their unfailing participation in all activities of producing this report, especially Mr. Venuste NKURUNZIZA Statistician in-charge of Socio Cross-cutting Statistics: Gender and Youth; Mr NILINGIYIMANA Faustin, Team leader in charge of Vital statistics and Cross-cutting social statistics, Mr Jean Marc MUKUNDABANTU, Team Leader in charge of Labour Statistics and Mr. MUCHOCHORI KANOBANA Dominique, the Technical Advisor for Gender Statistics (from UN Women) under the guidance of Mr. Michel NDAKIZE, Director of the Demographic and Social Statistics Unit (DSS).

We also appreciate the valuable technical support in the design and proof reading of this report provided by Mr. Jean Luc KABERA, Data Portals Management Officer under the guidance of Mr. NYIRIMANZI Jean Claude, Director of the SMRP Unit. To all the above, we say thank you.

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EXECUTIVE SUMMARY

This report presents the results of the Agricultural Household Survey carried out from 6th September to 8th October 2020 taking into account gender aspects. The information enclosed in this report covers agricultural activities done in the 2019/2020 agricultural year. This survey gathered information at the household level about basic agriculture indicators related to demographic household characteristics, farm characteristics, livelihood activities, crop information, livestock production, level of inputs use, agricultural practices, extension services, level of implementation of agricultural programs, the financial aspect of agricultural households, and other agriculture-related indicators. Results have been disaggregated by sex (male and female farmers or male and female-headed households) to explore gender-related aspects in key social and economic characteristics of agricultural households in Rwanda.

Demographic characteristics of agricultural households

An agricultural household is defined as a household with at least one member practicing agricultural activities (either crop or livestock production) that are taken as one of the sources of family income. In other words, it is a household that derives part of the income from agriculture, even when this is the smallest portion of the family earnings. According to AHS2020 findings, the estimated number of agricultural households is 2.3 million, equivalent to 80.1 percent of total country households, with majority female headed agricultural households (89.5 percent) compared to male headed agricultural households (74.5 percent). Results show further that, 69.3 percent of agricultural households practice agriculture as the main livelihood activity with female headed agricultural households accounting for 77.7 percent compared to male headed agricultural households that account for 67.9 percent.

Data show that 24.6 percent of female headed agricultural households practiced solely crop production compared to 18.1 percent of male headed agricultural households. Two percent for both female and male headed agricultural households practiced exclusively livestock production only. However, more male headed agricultural households did crop production in a combination of livestock rearing compared to female headed agricultural households (79.6 percent compared to 73.2 percent).

The majority of the female headed agricultural households are widowed (65 percent) followed by divorced (15.1 percent), while for male headed agricultural households, the majority are married (94.4 percent), followed by widowed (19.7 percent).

Farmer's profile

A farmer is defined as a person who is engaged in agriculture by growing crops or raising livestock on his/her own or rented land to sustain himself or his/her family or for commercial purposes. Results of AHS 2020 show that, there are 3.8 million regarded as farmers, of whom 2.1 million are females and 1.6 million are males. The findings also show that, out of the 2.1 million female farmers, 77.8 percent practice agriculture as their main activity and 22.2 percent practice agriculture as a secondary activity. For male farmers, out of 1.6 million, 67.9 percent practice agriculture as their main activity while 32.1 percent practice agriculture as a secondary activity. The majority of farmers are aged 31-64 years old and less educated. The involvement of youth in agriculture is low, only about a quarter of female and male farmers are between 16 and 30 years old.

Access and use of land

Results show that a large share of agricultural households operates on their own land, 88.3 percent of female-headed households own agricultural land compared to 87.4 percent of male headed agricultural households. Even though a big share of female and male headed agricultural households has their own land, 39.9 percent of female headed agricultural households rented land for agricultural purposes compared to 53.2 percent for male headed households. In regard to land use, 97.8 percent of female and male headed agricultural households dedicated their land for cropping, while 9.7 percent of female headed agricultural households used the land for fodder crop cultivation as compared to 11.7 percent of male headed households.

Farm structure

A household farm, also called land holding, is a collection of all parcels operated by a household, both owned and rented land. Results show that 84.7 percent of female headed agricultural households operate on a farm size of less than 0.5 hectare compared to 75.4 percent of male headed households, whereas only 4.8 percent of female headed agricultural households have 1 ha and above compared to 10.2 percent of male headed agricultural households.

Crops grown

Among vegetable growers, amaranths emerged as the top vegetable type produced by female headed agricultural households (46.5 percent) as well as for male headed agricultural households (43.1 percent). The second emerged vegetable is cabbage produced by 25.5 percent of female headed agricultural households as compared to 31.2 percent of male headed households.

Use of agricultural inputs

Results show that, 36.4 percent of female headed agricultural households used improved seeds compared to 47.8 percent of male headed agricultural households. In regard to other inputs type, 79.3 percent of female headed agricultural households used organic fertilizers compared to 85.5 percent of male headed households, 30.8 percent of female headed agricultural households applied inorganic fertilize compared to 42.3 percent of male headed households, while only 18.2 percent of female headed agricultural households used pesticides compared to 30.2 percent of male headed households.

Agricultural practices

Findings show that 80 percent of female headed agricultural households practiced erosion control measures compared to 85.2 percent of male headed households., whereas 39.6 percent of female headed agricultural households planted agroforestry trees in their plot compared to 48.8 percent of male headed households. Only 10.2 percent of female headed agricultural households practiced irrigation as control measure compared to 16.3 percent of male headed households. Mechanical equipment is still not a common agricultural practice in Rwanda for both female and male headed agricultural households.

Agriculture extension services

Empowering farmers with modern knowledge and farming practices leads to an increase in farm productivity, income, and welfare of their families as well. Results show that in the 2019/2020 agricultural year 65.0 percent of agricultural households received extension services.

In regard to services received, the most agricultural extension services received by female headed agricultural households are information on Nutrition and food security (57.8 percent) followed by horticulture skills (57.1 percent) and agricultural practices (56.3 percent), while for male headed agricultural households mostly received knowledge on agribusiness skills (48.2 percent), followed by how to use Smart Nkunganire (48%) and veterinary services (47.4 percent).

In regard to community membership, crop producer's cooperative emerged as the cooperative type with the highest female headed agricultural households' members (87.4 percent) compared to male headed households (84.8 percent).

Agricultural and social protection programs

As part of the social protection scheme in 2020 year, the results the survey revealed that more female headed agricultural households (4.8 percent) received a cow from Girinka program during the 2019/2020 agricultural year than male headed agricultural households (3.8 percent). Besides, 5.9 percent of female headed agricultural households have received small livestock during the 2019/2020 agricultural year compared to 3.7 percent of male headed agricultural households.

Saving and credits

Access to savings, credit and funds for agricultural households has a major contribution to the development especially in terms of getting agricultural inputs that increase production. Countrywide, 52.8 percent of female headed agricultural households have at least one member who own a bank account compared to 60.2 percent of male headed agricultural households. 60.1 percent of female headed agricultural household have at least one member who made savings compared to 71 percent of male headed agricultural households. Majority of female headed agricultural households (72.2 percent) used tontine/solidarity funds for their savings compared to 71 percent of male headed agricultural households. Additionally, 31.6 percent of female headed agricultural households applied for a loan in 2020 compared to 41.5 percent of male headed agricultural households.

Out of total female and male headed agricultural households who applied for a loan,74.9 percent of female headed agricultural households enquired loan in tontines/solidarity fund compared to 68.7 percent of male headed agricultural households. It should be noted that use of formal financial institutions is still very low where only 7.5 percent of female headed agricultural households inquired loan in microfinances institutions compared to 13.2 percent for male headed households, while only 1.6 percent of female headed agricultural households inquired for loan in commercial bank compared to 3.3 percent of male headed agricultural households. Although used of credit and servings cooperative is quite common across the country, inquired loan in this type of institution is still very low where only 2.7 percent of female headed agricultural households requested loan compared to 3.1 percent of male headed agricultural households.

Out of those who received funds/support, 34.6 percent of female-headed agricultural households received support in form of agricultural materials compared to 38.5 percent of male headed agricultural households, while 27.7 percent of female headed agricultural households received support in form of money compared to 10.2 percent of male headed agricultural households.

Livestock

Countrywide, 1.9 million agricultural households reportedly reared livestock. Major types of livestock reared in Rwanda are cattle with 45 percent of female headed agricultural households raising cattle compared to 56.8 percent of male headed agricultural households, followed by goats raised by 41.9 percent of female headed agricultural households compared to 36.2 percent of male headed agricultural households. 27.9 percent of female headed agricultural households raised pigs compared to 36.1 percent of male headed households.

CHAPTER 1: INTRODUCTION

Agriculture continues to be an important engine for growth in Africa's local and regional economies; the sector employs a substantial proportion of the population and is the basis for food security.

Women represent over half of the agricultural labour force in Sub-Saharan Africa. Their substantive contribution to agriculture and their vital role in ensuring family food security have been widely documented. However, gender-based inequalities in access to and control of productive and financial resources inhibit agricultural productivity and undermine resilience and sustainability efforts.

Empowering women in agriculture and reducing gender disparities would be consistent not only with the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development but also with a host of regional and international conventions and frameworks related to women in agriculture. Notably, the African Union's declaration of 2015 as the Year of Women's Empowerment and Development towards Africa's Agenda 2063 and the 2003 adoption of the "Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa" (commonly known as the Maputo Protocol) both speak to gender in the context of Africa's long-term development agenda [1] . Further, a number of International Labour Organization (ILO) conventions focus on promoting equality in the workplace and call for governments to ensure decent work conditions for women[2]. These initiatives will help facilitate broader policy and institutional frameworks supporting women farmers and correcting gender imbalances in the agricultural sector.

A growing body of evidence points to a salient feature of the agricultural sector across Sub-Saharan Africa: lower rates of agricultural productivity for female cultivators relative to male. Substantial gender gaps in productivity have arisen not because women are less efficient farmers, but because women experience inequitable access to land and to agricultural inputs. Such unbalanced distribution frequently stems from and is bolstered by deeply entrenched sociocultural norms and traditional expectations of gender roles. This structure of constraints is multifaceted. For example, women are more income- and time-constrained than men, which has repercussions on their ability to access credit, land and appropriate levels of inputs. These constraints thus lead to sizeable gender gaps in the adoption of high-value crops and in the use of agricultural implements, male family labour, pesticides and fertilizer, among other elements.

This report presents thoroughly the findings of the Agriculture Household Survey (AHS) 2020 related to demographic household characteristics, farm characteristics, livelihood activities, major crop and vegetables grown, fruits production. It also provides the status on the level of inputs use, agricultural practices, extension services, level of implementation of agricultural programs, the financial aspect of agricultural households, livestock numbers and other agriculture-related indicators.

1 https://au.int/sites/default/files/documents/31358-doc-au_echo_january_2015.pdf

2 https://au.int/sites/default/files/documents/31358-doc-au_echo_january_2015.pdf

CHAPTER 2: DEMOGRAPHICS AND LIVELIHOOD STRATEGIES

2. 1 Agricultural households' number

An agricultural household is defined as a household with at least one member practicing agricultural activities (either crop or livestock production) that are taken as one of the sources of family income. In other words, it is a household that derives part of the income from agriculture, even when this is the smallest portion of the family earnings.

Findings in Table 1 show that, during the 2019/2020 agricultural year, out of 80.1 percent of households that are engaged in any agriculture activity, majority are female headed agricultural households (89.5 percent) compared to male headed agricultural households (74.5 percent). The same trend is observed among households engaged in agriculture as main livelihood activity where female headed agricultural households account for 77.7 percent compared to male headed agricultural households that account for 67.9 percent

.

Table 1: Percentage of households per agricultural activities, by sex of head of household

Sex of the household head	Any agriculture activity	Agriculture as main livelihood activity
Female	89.5	77.7
Male	74.5	67.9
Rwanda	80.1	69.2

Source: NISR, AHS 2020

A household may be engaged in crops only or livestock only or in both agricultural activities. Findings in Figure 1 show that 24.6 percent of female headed agricultural households practiced solely crop production compared to 18.1 percent of male headed agricultural households. Two percent for both female and male headed agricultural households practiced exclusively livestock production only. However, more male headed agricultural households did crop production in a combination of livestock rearing compared to female headed agricultural households (79.6 percent compared to 73.2 percent). This shows that, regardless of the sex of the head of household, most of households who engage in agriculture mostly combine growing crops and rearing livestock, a good indicator of access to organic manure

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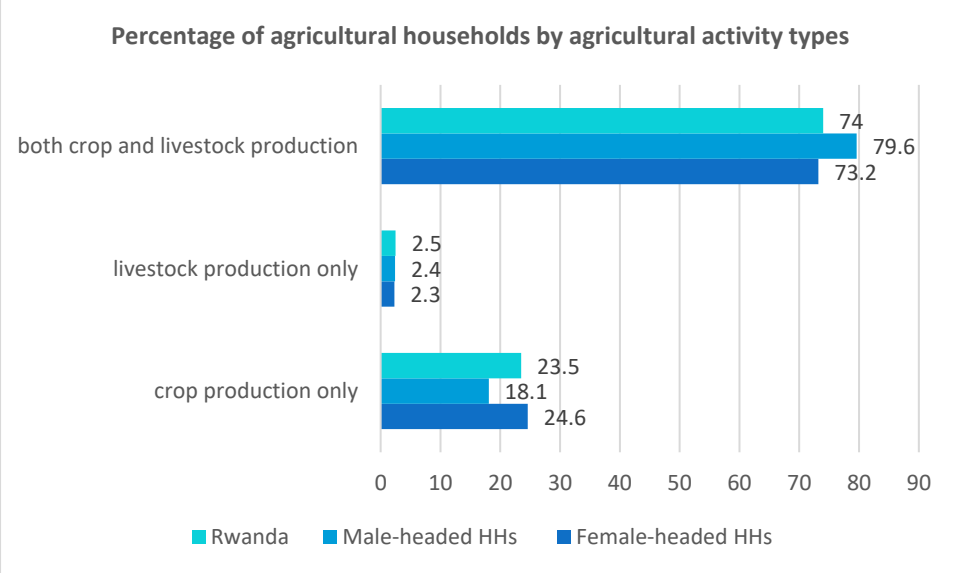
Figure 1: Percentage of agricultural households by agricultural activity types



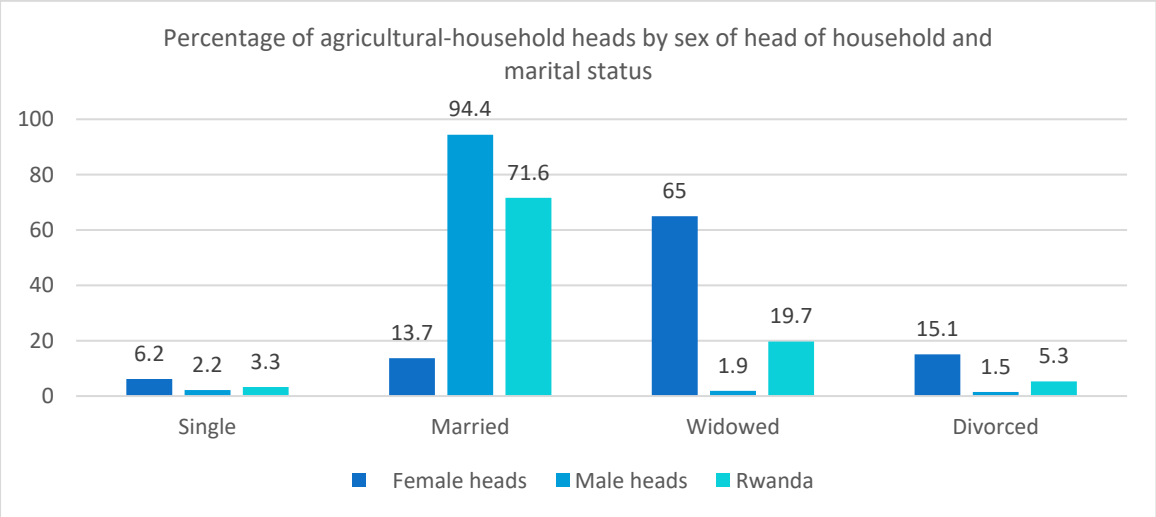
Source: NISR, AHS 2020

2.2. Agricultural households' profile

Socio-demography of statuses reflects the demographic and social roles and achievements of an individual(s) in a population. The current profile of socio-demographics of farmers is vital to know for sustaining of a major demandable food security.

Results in Figure 2 show that, the majority of the female headed agricultural households are widowed (65 percent) followed by divorced (15.1 percent), while for male headed agricultural households, the majority are married (94.4 percent), followed by single (2.2 percent).

Figure 2:Percentage of agricultural-household heads by sex of head of household and marital status



Source: NISR, AHS 2020

Data in Table 2 show that 56.6 percent of the female agricultural population at working age (16 years and above) attained primary education, followed by 22.8 percent who attained secondary education, no education by 18.9 percent, university level was attained by 1.7 percent. While the findings show that 61.9 percent of the male agricultural population at working age attained primary education, followed by 23.1 percent who attained

secondary education, no education by 12 percent, while university level was attained by 3.1 percent.

Table 2: Percentage of agricultural households' population aged 16 and above by sex of head of household, education level and province.

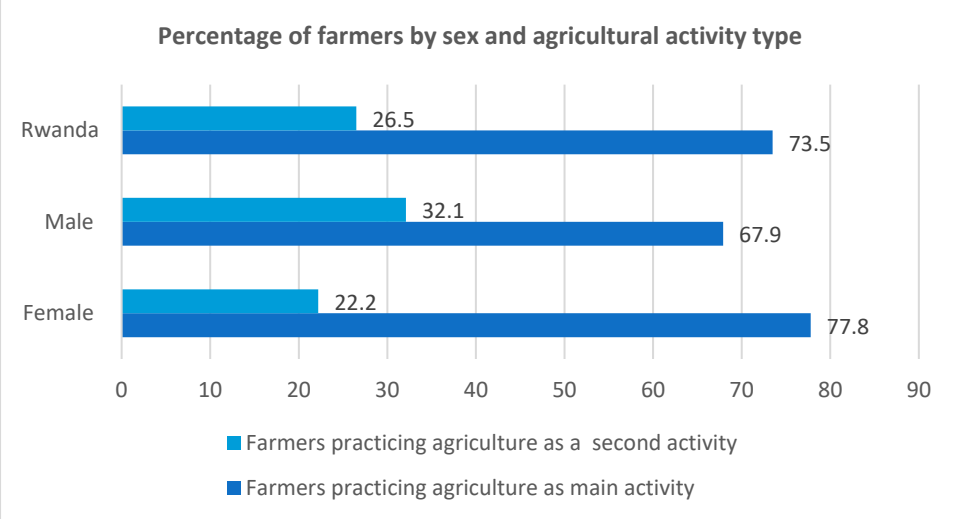
Province		Kigali	South	West	North	East	Rwanda
Female	Primary	52,7	58,1	55,5	57,9	55,8	56,6
	Secondary	29,8	22,6	23,3	20,4	23,2	22,8
	University	6,7	1,9	1,6	1,2	1,4	1,7
	No education	10,8	17,4	19,6	20,5	19,7	18,9
Male	Primary	52,7	63,8	61,4	63,8	60,5	61,9
	Secondary	31,9	21,2	24,7	20,9	23,7	23,1
	University	8,6	2,7	2,6	3,4	2,9	3,1
	No education	6,8	12,4	11,4	12	12,9	12
Both males and females	Primary	52,7	60,7	58,2	60,5	58	59
	Secondary	30,8	21,9	24	20,6	23,4	22,9
	University	7,6	2,3	2	2,2	2,1	2,4
	No education	8,9	15,1	15,9	16,7	16,5	15,7
Number of agricultural households' population aged 16 years and above (,000)		230	1.635	1.463	1.131	1.639	6.097

Source: NISR, AHS 2020

2.3. Farmer's profile

Results of AHS 2020 show that, there are 3.8 million regarded as farmers, of whom 2.1 million are females and 1.6 million are males. The findings also show that, out of the 2.1 million female farmers, 77.8 percent practice agriculture as their main activity and 22.2 percent practice agriculture as a secondary activity. For male farmers, out of 1.6 million, 67.9 percent practice agriculture as their main activity while 32.1 percent practice agriculture as a secondary activity (Figure 3).

Figure 3:Percentage of farmers by sex and agricultural activity type



Source: NISR, AHS 2020

Findings in Table 3 show that there were more female farmers (56.6 percent) than male farmers (43.4 percent). The predominance of female farmers was also recorded in the 2017 agricultural household survey, but it decreased by 3.2 percent when compared to AHS 2020 results.

Table 3: Farmers' demographic characteristics (in percentage)

	By province					Rwanda
Characteristic	Kigali	South	West	North	East	
% of farmers out of total agricultural working population	54,9	62,9	58,3	67,3	65	62,9
Percentage of farmers by sex						
Male	45,6	43	43,9	42	44,3	43,4
Female	54,4	57	56,1	58,1	55,7	56,6

Source: NISR, AHS 2020

Table 4 shows that, overall, majority of female and male farmers are aged 31 to 64 years old (63.6 percent and 64.6 percent respectively). It should be noted that only about a quarter of female and male farmers are youth aged 16-30 years old (26.3 percent and 27 percent respectively). There are slightly more female farmers (10.1 percent) in an older age category, 65 years and above compared to male farmers (8.4 percent).

Table 4: Distribution of farmers by sex, age group and province (in percentage)

Province		**Kigali**	**South**	**West**	**North**	**East**	**Rwanda**
Females	16 to 30 years	25,8	22,1	24,1	30,1	29,4	26,3
	31 to 64 years	69,2	66,5	65,6	58,8	62	63,6
	65 years and above	5	11,3	10,3	11,1	8,7	10,1
	Total	100	100	100	100	100	100
Males	16 to 30 years	23,9	24	27,2	29,5	28,5	27
	31 to 64 years	70,7	67,5	63,8	61,1	64,1	64,6
	65 years and above	5,4	8,5	9	9,5	7,4	8,4
	Total	100	100	100	100	100	100
Both males and females	16 to 30 years	24,9	22,9	25,4	29,8	29	26,6
	31 to 64 years	69,9	66,9	64,8	59,8	62,9	64
	65 years and above	5,2	10,1	9,7	10,4	8,1	9,4
	Total	100	100	100	100	100	100
Total number of farmers (,000)		126	1.028	852	761	1.065	3.832

Source: NISR, AHS 2020

2.4. Main livelihood activities of agricultural households

Findings in Table 5 show that female headed agricultural households practiced other income-generating activities that complement agriculture, including daily labour (34.8 percent) followed by VUP Direct Transfers (6 percent), VUP Public Works (5.71 percent), informal sale (5.18 percent). While for male headed agricultural households, who practiced other income-generating activities included daily labour (37.4 percent), followed by informal sale (6.2 percent), and salaried work (5.6 percent).

Table 5: Percentage of agricultural households practicing other livelihood activities that complement agriculture, by sex of head of household.

Livelihood activity	Male	Female	Total
Daily Labour	37.43	34.8	36.69
Fishing, Hunting, Gat	0.77	0.37	0.65
Skilled labor	2.82	0.53	2.17
Purchase and Sale of agricultural products	2.24	1.49	2.03
Purchase and sale of livestock	0.38	0.01	0.27
Informal Sale	6.23	5.18	5.93
Handicrafts	2.99	0.98	2.43
Transport	2.21	0.23	1.65
Salaried work	5.67	1.57	4.52
Pension	0.28	0.23	0.27
Own Business/Self Emp	1.91	0.7	1.57
VUP Public Works	2.02	5.71	3.06
VUP Direct Transfers	1.22	6.5	2.71
Remittances from frie	0.23	0.97	0.44
None	33.6	40.73	35.61
Total	100	100	100

Source: NISR, AHS 2020

CHAPTER 3: AGRICULTURAL LAND ACQUISITION

3.1. Access to agricultural land

Women's access to land and property is central to women's economic empowerment, as land can serve as a base for food production and income generation, as collateral for credit and as a means of holding savings for the future. Women's equal access to land is a human rights issue. Agricultural production and food security also increase when women are granted tenure security[3].

Access to agricultural land, in the context of this survey, refers to the right by households to acquire land for agricultural purposes either owned or rented. Agricultural land includes cultivated land, land left fallow, pastureland, and land under forest cultivation. Findings from Table 6 show that a large share of agricultural households operates on their own land, 88.3 percent of female-headed households own agricultural land compared to 87.4 percent of male headed households. However, there is a considerable difference between female and male when it comes to accessing land through renting where only 39.9 percent of female headed agricultural households rented land for agricultural purposes compared to 53.2 percent for male headed households. The same trend is observed when it comes to complemented own land with rented land with 28.2 percent for female headed agricultural households compared to 40.6 percent for male headed agricultural households.

Table 6: Percentage of agricultural households who accessed agricultural land by land ownership type.

Sex of the Head of HH	Ownership type			Households who accessed agricultural land (,000)
	Own land	Rented land	Complemented own land with rented land	
Female headed	88,3	39,9	28,2	641
Male headed	87,4	53,2	40,6	1.630
Rwanda	87,6	49,5	37,1	2.270

Source: NISR, AHS 2020

Data in Table 7 show that 97.8 percent of female and male headed agricultural households dedicated their land for cropping, while 9.7 percent of female headed agricultural households used the land for fodder crop cultivation as compared to 11.7 percent of male headed households. 15.4 percent of female headed agricultural households have a piece of their land under forest plantation compared to 19.6 percent for male headed agricultural households. It should be noted that, 1.9 percent of female and male headed agricultural households have left their land fallow.

[3] https://www.oecd.org/dac/gender-development/47566053.pdf; accessed April 26, 2023

Table 7: Percentage of agricultural households by land use type

Sex of the Head of HH	Agricultural households with at least land used for				Number of agricultural households (,000)
	Cropping	Fodder cultivation	Forest plantation	Fallow land	
Female-headed	97,8	9,7	15,2	1,9	655
Male-headed	97,8	11,7	19,6	1,9	1.667
Rwanda	97,8	11,2	18,4	1,9	2.322

Source: NISR, AHS 2020

3.2. Farm size

A household farm, also called land holding, is a collection of all parcels operated by household, both owned and rented land. As presented in table 8, results show that 84.7 percent of female headed agricultural households operate on a farm size of less than 0.5 hectare compared to 75.4 percent of male headed households, whereas only 4.8 percent of female headed agricultural households have 1 ha and above compared to 10.2 percent of male headed agricultural households.

Table 8: Percentage of agricultural households accessing land by farm size categories by sex of head of household.

Sex of the Head of HH	Less than 0.5 ha	0.5 to 1 ha (exc.)	1 to 5 Ha (exc.)	5 ha and above	Total
Female headed	84.7	10.6	4.8	0.0	100
Male headed	75.4	14.5	9.7	0.5	100
Rwanda	77.6	13.5	8.6	0.4	100

Source: NISR, AHS 2020

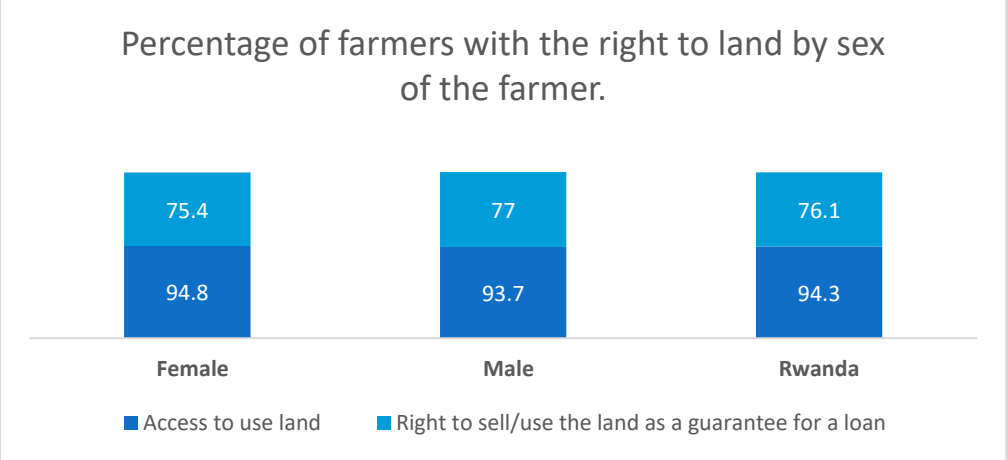
3.3. Right to land

Effective and secure control over land and its productive resources is critical to the ability of rural communities to sustain a livelihood and control their own economic welfare. In a very real sense, a lack of access to land is strongly related to issues of poverty and entrenched inequality[4].

Figure 4 reports that 94.8 percent of female farmers had access to use the household land for agriculture purposes compared to 93.7 percent of male farmers, while 75.4 percent of female farmers reported having the right to sell or use the land as a guarantee for a loan compared to 77 percent of male farmers. The findings indicate no significant variation on equal rights to access land as well as a decision over land resources between female and male farmers.

[4] https://www.a4id.org/wp-content/uploads/2016/03/Right-to-Land-A4ID-Guide-1.pdf , accessed May 9, 2023

Figure 4: Percentage of farmers with the right to land by sex of the farmer.



Source: NISR, AHS 2020

CHAPTER 4: CROPS AND FARMING PRACTICES

4.1. Crop produced in 2019/2020 agricultural year.

The following section summarizes the distribution of the production of staple crops during the agricultural year 2019/2020. Among vegetable growers, amaranths emerged as the top vegetable type produced by female headed agricultural households (46.5 percent) as well as for male headed agricultural households (43.1 percent). The second emerged vegetable is cabbage produced by 25.5 percent of female headed agricultural households as compared to 31.2 percent of male headed households (Table 13).

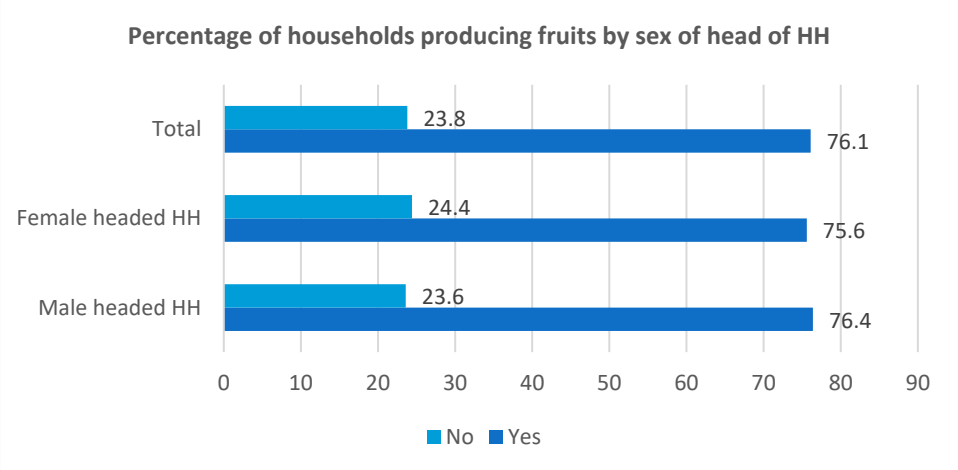
Table 9: Percentage of households producing major vegetable crops by vegetable type by sex of head of HH.

Vegetable Production	Sex		Rwanda
	Male	Female	
Amaranths	43.1	46.5	43.7
Tomato	27.2	18.5	25.6
Cabbage	31.2	25.5	30.1
Eggplant	25.2	20.0	24.2
Carrot	15.1	12.8	14.6
Onion	12.5	10.1	12
Sweet pepper	4.5	3.3	4.3
Sugar beet	3.7	4.3	3.8
French beans	2.9	3.1	2.9
Number of HHs who grew vegetables (,000)	258	60	318

Source: NISR, AHS 2020

The question on whether a household grows fruits or not was asked to both agricultural and non-agricultural households. The results indicate that 75.6 percent of female headed households in Rwanda grow fruits compared to 76.4 percent of male headed households (Figure 5). About a quarter of both female and male headed households do not grow fruits.

Figure 5: Percentage of households producing fruits by sex of head of HH.



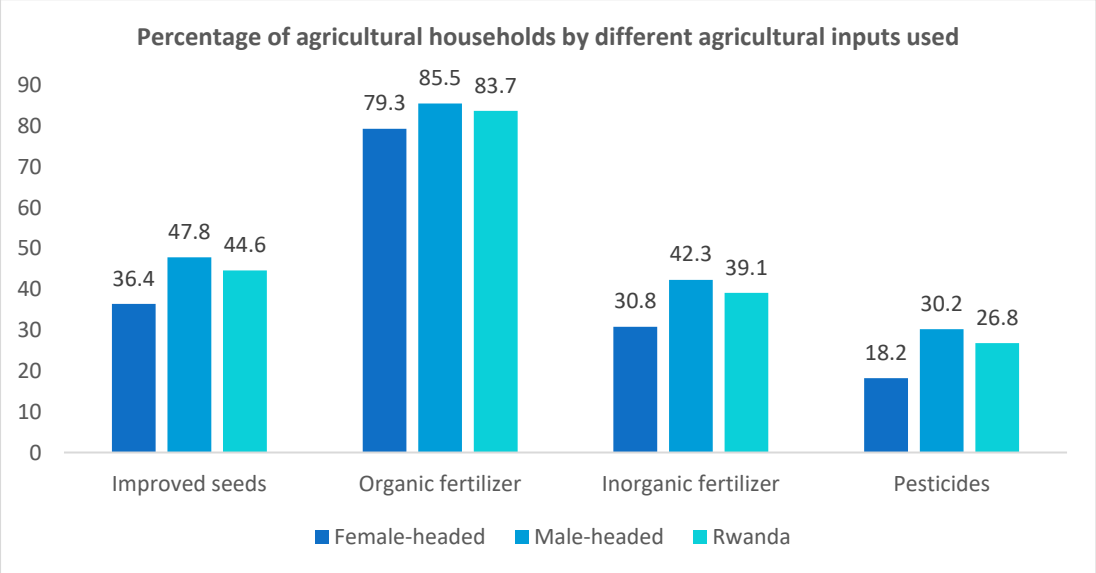
Source: NISR, AHS 2020

4.2. Use of agricultural inputs

For agriculture to prosper, farm inputs need to be available, affordable, accessible, and good quality. Seeds, fertilizers, and agro chemicals are essential for improving the productivity and incomes of smallholder farmers in developing countries (World Bank, 2007, 2013; Rosegrant et al., 2001; AGRA 2013; FAO, 2013)[5].

Results from figure 6 show that there is noticeable variations between female and male headed agricultural households in agriculture inputs use, where 36.4 percent of female headed agricultural households used improved seeds compared to 47.8 percent of male headed agricultural households. In regard to other inputs type, 79.3 percent of female headed agricultural households used organic fertilizers compared to 85.5 percent of male headed households, 30.8 percent of female headed agricultural households applied inorganic fertilize compared to 42.3 percent of male headed households, while only 18.2 percent of female headed agricultural households used pesticides compared to 30.2 percent of male headed households.

Figure 6:Percentage of agricultural households by different agricultural inputs used.



Source: NISR, AHS 2020

In regard to the type of crops, 53.3 percent of female headed agricultural households mostly used improved seeds on maize compared to 64 percent of male headed agricultural households. Paddy rice is the second type of crop with which female headed households used improved seeds with 39 percent compared to 46.5 percent for male headed households, wheat is the third with female headed households accounting for 23.8 percent against 31.9 percent for male headed households (Table 16).

[5] https://www.kit.nl/wp-content/uploads/2018/08/Market-based-solutions-for-input-supply.pdf , accessed April 27, 2023

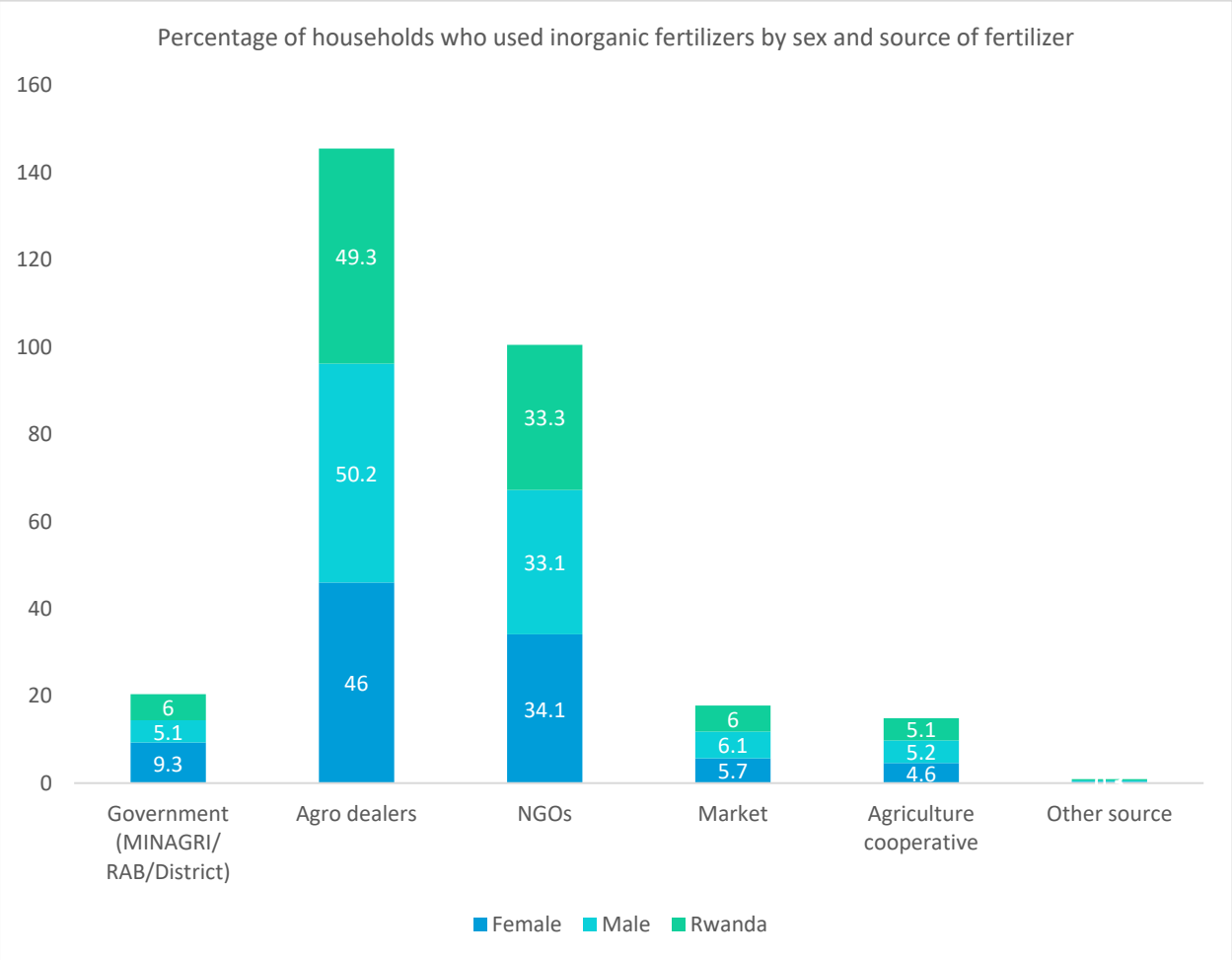
Table 10: Percentage of households who used improved seeds by important crop type by sex of head of HH.

Crop type	Sex		Rwanda
	Female	Male	
Maize	53.3	64.0	61.1
Paddy rice	39.0	46.5	44.7
Wheat	23.8	31.9	29.6
Beans	0.9	1.6	1.4
Irish potato	3.0	3.5	3.4
Soybean	1.5	2.7	2.3
Vegetables	18.2	24.8	23.5
Other crops	0.0	2.7	2.1

Source: NISR, AHS 2020

Findings from Figure 7 show that a large percentage of female headed agricultural households (46 percent) purchase inorganic fertilizers from Agro-dealers, NGOs (34.1 percent) and Government/Ministry of Agriculture/Rwanda Agriculture Board/District (9.3 percent), while for male headed agricultural households, the largest percentage purchase the inorganic fertilizer from Agro-dealers (50.2 percent) followed by NGOs (33.1 percent) and Market (6.1 percent).

Figure 7: Percentage of households who used inorganic fertilizers by sex and source of fertilizer.



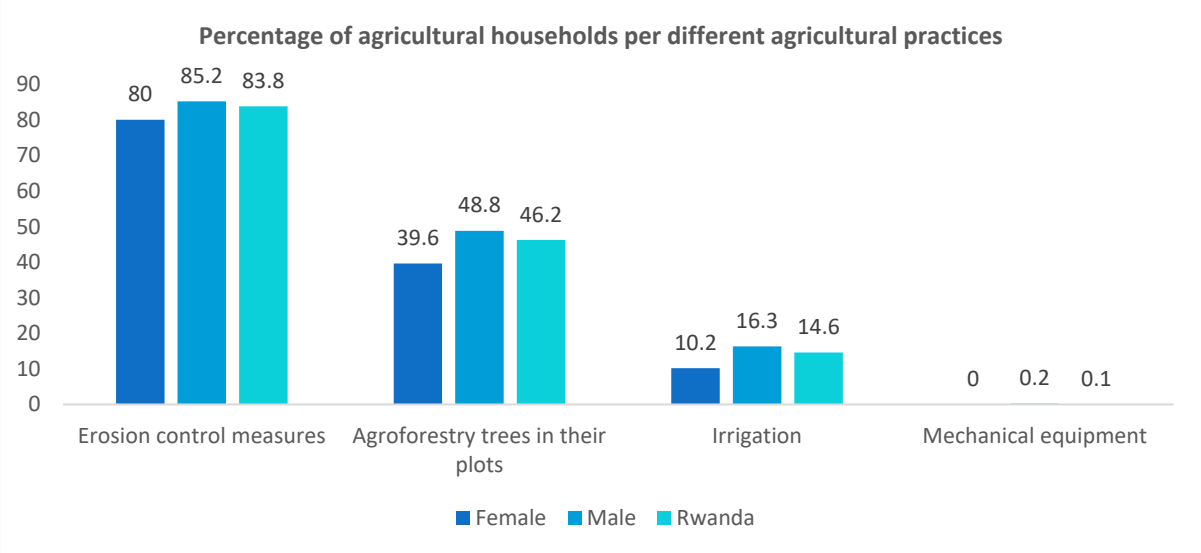
Source: NISR, AHS 2020

4.3. Agricultural practices

Good Agricultural Practices (GAP) is important because it reinforces responsible farming methods from site selection and land preparation to harvesting and handling. According to the Food and Agriculture Organization of the United Nations (FAO), GAP applies available knowledge to address environmental, economic, and social sustainability for on-farm production and post-production processes, resulting in safe and healthy agricultural products. Implementing Good Agricultural Practices can improve the livelihood of producers and the local economy as a whole, contributing to fulfilling national development objectives or sustainable development goals[6].

Data in Figure 8 shows that 80 percent of female headed agricultural households practiced erosion control measures compared to 85.2 percent of male headed households., whereas 39.6 percent of female headed agricultural households practiced agroforestry trees in their plot compared to 48.8 percent of male headed households. While 10.2 percent of female headed agricultural households practiced irrigation as control measure compared to 16.3 percent of male headed households. Mechanical equipment is still not a common agricultural practice in Rwanda for both female and male headed agricultural households.

Figure 8: Percentage of agricultural households per different agricultural practices



Source: NISR, AHS 2020

Results in table 11 show that, cover plants/grasses emerged as the most frequently applied anti-erosion control measure with little variation between female and male headed agricultural households (66.1 percent compared to 70 percentt), while trenches emerged as second most frequently applied anti-erosion technic with 21.9 percent of female headed agricultural households practicing it against 28.6 percent of male headed households.

[6] https://safetyculture.com/topics/good-agricultural-practices/ , accessed April 27, 2023

Table 11: Percentage of agricultural households by types of erosion control measures by Sex of head of household

Types of erosion control techniques	Sex of the household head		Rwanda
	Female-headed	Male-headed	
Radical terraces	7,6	9,8	9,2
Progressive terraces	10,9	11,2	11,1
Trenches	21,9	28,6	26,7
Trees/ Shelter belt	5,7	7,8	7,2
Cover plants/ grasses	66,1	70	68,9
Water drainage	1,9	2,2	2,1
Mulching	1,4	3,2	2,7
Beds /ridges	6,2	7,2	6,9
Other	0,3	0,2	0,2
Number of HHs who protected soil against erosion (,000)	641	1.630	2.270

Source: NISR, AHS 2020

In regard to irrigation techniques, data in Table 12 show that traditional irrigation is the most practiced technique used by both female and male headed agricultural households with 71 percent each. The traditional methods are mostly used by rural small farmers, and it is done by using small equipment like watering canes, Jerry can/bassin/bucket, and other local materials that can be available to draw water. Flood irrigation emerged the second most practiced irrigation technique used by both female and male headed agricultural households with 14.81 percent and 13.55 percent respectively.

Table 12: Percentage of agricultural households who irrigated land by irrigation techniques by sex of head of HH.

Irrigation Techniques	Female headed HH		Male headed HH		Total
Traditional irrigation	70.99		70.71		70.77
Surface irrigation	12.56		12.66		12.64
Flood irrigation (especially for rice)	14.81		13.55		13.8
Drip irrigation	0.37		0.88		0.78
Sprinkler irrigation	0.3		1.25		1.06
Pivot irrigation	0.97		0.95		0.95
Number of HHs who practiced irrigation (,000)	65,596		266,056		331,652
Total	100		100		100

Source: NISR, AHS 2020

Findings in Table 13 show that water from streams or lakes was the main source of water for irrigation that served 51.14 percent of female headed agricultural households compared to 52.82 percent of male headed households, while underground water is the second source of water for irrigation with 39.84 percent of female headed agricultural households against 35.82 percent of male headed household using this source.

Table 13: Source of water used for irrigation (percentage) by sex of head of HH.

Water for irrigation	Male	Female	Total
Rainwater harvesting	0.9	1.11	0.95
Water treatment plant	4.97	2.66	4.51
Underground water	35.82	39.84	36.61
Lake/stream water	52.82	51.14	52.49
Water(dam)	5.38	5.24	5.35
Other(specify)	0.12	0	0.1
Total	100	100	100

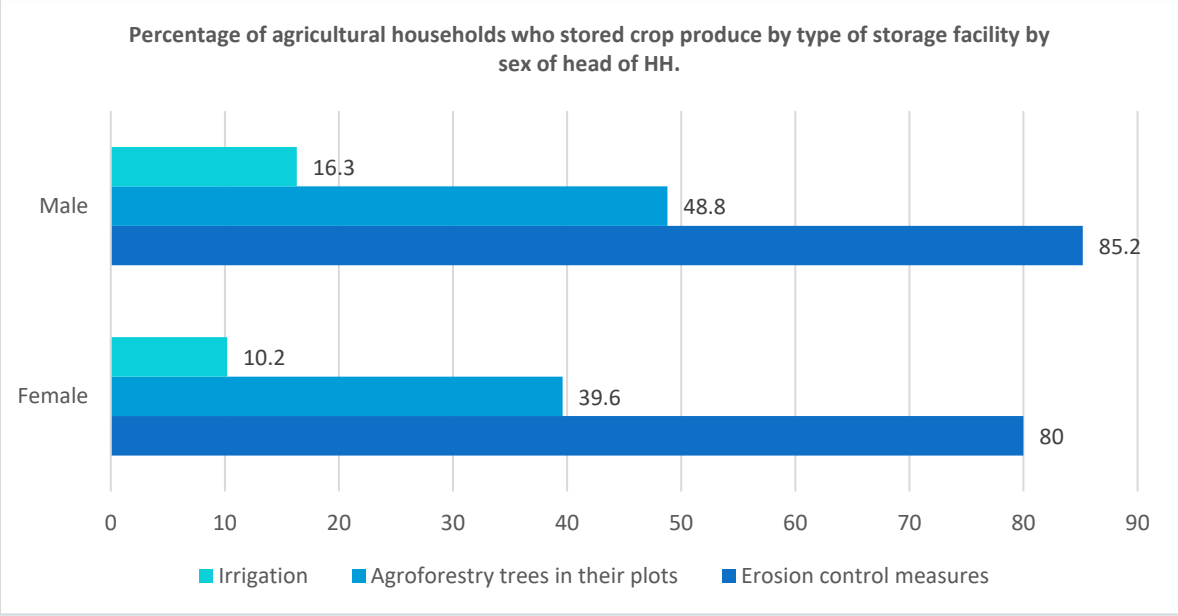
Source: NISR, AHS 2020

4.4. Post-harvest

Crop harvest storage plays an essential part in ensuring domestic food supply. It facilitates farmers to eradicate food insecurity that mostly occurs in a lean season, the time shortly before a new harvest is brought in. By making storage farmers can also be able to improve farm incomes by selling at premium prices when demand exceeds supply later in the post-harvest period. As many farming households use traditional seeds, they prefer to store a part of their harvest to be used as seed later in the upcoming seasons. Rwandan farmers are advised on handling and storing their crops properly after harvest in order to improve the quality of their produce and attract a good market.

Data in figure 9 show that the use of improved on-farm storage facilities appeared to be very low since nearly all female and male headed agricultural households (98.5 percent) use their own home storage (bags, ground…). Only one percent of both female and male headed agricultural households kept their crop produces in public storage, while 0.6 percent reserved their harvest in cooperative/private companies' storage facilities.

Figure 9: Percentage of agricultural households who stored crop produce by type of storage facility by sex of head of HH.



Source: NISR, AHS 2020

CHAPTER 5: AGRICULTURE EXTENSION SERVICES

An agricultural extension service offers technical advice on agriculture to farmers, and also supplies them with the necessary inputs and services to support their agricultural production. It provides information to farmers and passes to the farmers new ideas developed by agricultural research stations. Agricultural extension programmes cover a broad area including improved crop varieties, better livestock control, improved water management, and the control of weeds, pests or plant diseases. Where appropriate, agricultural extension may also help to build up local farmers' groups and organizations so that they can benefit from extension programmes. Agricultural extension, therefore, provides the indispensable elements that farmers need to improve their agricultural productivity[7].

5.1 Communication asset ownership

Table 14 shows different communication assets that can enable farmers to gain extension services. Overall, more female headed agricultural households (38.8 percent) do not own any communication assets than male headed agricultural households (16.1 percent). Among those who own communication assets, the findings show that only 39.1 percent of female headed agricultural households own a radio compared to 64.4 percent of male headed agricultural households, while 54.7 percent of female headed agricultural households own a telephone compared to 76.5 percent of male headed households. In addition, 3.5 percent of female headed households own a television compared to 9.5 percent of male headed households. Only 4.1 percent of female headed agricultural households have access to the internet compared to 8.1 percent of male headed households. In general female headed agricultural households have less access to communication assets than male headed agricultural households.

Table 14: Percentage of agricultural households owning communication assets by sex of head of household.

Sex of the Head of HH	Communication asset					
	Radio	Television	Telephone	Internet	No assets	
Female-headed	39,1	3,5	54,7	4,1	38,8	654
Male-headed	64,4	9,5	76,5	8,1	16,1	1.667
Rwanda	57,3	7,8	70,3	7,0	22,5	2.322

Source: NISR, AHS 2020

Results in Table 15 indicate that the most agricultural extension services received by female headed agricultural households are information on Nutrition and food security (57.8 percent) followed by horticulture skills (57.1 percent) and agricultural practices (56.3 percent), while for male headed agricultural households mostly received knowledge on agribusiness skills (48.2 percent), followed by how to use Smart Nkunganire (48%) and veterinary services (47.4 percent). In general, more members of female headed agricultural households benefited from extension services than male headed agricultural households regardless of the type of extension services.

[7] https://www.fao.org/3/t0060e/T0060E03.htm#:~:text=An%20agricultural%20extension%20service%20offers,developed%20by%20agricultural%20research%20stations. Accessed on April 28, 2023

Table 15: Percentage of agricultural households who received extension services by sex of head of household.

Type of extension services received	Rwanda	% of HH members who received extension services by sex of head of HH		Number of HH members who received extension services (,000)
		Female	Male	
Agricultural practices	55,8	56,3	43,7	2.254
Post-harvest handling and storage	14,6	54,3	45,7	607
Erosion control measures	27,1	55,1	44,9	1.152
Horticulture skills	15,5	57,1	42,9	635
Animal production and nutrition	8,8	52,8	47,2	357
Veterinary services	6,8	52,6	47,4	281
Agribusiness skills	6,2	51,8	48,2	255
Weather and climate information products/ services	11,9	53,3	46,7	551
Saving	19,1	55,9	44,1	842
Integrated pest management	13,4	54,4	45,6	569
Nutrition and food security	20,4	57,8	42,2	899
Smart Nkunganire	13,7	52,0	48,0	543
Households who receive extension services (%)	65			
Number of agricultural households (,000)	2.322			

Source: NISR, AHS 2020

5.2. Farmers' community groups membership

In Rwanda, an agricultural cooperative is widely considered as a vital foundation that can help smallholder farmers to overcome constraints that hinder them from taking advantages of their business. Participation in cooperative or other community group creates a platform for knowledge sharing among farmers, additionally, empowers economically smallholder farmers through enhancing their collective bargaining power, thus reduce risks of market failure. Findings in Table 16 show that crop producer's cooperative emerged as the cooperative type with the highest female headed agricultural households' members (87.4 percent) compared to male headed households (84.8 percent).

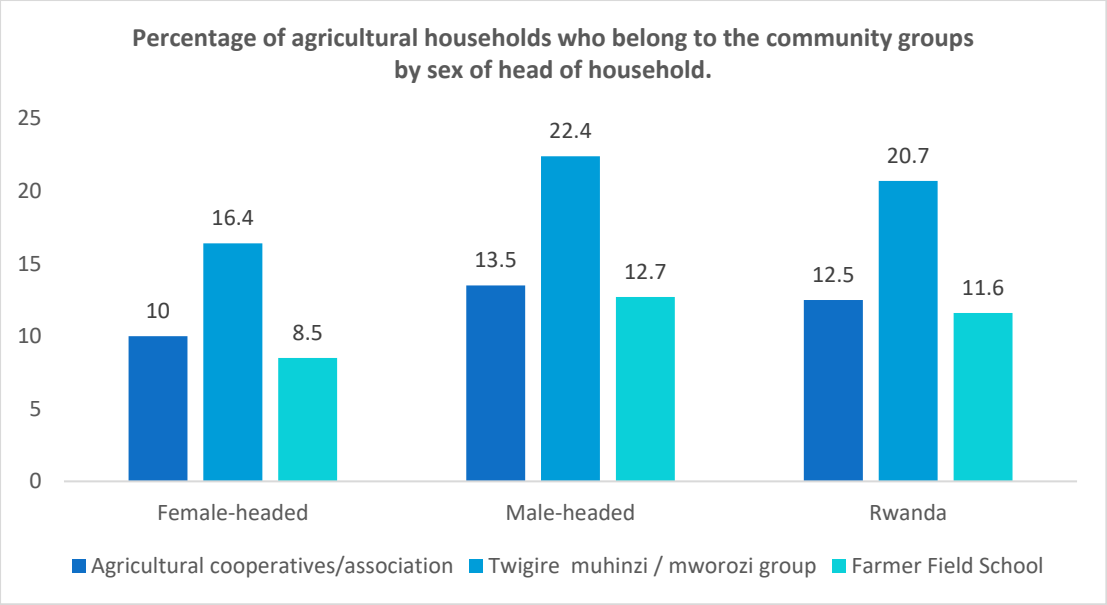
Table 16: Percentage of agricultural households by type of cooperatives by sex of head of household

Sex of the Head of HH	Agricultural cooperative type					HHs with at least one member belonging to agriculture cooperative
	Crop producers	Livestock producers'	Water users'	Apiculture	Fishery	(,000)
Female headed	87,4	10,8	0,4	0,8	0,7	66
Male headed	84,8	12,0	1,7	0,7	0,8	225
Rwanda	85,4	11,7	1,4	0,7	0,8	290

Source: NISR, AHS 2020

Rwanda puts much effort into agricultural extension services to help farmers to improve farming productivity through farming professionalization. Rwanda Agriculture and Animal Resources Development Board (RAB) is promoting Twigire muhinzi program, an extension model based on the farmer-to-farmer extension approach, namely the farmer promoter approach and the Farmer Field School approach. Results in Figure 10 show that 16.4 percent of female headed agricultural households belong to Twigire muhinzi groups compared to 22.4 percent of male headed agricultural households. Only 8.5 percent of female headed agricultural households belong to Farmer Field School (FFS) compared to 12.7 percent male headed agricultural households. It should be noted that, 10 percent of female headed agricultural households belong to agricultural cooperatives/association compared to 13.5 percent of male headed agricultural households.

Figure 10: Percentage of agricultural households who belong to the community groups by sex of head of household.



Source: NISR, AHS 2020

CHAPTER 6: AGRICULTURE POLICIES AND PROGRAMS

6.1. Social protection programs

The One Cow per Poor Family program—called "Girinka," was initiated in 2006 to reduce child malnutrition rates and increase household incomes of vulnerable poor families. The results revealed that more female headed agricultural households (4.8 percent) received a cow from Girinka program during the 2019/2020 agricultural year than male headed agricultural households (3.8 percent). A large share of a cow from Girinka program was provided by the government (93.7 percent for female headed agricultural households compared to 93.3 percent male headed agricultural households) while non-government organizations contributed 6.3 percent to this program for female headed agricultural households compared to 6.7 percent for male headed agricultural households (Table 17).

Table 17: Percentage of HHs who benefited from Girinka program by sex of head of household and type of providers.

Sex of the Head of HH	Agricultural HHs who benefited from Girinka program in 2020	Agricultural HHs who still have cow from Girinka program	Type of providers		
			Government	NGO/company	Total
Female	4,8	84,3	93,7	6,3	100
Male	3,8	86	93,3	6,7	100
Rwanda	4,1	85,4	93,4	6,6	100

Source: NISR, AHS 2020

Findings in Table 18 shows that, 5.9 percent of female headed agricultural households have received small livestock during the 2019/2020 agricultural year compared to 3.7 percent of male headed agricultural households. Among distributed small livestock, goats were distributed to 65.7 percent of female headed agricultural households compared to 53.8 percent of male headed agricultural households.

Table 18: Percentage of households who benefited from the small stock program by type of small livestock by sex of head of household:

	Sex of head of household		Rwanda
	Female	Male	
HHs who benefited from small livestock program (%)	5,9	3,7	4,3
Type of small livestock			
Goat	65,7	53,8	58,5
Pig	18,2	23,2	21,3
Poultry	8,6	11,2	10,1
Sheep	6,8	11,8	9,8
Other small livestock	0,8	-	0,3
Total	100	100	100

Source: NISR, AHS 2020

CHAPTER 7: FINANCIAL SERVICES AND AGRICULTURAL SUPPORT

Agriculture finance empowers poor farmers to increase their wealth and facilitates the development of food value chains for feeding 9 billion people globally by 2050. Financial systems in most developing countries are ill-prepared to finance the shift to sustainable agriculture and agri-food industries. Banks, microfinance institutions, and institutional investors have traditionally been providing very limited resources for the sectors. Agriculture loans and investments portfolios currently are disproportionately low compared to the agriculture sector's share of GDP. Important challenges for the financial markets include managing unique risks in agriculture, high transaction costs in dealing with large number of small farmers, and micro, small and medium enterprises (MSMEs) along the agriculture value chains, limited effective demand for finance, lack of expertise of financial institutions in managing agricultural loan portfolios[8].

Women empowerment, a prerequisite to achieve gender equality for sustainable development, cannot be effective without women's access to finance, especially in rural areas, where majority of women live as farmers. Persistence of negative mind-set, beliefs that undermine women, limited access to resources, capital, limited access to information, limited entrepreneurial and innovation skills; limited penetration of insurance services especially in agriculture sector as well as inadequate coordination and monitoring of different initiatives that promote women's economic empowerment, were identified as the major challenges against women financial inclusion [9]. During the agriculture household survey 2020, data were collected on financial accessibility for farmers.

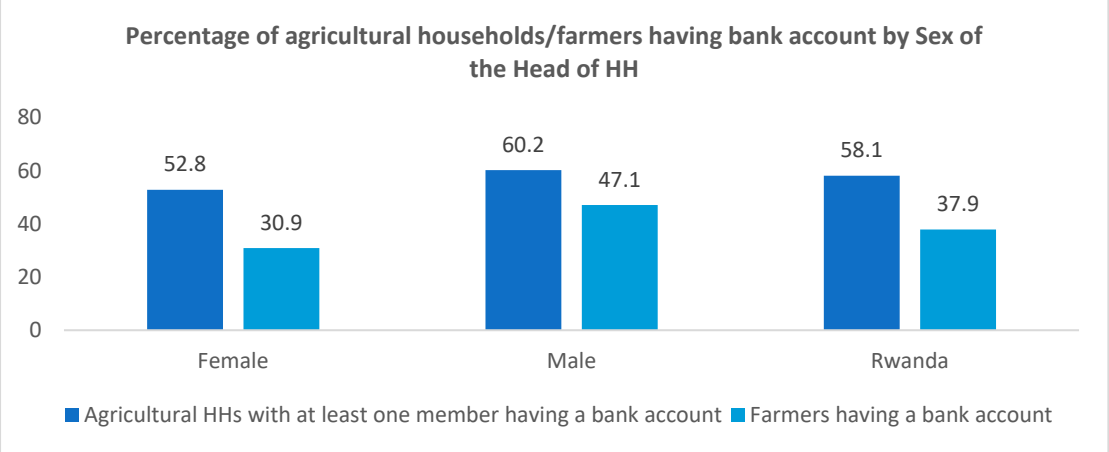
7.1. Ownership of bank account

Findings from Figure 11 shows that, countrywide, female farmers (30.9 percent) lag behind in bank account ownership than their male counterparts (47.1 percent). Data show that 52.8 percent of female headed agricultural households have at least one member who own a bank account compared to 60.2 percent of male headed agricultural households.

8 https://www.worldbank.org/en/topic/financialsector/brief/agriculture-finance accessed May 10, 2023

9 http://profemmes.org/IMG/pdf/assessment_on_women_access_to_finance_in_agriculture_sector.pdf access May 10, 2023

Figure 11: Percentage of agricultural households/farmers having bank account by Sex of the Head of H



Source: NISR, AHS 2020

The majority of female headed agricultural household members (80.5 percent) have a bank account in savings & credits cooperatives compared to male headed agricultural household members (70.7 percent). Commercial banks emerged as the second type of financial institution with more female headed agricultural household members (11.1 percent) than male headed agricultural household members (20.6 percent) and microfinance is the third type of financial institution with slightly more than 8 percent for both female and male headed agricultural households (Table 19).

Table 19: Percentage of agricultural households by type of financial institutions in which they have a bank account and by sex of head of HH.

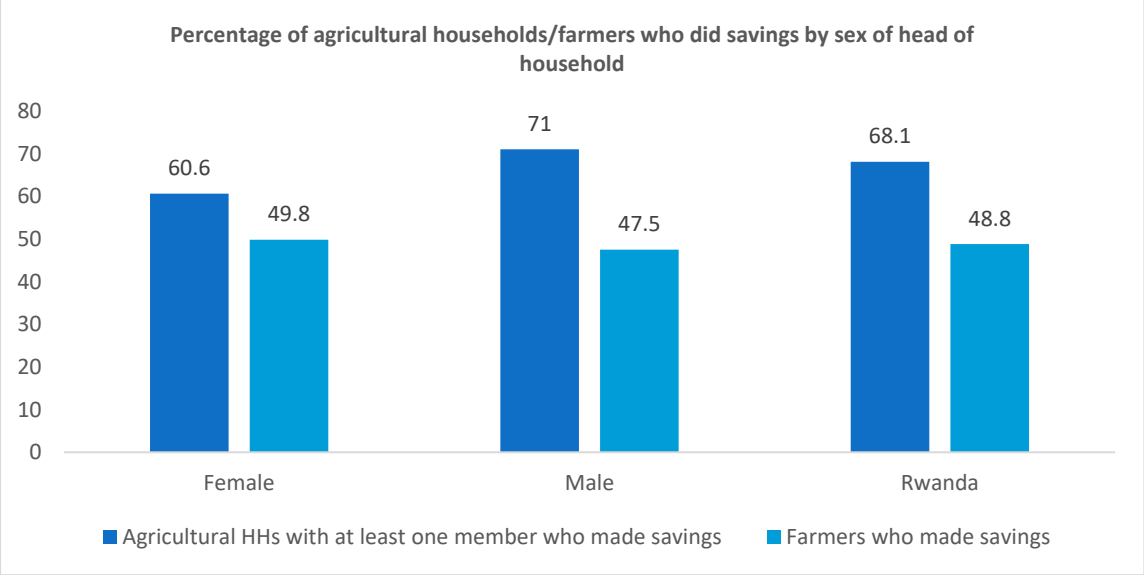
Type of financial institutions	Female headed HH	Male-headed HH	Total
Commercial bank	11.1	20.6	18.2
Saving & credits cooperatives	80.5	70.7	73.2
Microfinance	8.4	8.7	8.6
Total	100.0	100.0	100.0

Source: NISR, AHS 2020

7.2. Savings

Results in Table 31 show that countrywide 60.6 percent of female headed agricultural household have at least one member who made savings compared to 71 percent of male headed agricultural households. It should be noted that the share of individual female farmers who made savings is a bit higher than the share of male farmers (49.8 versus 47.5 percent).

Figure 12: Percentage of agricultural households/farmers who did savings by sex of head of household.



Source: NISR, AHS 2020

Table 20 shows that, most female headed agricultural households (72.2 percent) used tontine/solidarity funds for their savings compared to 71 percent of male headed agricultural households, followed by savings & credits cooperatives (about 16 percent for both female and male headed agricultural households), commercial banks (5.9 percent for female headed agricultural households compared to 6.6 percent of male headed households), microfinance (about 3.8 percent for both female and male headed agricultural households).

Table 20: Percentage of agricultural households by province and type of financial institutions (formal or informal) in which they made savings by sex of head of HH.

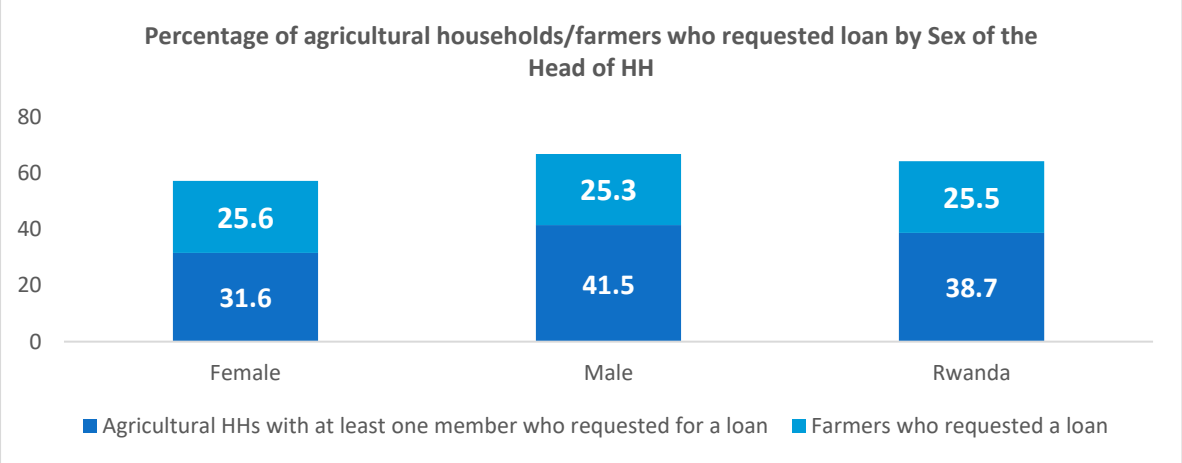
		What main financial institution/s in which savings were made?					
		Commercial bank	Savings & Credits cooperative	Microfinance	Tontine/ Solidarity fund	Other	Total
		%	%	%	%	%	%
Kigali	Male	19.7	13.9	3.4	62.4	0.7	100
	Female	17.5	14.1	2.8	65.2	0.3	100
	Total	18.6	14	3.1	63.8	0.5	100
South	Male	7.3	21	3.3	68.1	0.3	100
	Female	6.8	20.2	3.2	69.3	0.5	100
	Total	7	20.6	3.3	68.7	0.4	100
West	Male	8.1	19.7	4.2	66.6	1.4	100
	Female	7.6	19.1	4.6	67.4	1.4	100
	Total	7.8	19.4	4.4	67	1.4	100
North	Male	7.1	20.5	4.4	67	0.9	100
	Female	6.6	20.6	4.2	67.6	1	100
	Total	6.9	20.5	4.3	67.3	1	100
East	Male	9.5	15	1.4	73.7	0.5	100
	Female	8.6	14	1.6	75.2	0.6	100
	Total	9	14.5	1.5	74.5	0.5	100
Total	Male	6.6	16.6	3.9	71	0.7	100
	Female	5.9	16	3.8	72.2	0.8	100
	Total	6	16.7	3.9	72.2	0.7	100

Source: NISR, AHS 2020

7.3. Access to loan

Results from Figure 13 show that 31.6 percent of female headed agricultural households had requested a loan compared to 41.5 percent of male headed agricultural households. The share of female farmers who requested a loan is almost the same as the one of male farmers (25.6 versus 25.3 percent).

Figure 13:Percentage of agricultural households/farmers who requested loan by Sex of the Head of HH



Source: NISR, AHS 2020

Table 21 shows that, 74.9 percent of female headed agricultural households enquired loan in tontines/solidarity fund compared to 68.7 percent of male headed agricultural households. It should be noted that use of formal financial institutions is still very low where only 7.5 percent of female headed agricultural households inquired loan in microfinances institutions compared to 13.2 percent for male headed households, while only 1.6 percent of female headed agricultural households inquired for loan in commercial bank compared to 3.3 percent of male headed agricultural households. Although used of credit and servings cooperative is quite common across the country, inquired loan in this type of institution is still very low where only 2.7 percent of female headed agricultural households requested loan compared to 3.1 percent of male headed agricultural households.

Table 21: Percentage of agricultural households by source of requested loan and by sex of head of HH

Source of requested loan	Sex of head of HH		Rwanda
	Female	Male	
Commercial bank	1.6	3.3	2.9
Microfinance	7.5	13.2	11.9
Credit & saving cooperative	2.7	3.1	3
VUP financial services	2.1	1.6	1.7
Ubudehe loan	0.7	0.6	0.6
Employer	0.3	0.2	0.2
Relative/friend	10.3	9.4	9.6
Tontine/Solidarity fund	74.9	68.7	70.1
Number of agricultural HHs who requested for loan (,000)	224	674	898

Source: NISR, AHS 2020

7.4. Agricultural funds/support

On average 2.8 percent of agricultural households received various funds/support. Findings from Table 22 show that, out of those who received funds/support, 34.6 percent of female headed agricultural households received support in form of agricultural materials compared to 38.5 percent of male headed agricultural households, while 27.7 percent of female headed agricultural households received support in form of money compared to 10.2 percent of male headed agricultural households. Regardless of the sex of head of agricultural household, post-harvest tools as support was very limited.

Table 22:Percentage of agricultural households who received any support by support/fund type and by sex of head of HH.

Support/funds received	Female		Male		Total
Money	27.7		10.2		15.9
Agricultural material	34.6		38.5		37.2
Post-harvests tools	0.0		1.1		0.7
Other(specify)	37.7		50.3		46.2
	100.0		100.0		100.0
Total	20,947		43,112		64,059

Source: NISR, AHS 2020

Results in Table 23 show that the Ggovernment provided 83.6 percent of these funds/support were received by female headed agricultural households compared to 79.6 percent of male headed agricultural households. NGOs emerged second in providing funds/support to agricultural households, where they provided 12.1 percent of these funds/support to both female and male headed agricultural households.

Table 23: Percentage of agricultural households who received any support by the source of support/fund and by sex of head of HH.

Source of Support/Fund	Male	Female	Total
Government	79.6	83.6	80.9
NGOs	12.1	12.1	12.1
Friends and relatives	1.8	3.2	2.3
Company/Association	5.9	0.0	4.0
Other(specify)	0.5	1.2	0.7
	100.0	100.0	100.0
Total	43,112	20,947	64,059

Source: NISR, AHS 2020

CHAPTER 8: LIVESTOCK

The livestock section of this report covers several households that raised livestock by numbers, type, breed, age and sex of livestock. Besides, livestock products such as milk, eggs and honey have been reported.

8.1 Livestock numbers

The Rwanda Livestock Master Plan (LMP) is a national sectoral plan of Rwanda for the period of 2017-2022. The main objectives of the Plan include reducing poverty, achieving food and nutritional security, increasing economic growth, increasing exports, contributing to industrialization and employment, and mitigating climate change. The LMP aims to achieve food and nutritional security by increasing household herd and national production levels and by also increasing availability of animal source foods to meet FAO individual consumption targets. Further, it sets out measures concerning investment interventions that could help meet the national development plan targets of Rwanda by improving productivity and total production in the key livestock value chains for cow dairy, red meat-milk, poultry, and pork[10].

Findings in Table 24 show that, about 1.9 million households reared livestock. Major types of livestock reared in Rwanda are cattle with 45 percent of female headed agricultural households raising cattle compared to 56.8 percent of male headed agricultural households, followed by goats raised by 41.9 percent of female headed agricultural households compared to 36.2 percent of male headed agricultural households. 27.9 percent of female headed agricultural households raised pigs compared to 36.1 percent of male headed households.

Table 24; Percentage of households raising different types of livestock by sex of household head.

Types of livestock	Sex of the Head of HH		Rwanda
	Female-headed	Male-headed	
Cattle	45,0	56,8	53,7
Goats	41,9	36,2	37,7
Sheep	8,5	10,4	9,9
Pig	27,9	36,1	33,9
Chicken	23,3	34,7	31,7
Rabbit	7,0	9,4	8,8
Other Poultry	0,8	1,7	1,5
Other Animal	1,3	1,0	1,1
Bee keeping	0,9	3,2	2,6
Households raised livestock (,000)	494	1.365	1.859

Source: NISR, AHS 2020

[10] https://leap.unep.org/countries/rw/national-legislation/rwanda-livestock-master-plan-201718-202122 accessed May 10, 2023

Annexes:

Table 25: :Demographic characteristics of Agricultural household members

Characteristic	By province					Rwanda
	Kigali	South	West	North	East	
Average agricultural household size	4,7	4,4	4,8	4,3	4,5	4,5
Household heads by sex (%)						
Male-headed households	75,9	69,4	71,3	73,5	73	71,8
Female-headed households	24,2	30,6	28,7	26,5	27,1	28,2
Agricultural household members by sex (%)						
Male	48,2	48	47,3	46,7	47,8	47,5
Female	51,8	52	52,7	53,3	52,2	52,5

Source: NISR, AHS 2020

Table 26: Distribution of farmers by sex, education level and province (in percentage)

Sex	Level of education	Provinces					Rwanda
		Kigali	South	West	North	East	
Females	Primary	64,8	63,6	59,8	62,3	61,7	62
	Secondary	18,3	13,5	13,7	12,6	14	13,7
	University	3,5	1,4	1,1	0,9	1	1,2
	No education	13,5	21,5	25,4	24,3	23,3	23,2
	Total	100	100	100	100	100	100
Males	Primary	61,7	67,9	68,5	70,1	65,7	67,6
	Secondary	22,7	14,1	15	13	15,5	14,8
	University	5,3	1,8	2	2,5	2,2	2,2
	No education	10,3	16,2	14,5	14,4	16,6	15,4
	Total	100	100	100	100	100	100
Both males and females	Primary	63,4	65,5	63,6	65,6	63,5	64,5
	Secondary	20,3	13,8	14,3	12,8	14,7	14,2
	University	4,3	1,6	1,5	1,5	1,5	1,6
	No education	12	19,2	20,6	20,2	20,3	19,8
	Total	100	100	100	100	100	100
Total number of farmers (,000)		126	1.028	852	761	1.065	3.832

Source: NISR, AHS 2020

Table 27:Number of farmers by District and agricultural activity type by sex of the farmer

	Male		Female		Total		Grand Total
	Main activity	Second activity	Main activity	Second activity	Main activity	Second activity	
	Count	Count	Count	Count	Count	Count	
Nyarugenge	6,644	5,602	10,505	3,963	17,148	9,565	26,713
Gasabo	18,018	15,974	28,583	11,500	46,602	27,473	74,075
Kicukiro	5,041	6,264	9,251	4,907	14,293	11,170	25,463
Nyanza	36,632	21,166	44,424	18,266	81,055	39,432	120,487
Gisagara	44,396	23,161	71,341	24,462	115,737	47,623	163,359
Nyaruguru	37,170	8,269	56,709	10,125	93,879	18,394	112,273
Huye	27,726	17,807	46,489	20,163	74,215	37,971	112,186
Nyamagabe	39,369	28,943	63,326	22,056	102,695	50,999	153,694
Ruhango	39,725	14,189	57,411	12,153	97,136	26,342	123,478
Muhanga	34,665	9,600	54,103	5,403	88,767	15,003	103,770
Kamonyi	45,135	13,887	68,215	11,042	113,350	24,929	138,279
Karongi	39,079	11,755	56,243	9,786	95,322	21,541	116,863
Rutsiro	32,469	11,107	48,992	10,241	81,461	21,348	102,809
Rubavu	21,185	20,522	26,467	15,649	47,652	36,171	83,823
Nyabihu	26,277	20,781	43,397	22,037	69,674	42,818	112,492
Ngororero	28,191	18,222	49,206	14,310	77,397	32,532	109,929
Rusizi	38,986	30,278	64,792	22,636	103,778	52,915	156,692
Nyamasheke	61,284	13,828	85,029	9,683	146,313	23,512	169,824
Rulindo	38,077	19,572	67,318	17,035	105,396	36,606	142,002
Gakenke	57,352	9,186	90,777	7,076	148,128	16,262	164,390
Musanze	32,580	27,793	57,292	31,275	89,872	59,068	148,940
Burera	45,029	16,712	69,857	13,500	114,885	30,212	145,098
Gicumbi	55,706	17,228	72,628	14,939	128,335	32,167	160,502
Rwamagana	34,699	16,735	53,505	15,156	88,204	31,890	120,095
Nyagatare	47,211	41,300	57,877	36,837	105,088	78,137	183,224
Gatsibo	60,436	15,113	76,621	19,145	137,057	34,258	171,315
Kayonza	39,775	17,716	54,353	19,611	94,128	37,327	131,455
Kirehe	43,924	22,205	67,400	19,583	111,325	41,788	153,113
Ngoma	48,212	20,058	66,715	19,747	114,927	39,805	154,732
Bugesera	45,524	19,085	67,064	19,714	112,588	38,799	151,387
Total	1,130,517	534,059	1,685,888	481,999	2,816,405	1,016,057	3,832,463

Source: NISR, AHS 2020

Table *28*: Socio-demographic characteristics of farmers by district (in percentage)

District	Percentage of farmers by sex		Percentage of farmers out of total agricultural working-age population
	Female	Male	
Nyarugenge	54,2	45,8	51,3
Gasabo	54,1	45,9	57,3
Kicukiro	55,6	44,4	52,5
Nyanza	52	48	53,8
Gisagara	58,7	41,4	72,3
Nyaruguru	59,5	40,5	58,9
Huye	59,4	40,6	59,9
Nyamagabe	55,6	44,5	70,2
Ruhango	56,3	43,7	64,8
Muhanga	57,3	42,7	57,4
Kamonyi	57,3	42,7	63,8
Karongi	56,5	43,5	60,8
Rutsiro	57,6	42,4	54,3
Rubavu	50,2	49,8	45,8
Nyabihu	58,2	41,8	65,6
Ngororero	57,8	42,2	46,9
Rusizi	55,8	44,2	65,9
Nyamasheke	55,8	44,2	66,6
Rulindo	59,4	40,6	67
Gakenke	59,5	40,5	75,3
Musanze	59,5	40,5	61
Burera	57,5	42,6	70,7
Gicumbi	54,6	45,4	63,8
Rwamagana	57,2	42,8	58,6
Nyagatare	51,7	48,3	61,2
Gatsibo	55,9	44,1	62,9
Kayonza	56,3	43,7	60,4
Kirehe	56,8	43,2	69,8
Ngoma	55,9	44,1	78,7
Bugesera	57,3	42,7	66,2
Rwanda	56,6	43,4	62,9

Source: NISR, AHS 2020

Table 29: Percentage of agricultural households who accessed land by and District and land use type by sex of head of HH.

	Agricultural households with access to agricultural land	Agricultural households with access to land used for fodder cultivation	Agricultural households with access to agricultural land	Agricultural households with access to land used for fodder cultivation	Agricultural households with access to agricultural land	Agricultural households with access to land used for fodder cultivation
	Male		Female		Total	
	%	%	%	%	%	%
Nyarugenge	95.4	13.2	96.6	14.7	95.7	13.6
Gasabo	94.1	5.9	98.0	9.4	95.1	6.8
Kicukiro	85.5	8.4	94.4	4.5	87.5	7.5
Nyanza	98.6	9.1	98.5	9.1	98.5	9.1
Gisagara	98.2	.8	99.4	1.4	98.7	1.0
Nyaruguru	98.6	10.5	98.5	11.0	98.6	10.7
Huye	99.2	2.9	98.5	1.7	99.0	2.5
Nyamagabe	98.9	8.2	98.8	4.1	98.8	6.7
Ruhango	98.9	13.2	100.0	16.5	99.2	14.2
Muhanga	97.8	38.7	99.2	40.2	98.2	39.2
Kamonyi	99.4	4.0	99.6	5.7	99.5	4.5
Karongi	98.9	22.9	98.2	24.9	98.7	23.6
Rutsiro	98.3	11.2	99.3	4.1	98.6	9.1
Rubavu	82.5	5.8	80.9	2.5	82.1	5.0
Nyabihu	97.5	12.7	98.9	7.6	98.0	10.9
Ngororero	98.5	7.9	98.3	3.5	98.4	6.4
Rusizi	99.3	4.0	100.0	4.1	99.5	4.1
Nyamasheke	98.1	14.0	97.3	17.2	97.9	15.0
Rulindo	99.3	8.1	100.0	8.7	99.5	8.3
Gakenke	100.0	16.4	99.3	25.8	99.8	19.7
Musanze	96.0	6.8	98.5	4.5	96.8	6.1
Burera	99.1	12.1	98.9	5.6	99.0	10.3
Gicumbi	99.9	31.9	100.0	24.0	99.9	29.4
Rwamagana	97.8	19.1	96.9	14.9	97.5	17.8
Nyagatare	97.1	9.4	94.8	9.3	96.5	9.3
Gatsibo	98.1	10.5	97.0	11.4	97.8	10.8
Kayonza	99.3	7.9	99.1	2.8	99.2	6.1
Kirehe	98.8	5.7	97.1	1.2	98.3	4.4
Ngoma	99.3	11.3	98.8	4.3	99.1	9.4
Bugesera	98.5	17.1	97.1	9.3	98.0	14.7
Total	97.9	11.7	98.1	10.3	97.9	11.3

Source: NISR, AHS 2020

Table30: Percentage of crop-producing households who used different agricultural inputs by District by sex of head of HH.

	Agricultural HHs who used improved seeds			Agricultural HHs who used organic fertilizer			Agricultural HHs who used inorganic fertilizer			Agricultural HHs who used pesticides			Number of crops-producing households (,000)
District	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Nyarugenge	24.8	19.3	23.4	73.4	66.3	71.6	22.8	20.3	22.1	20.4	13.8	18.7	19
Gasabo	42.0	31.3	39.3	84.2	79.9	83.1	23.7	24.3	23.9	20.9	14.9	19.4	46
Kicukiro	30.8	17.3	27.6	71.5	67.2	70.5	30.5	19.9	28.0	23.4	9.4	20.0	15
Nyanza	40.4	21.4	34.4	82.4	75.5	80.2	30.4	17.5	26.3	21.6	12.0	18.6	82
Gisagara	41.9	24.9	35.8	83.7	65.7	77.3	30.8	25.5	29.0	23.0	18.5	21.4	90
Nyaruguru	48.8	48.6	48.7	96.1	92.3	94.8	65.6	48.9	59.8	45.0	27.6	39.0	67
Huye	49.2	33.0	44.4	92.8	84.3	90.3	37.3	26.0	33.9	24.8	18.2	22.8	71
Nyamagabe	47.9	39.6	45.5	97.0	89.4	94.8	50.4	42.5	48.1	32.9	20.2	29.2	83
Ruhango	23.3	18.7	22.0	83.3	79.3	82.1	18.4	12.4	16.7	23.5	10.3	19.6	75
Muhanga	38.2	32.7	36.7	95.3	89.9	93.8	31.3	22.7	29.0	22.5	19.1	21.6	70
Kamonyi	24.9	19.8	23.5	81.3	68.2	77.7	19.0	14.8	17.8	24.8	10.4	20.8	84
Karongi	70.5	59.7	67.2	92.5	93.5	92.8	64.4	45.5	58.7	37.0	21.2	32.2	72
Rutsiro	53.6	43.7	50.8	95.3	89.9	93.8	60.0	32.9	52.5	28.7	16.5	25.3	72
Rubavu	47.4	36.5	45.0	66.4	52.2	63.3	43.8	36.9	42.3	41.6	46.9	42.8	53
Nyabihu	38.6	32.3	36.5	89.1	78.1	85.4	54.0	49.5	52.5	61.4	51.4	58.1	65
Ngororero	65.5	47.3	60.1	98.2	96.8	97.8	47.7	38.2	44.9	29.1	20.9	26.6	86
Rusizi	49.4	34.8	45.6	90.6	83.1	88.6	69.6	48.8	64.0	26.3	13.2	22.8	82
Nyamasheke	34.3	33.6	34.1	94.1	89.9	92.9	65.0	55.5	62.2	22.2	10.6	18.8	92
Rulindo	46.9	23.7	40.5	96.8	94.4	96.1	38.4	20.5	33.5	33.0	10.9	26.9	81
Gakenke	76.6	58.6	71.3	98.8	96.9	98.3	80.7	62.1	75.2	58.1	32.3	50.5	85
Musanze	57.3	40.1	53.0	88.9	75.0	85.4	50.6	29.1	45.2	64.2	42.0	58.6	88
Burera	35.1	24.4	32.6	91.8	91.7	91.8	39.1	19.2	34.4	47.6	21.6	41.4	80
Gicumbi	43.2	28.0	39.1	92.1	85.8	90.4	31.2	14.3	26.7	25.9	13.1	22.5	96
Rwamagana	56.1	45.4	53.1	84.7	73.8	81.7	40.0	26.0	36.1	26.3	18.4	24.1	73
Nyagatare	38.5	23.6	35.1	55.7	53.9	55.3	31.6	13.1	27.4	21.5	8.3	18.6	109
Gatsibo	44.3	33.7	41.5	83.4	80.7	82.7	34.6	34.0	34.4	20.0	11.7	17.8	100
Kayonza	52.4	46.9	50.6	75.4	65.1	71.9	28.3	22.0	26.1	17.9	11.8	15.8	83
Kirehe	59.1	48.6	56.5	71.7	63.9	69.8	33.3	29.0	32.2	20.9	14.1	19.2	84
Ngoma	67.5	58.4	65.1	80.4	73.9	78.7	44.2	37.3	42.5	21.6	7.3	17.9	83
Bugesera	57.0	39.8	51.9	68.5	58.9	65.7	34.3	16.9	29.2	19.6	7.6	16.1	82
Total	47.8	36.4	44.6	85.5	79.3	83.7	42.3	30.8	39.1	30.2	18.2	26.8	2,268

Source: NISR, AHS 2020

Table 31: Use of agricultural practices among agricultural households (%) by sex of head of HH

	Have land protected. soil against erosion		Planted agroforestry. trees in their plots		Practiced irrigation		Used mechanical. equipment		Total
District	Male	Female	Male	Female	Male	Female	Male	Female	
Nyarugenge	69.2	57.3	36.7	34.8	21.4	17.3	0.2	0.0	19,019
Gasabo	77.8	78.2	29.1	19	23.4	10.7	0.0	0.0	45,573
Kicukiro	33.5	25.6	21.8	18.8	13.5	3.8	0.6	1.1	15,260
Nyanza	83.5	82.7	47	38.5	30.5	22.6	0.0	0.0	82,177
Gisagara	77.7	64.5	41	28.8	24.3	15.4	0.0	0.0	90,266
Nyaruguru	91	89.7	53	41.9	20.2	13.6	0.7	0.0	66,739
Huye	87.7	81.5	48.3	33.9	41.1	22.8	0.5	0.0	72,361
Nyamagabe	92.8	90.4	67	63.5	15.7	14	0.7	0.0	82,569
Ruhango	95.3	88.7	52	37.1	14.8	16	0.0	0.0	74,606
Muhanga	86.9	81.4	37.7	23.5	29.7	28	0.0	0.0	70,907
Kamonyi	86	71.5	37	17.2	17.1	4.8	0.4	0.0	84,143
Karongi	94.9	93.3	47.4	35.1	19.1	14.7	0.4	0.0	72,072
Rutsiro	94.1	91.2	60.2	40	5.2	0	0.0	0.0	71,530
Rubavu	90.2	86.2	28.9	27.9	2.7	3	0.0	0.0	53,041
Nyabihu	98.2	95.5	56.7	57.4	1.2	0	0.0	0.0	65,032
Ngororero	96.2	95.8	60.4	44.3	9	5.3	0.8	0.0	86,001
Rusizi	78.8	77.7	69.2	77.7	17.9	17	0.0	1.1	82,009
Nyamasheke	89.2	79.8	67.7	63.7	13.9	15.2	0.0	0.0	92,096
Rulindo	97.5	92.1	39.8	24.8	31.6	8	0.0	0.0	82,002
Gakenke	97.6	93.9	37.2	30.5	18.6	11.5	0.0	0.0	84,765
Musanze	94.5	94.8	44	28.9	6.6	4.9	0.0	0.0	87,617
Burera	93.5	89.4	20.9	15.1	4.8	2.8	0.4	0.0	80,216
Gicumbi	94.6	84	46.8	24.5	12.7	7.4	0.4	0.0	96,025
Rwamagana	79.2	75	61.6	51.5	11.5	6	0.0	0.0	74,313
Nyagatare	55.7	51.5	46.7	47.1	8.2	2	0.0	0.0	108,543
Gatsibo	87.4	88.3	58.5	49.9	11.7	6.1	0.4	0.0	100,083
Kayonza	67.1	55.3	46.3	44.3	11.9	8.1	0.0	0.0	83,278
Kirehe	78.3	66.7	54	46.6	21.6	8	0.0	0.0	83,523
Ngoma	75.3	60.5	52.1	33.5	19.5	2.9	0.0	0.0	82,833
Bugesera	74	68.5	51.8	45.7	18.7	10.2	0.3	0.0	81,782

Source: NISR, AHS 2020

Table 28: Percentage of agricultural households who received extension services by extension type, and district by sex of head of HH.

District	Agricultural practices	Post-harvest handling and storage	Erosion control measures	Horticulture skills	Animal production and nutrition	Veterinary services	Agribusiness skills	Weather & climate information products/	Saving	Integrated pest management	Nutrition and food security	Smart nkunganire	Total
Male headed HH													
Nyarugenge	25.9	1.1	3.7	4.2	1.0	1.9	1.2	3.0	3.1	2.2	3.4	2.2	100
Gasabo	25.9	0.9	7.0	5.1	2.6	0.0	1.2	5.8	6.0	3.7	4.6	4.4	100
Kicukiro	5.5	0.0	1.5	3.0	1.8	1.2	1.1	3.8	3.3	1.0	1.1	3.1	100
Nyanza	18.6	5.3	5.6	7.7	4.0	2.5	4.1	4.6	5.6	3.8	5.5	5.6	100
Gisagara	26.5	2.9	4.7	1.6	0.4	3.6	3.7	1.3	0.8	0.9	2.3	4.4	100
Nyaruguru	30.5	2.4	5.5	9.1	1.6	1.4	3.1	0.8	3.3	5.9	7.3	11.6	100
Huye	24.0	4.3	10.3	6.0	2.6	2.2	2.2	3.5	8.1	5.2	4.4	4.6	100
Nyamagabe	27.8	5.5	13.9	2.0	1.8	3.0	0.3	11.4	6.2	5.1	6.4	5.8	100
Ruhango	12.6	6.1	10.3	6.3	1.8	0.4	0.4	3.1	10.5	6.6	7.6	6.7	100
Muhanga	22.8	3.2	3.1	1.6	1.5	0.4	0.4	6.6	1.2	0.0	1.0	0.5	100
Kamonyi	31.6	4.1	10.0	3.7	4.1	0.0	1.2	3.7	9.2	4.9	4.3	7.5	100
Karongi	32.2	0.0	3.6	1.7	1.3	0.0	0.0	0.8	1.0	1.9	3.9	3.2	100
Rutsiro	27.1	0.0	7.1	2.3	2.3	0.8	0.0	0.5	5.4	0.5	9.4	2.7	100
Rubavu	17.9	0.8	2.8	2.3	1.8	1.1	0.0	1.2	0.4	2.9	1.0	1.5	100
Nyabihu	16.9	3.5	11.4	7.0	7.2	3.1	0.4	16.1	10.6	6.9	5.1	3.9	100
Ngororero	27.6	0.8	8.9	3.5	1.8	1.9	1.0	3.3	8.6	2.6	10.4	4.0	100
Rusizi	32.5	3.8	12.4	3.6	2.4	3.2	6.5	2.1	4.1	3.2	4.3	0.8	100
Nyamasheke	33.2	2.3	13.1	4.6	4.1	1.2	0.7	1.7	2.3	4.4	1.9	0.4	100
Rulindo	33.1	3.0	4.0	1.6	0.7	0.4	0.4	4.3	4.4	5.3	10.6	4.7	100
Gakenke	30.7	0.7	7.5	3.0	0.7	1.2	1.1	0.8	4.1	2.9	5.0	20.9	100
Musanze	22.2	0.4	1.7	2.2	3.4	0.0	0.7	0.4	3.6	1.7	2.8	1.0	100
Burera	23.0	1.6	10.7	2.6	2.8	1.6	0.8	0.4	5.3	6.7	5.1	1.1	100
Gicumbi	37.4	2.2	7.2	3.3	0.6	0.0	0.9	4.4	7.9	1.7	11.0	0.8	100
Rwamagana	35.1	3.4	3.3	1.2	2.6	1.6	0.4	1.3	2.5	2.4	1.6	1.2	100
Nyagatare	28.4	5.0	9.2	4.4	1.4	1.4	2.3	2.3	6.4	6.1	4.3	3.7	100
Gatsibo	34.1	4.0	6.6	3.8	1.7	1.5	0.4	1.7	3.3	3.7	2.6	1.8	100
Kayonza	35.4	1.4	9.9	7.9	1.4	1.5	3.8	2.7	6.0	2.7	4.5	3.1	100
Kirehe	45.3	7.3	6.5	5.6	1.9	1.9	2.3	2.0	3.4	1.8	5.9	7.1	100
Ngoma	24.5	8.7	9.0	4.0	2.5	1.9	1.8	4.4	4.6	4.9	4.3	4.1	100
Bugesera	36.1	7.3	3.5	2.8	1.2	0.6	2.7	3.8	5.9	2.8	10.0	2.6	100
Total	28.42	3.33	7.46	3.9	2.17	1.38	1.53	3.29	5.03	3.61	5.22	4.16	100

District	Agricultural practices	Post-harvest handling and storage	Erosion control measures	Horticulture skills	Animal production and nutrition	Veterinary services	Agribusiness skills	Weather & climate information products/	Saving	Integrated pest management	Nutrition and food security	Smart nkunganire	Total
Female headed HH													
Nyarugenge	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	100
Gasabo	65.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	23.8	0.0	0.0	0.0	100
Kicukiro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	100
Nyanza	16.0	0.0	0.0	24.3	14.7	0.0	0.0	0.0	0.0	9.6	0.0	0.0	100
Gisagara	75.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Nyaruguru	32.9	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	23.5	100
Huye	77.1	0.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Nyamagabe	44.0	7.7	7.7	0.0	0.0	0.0	0.0	7.7	16.9	0.0	16.0	0.0	100
Ruhango	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	0.0	40.0	0.0	100
Muhanga	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Kamonyi	45.4	0.0	11.5	0.0	0.0	0.0	0.0	14.7	0.0	0.0	12.7	15.8	100
Karongi	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Rutsiro	14.7	0.0	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Rubavu	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	0.0	100
Nyabihu	0.0	0.0	40.9	0.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	100
Ngororero	30.8	7.4	7.4	0.0	0.0	0.0	0.0	0.0	6.6	7.4	24.1	6.5	100
Rusizi	64.0	0.0	0.0	0.0	36.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Nyamasheke	20.9	0.0	17.7	8.9	0.0	0.0	11.1	0.0	8.1	0.0	0.0	0.0	100
Rulindo	33.0	0.0	30.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Gakenke	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Musanze	17.0	0.0	15.9	17.0	0.0	0.0	0.0	0.0	26.3	0.0	0.0	0.0	100
Burera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Gicumbi	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Rwamagana	26.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Nyagatare	19.2	5.6	5.6	5.6	5.6	0.0	5.6	5.6	10.7	5.6	13.4	5.6	100
Gatsibo	22.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	0.0	0.0	0.0	100
Kayonza	11.4	16.6	0.0	12.3	0.0	12.3	0.0	14.0	0.0	0.0	0.0	0.0	100
Kirehe	52.0	0.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Ngoma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Bugesera	70.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0	100
Total	30.8	3.0	6.7	5.1	2.0	0.6	1.5	3.2	6.4	3.0	6.5	3.3	100

Source: NISR, AHS 2020

Table 29: Percentage of agricultural households with at least one member who joined community groups by District by sex of head of HH.

	Cooperatives		TWIGIREMUHINZI		Farmer field school		Total
District	Male	Female	Male	Female	Male	Female	
Nyarugenge	6.1	9.8	15.7	12.8	9.3	3.8	19,919
Gasabo	7.2	13.3	7.4	9.6	17.4	12.9	49,073
Kicukiro	4.6	2.2	3.4	2.3	1.7	2.1	17,260
Nyanza	13.2	9.8	40.8	37	18.4	20.3	83,877
Gisagara	27.3	17.3	10.3	1.6	8.7	4.6	91,266
Nyaruguru	13.3	12.2	21.1	11.6	16.7	11.7	67,639
Huye	30.1	27.1	16.6	12.9	8.1	3.5	72,361
Nyamagabe	14.3	15.9	24.4	16	13.8	13	84,169
Ruhango	14.5	11.5	29.2	18.8	9.2	3.1	75,606
Muhanga	19	13.6	11.1	6.4	5.6	7.1	71,907
Kamonyi	13.3	8.7	20.7	15.9	9.8	3.7	84,543
Karongi	10.3	6.3	22.4	12.5	16.8	8.3	72,672
Rutsiro	6.2	5.1	22	14.4	9.2	3.5	73,230
Rubavu	11.2	2.7	13	6.7	4.5	1.5	65,041
Nyabihu	16.1	6.4	54.8	47.9	9	11.2	66,532
Ngororero	4.6	1.3	27.4	18.7	22.9	18.7	87,701
Rusizi	14.9	17	36.2	27.8	30	24.4	82,889
Nyamasheke	15.4	14	14.5	14.1	15.2	11.6	93,796
Rulindo	12.4	5.3	18.4	10.9	6.6	4	82,002
Gakenke	9.1	8	46.7	24.3	10.4	7.7	84,765
Musanze	12.5	3.5	9.2	2.6	2.1	0	91,017
Burera	10.1	2.7	17.5	9	7.5	0	81,216
Gicumbi	9.6	6.8	14.4	15.1	9.8	5.7	95,625
Rwamagana	8.4	7.5	8.2	12.6	12.4	14.3	75,613
Nyagatare	8	6.2	25.3	21.4	20.5	9.3	113,143
Gatsibo	12.1	7.2	13.8	10.4	10	2.4	102,383
Kayonza	15.4	12.2	23.2	14.6	18.3	12.8	83,278
Kirehe	25.1	12.9	34	21.1	18.1	5	85,523
Ngoma	9.4	10.3	33.7	24.5	13.3	7.2	83,833
Bugesera	20.8	14.3	18.2	20.2	13.4	8.8	83,782
Total	13.5	10	22.4	16.4	12.7	8.5	2,321,662

Source: NISR, AHS 2020

Table 30: Percentage of agricultural HHs with at least one member having a bank account by sex of head of HH.

District	Male	Female	Total
Nyarugenge	69.5	59.0	66.9
Gasabo	72.4	60.9	69.6
Kicukiro	61.6	42.7	57.4
Nyanza	62.7	48.5	58.2
Gisagara	58.5	49.6	55.3
Nyaruguru	77.6	78.8	78.0
Huye	65.3	53.8	61.9
Nyamagabe	72.5	67.3	70.9
Ruhango	55.7	47.6	53.3
Muhanga	54.3	56.9	55.0
Kamonyi	53.3	46.6	51.4
Karongi	63.4	52.4	60.0
Rutsiro	62.8	59.5	61.9
Rubavu	59.5	52.8	57.9
Nyabihu	64.5	45.2	58.2
Ngororero	66.4	59.2	64.2
Rusizi	54.1	53.1	53.8
Nyamasheke	65.1	60.0	63.6
Rulindo	73.5	63.2	70.7
Gakenke	63.0	49.4	58.9
Musanze	56.2	42.6	52.8
Burera	57.7	51.5	56.3
Gicumbi	61.1	46.5	57.2
Rwamagana	65.5	43.0	59.2
Nyagatare	47.8	37.7	45.4
Gatsibo	44.6	32.0	41.4
Kayonza	54.2	46.4	51.6
Kirehe	56.5	58.9	57.1
Ngoma	54.0	54.0	54.0
Bugesera	61.4	70.1	64.0
Total	60.2	52.8	58.1

Source: NISR, AHS 2020

Table 31: Percentage of agricultural households/farmers who did savings by District by sex of head of HH

District	Male	Female	Total
Nyarugenge	78.0	71.1	76.2
Gasabo	79.6	74.7	78.4
Kicukiro	65.3	53.2	62.6
Nyanza	74.0	61.9	70.2
Gisagara	74.8	58.0	68.8
Nyaruguru	64.9	71.2	67.1
Huye	81.1	76.4	79.7
Nyamagabe	75.9	72.6	74.9
Ruhango	75.9	74.0	75.3
Muhanga	68.8	63.5	67.4
Kamonyi	78.4	65.9	74.9
Karongi	60.9	43.6	55.6
Rutsiro	43.6	44.0	43.7
Rubavu	63.5	50.2	60.4
Nyabihu	82.4	67.1	77.4
Ngororero	68.6	49.7	62.8
Rusizi	73.3	59.6	69.6
Nyamasheke	31.5	27.7	30.3
Rulindo	82.3	53.9	74.5
Gakenke	54.5	43.3	51.2
Musanze	71.2	57.2	67.7
Burera	69.3	62.6	67.7
Gicumbi	80.3	60.3	75.0
Rwamagana	78.1	60.5	73.2
Nyagatare	73.8	69.3	72.7
Gatsibo	74.0	55.3	69.1
Kayonza	79.9	80.8	80.2
Kirehe	78.9	83.8	80.1
Ngoma	72.3	44.8	65.2
Bugesera	77.4	72.1	75.9
Total	71.0	60.6	68.1

Source: NISR, AHS 2020