









Hearing their voices: Action research to support women's agency and empowerment in livestock vaccine distribution, delivery and use in Rwanda, Uganda and Kenya

GENDER ANALYSIS REPORT – CASE STUDY OF RWEMPASHA AND RWIMIYAGA SECTORS IN NYAGATARE DISTRICT

By

SheVax + Rwanda Team

2020

ACKNOWLEDGMENTS

This work was done under the funding from IDRC-Canada through the Livestock Vaccine Innovation fund. We are grateful for this generous support.

We would like to thank Dr. Hellen Amuguni, the Principal Investigator of the SheVax + project for the good leadership and her invaluable work on project elaboration, implementation, and management. We extend our gratitude to the project management team, Professor Anthony Mugisha, Ms. Winnie Bikaako, Ms. Meghan Stanley and Ms. Agnes Yawe for their contribution to project logistics, implementation, and management.

We cannot forget to thank the project experts who helped in understanding the project vision, goal, and mission; and the project methodologies to use in research activities. We also thank Dr. Brigitte Bagnol, Dr. Beth Miller, Dr. Jeff Mariner, Dr. Janna Schurer, Dr. Marieke Rosenbaum, and Mr. Julius Nyangaga. Thank you for sharing with us your knowledge and skills in gender analysis, VVC analysis, research methodology and outcome mapping.

We also express our gratitude to administrators in the Rwempasha and Rwimiyaga sectors and Nyagatare district. We thank the Mayor of the district, the executive secretaries, veterinarians, and agronomists of sectors for welcoming us in Nyagatare and Rwempasha and Rwimiyaga sectors. We also thank the farming communities of Rwempasha and Rutare Cells in Rwempasha sector and Karushuga cell in Rwimiyaga sector for welcoming us, for their time used in participating in the FGDs. We also thank all people and researchers who participated in research activities. We value their contribution and collaboration.

We thank IDRC for financing the project activities, visiting our project activities and their advice for the good implementation of project activities. We also thank Tufts University, Africa One Health University Network (AFROHUN), University of Rwanda and the University of Global Health Equity (UGHE) for availing the human and physical resources the project benefited from. We particularly recognize UGHE Faculty of Health Sciences and Dean of Faculty for hosting our stakeholder engagement meeting and the outcome mapping training. We also thank the Kenya and Uganda SheVax+ Project teams for the time spent together in different project training and the ideas and knowledge shared.

Blessings to all contributors to SheVax+ Project!

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INTRODUCTION

About 752 million of the world's poor keep livestock to produce food, generate income, and build assets. Women represent two-thirds (around 400 million people) of low-income livestock keepers. Diseases are a major issue preventing livestock keepers from optimizing production earnings. However, much of the animal-associated disease burden is preventable through vaccination. Barriers and limitations impeding women from participating and/or fully benefiting from the livestock vaccine chain are widespread. Their flocks are frequently decimated by Newcastle disease (NCD) despite availability of an effective NCD vaccine. Packaging, service providers and reliable structures for vaccine delivery remain an obstacle to their uptake and use by women farmers. Three East African countries are currently experiencing an outbreak of Rift Valley Fever (RVF), which devastates animal populations and causes human disease. A vaccination program against RVF with an emphasis on cattle is underway. However, the animals most vulnerable to RVF are goats and sheep, which are mostly owned and managed by women.

To empower women to effectively contribute and benefit from the vaccine supply chain as entrepreneurs, service/product providers and users, the limelight needs to be cast on the gender related technical, social, cultural, and economic barriers that they encounter and the opportunities therein. Hence, this action research has three main objectives: 1) identify and analyze the barriers, opportunities, and strategies for improving women's entry and participation in livestock ownership and livestock VVC in Rwanda, 2) determine if the VVC supports women empowerment and gender equality, 3) test models that support women's entry into the VVC and their impact on empowerment and livelihoods.

This report focuses on the gender analysis in Rwempasha and Rwimiyaga sectors of Nyagatare district in Eastern Province of Rwanda. It generates information on gaps and opportunities that can be used to empower women smallholder farmers and entrepreneurs to contribute to and benefit from livestock vaccines thereby improving livestock production and their livelihoods. The information gathered can be scaled up and applied to other livestock vaccines and other regions in Rwanda and other countries.

1. BACKGROUND INFORMATION

1.1. Overall Objectives of the Study and Expected Outcome

1.1.1. Overall Objectives

The overall objectives of this study is to identify and analyse the barriers, opportunities, and strategies for improving women's entry and participation in livestock ownership and the vaccine value chain (VVC) in Rwanda, particularly in Rwempasha and Rwimiyaga sector in Nyagatare district.

1.1.2. Expected Outcomes

- Gender, social, cultural, political, economic, technical barriers, and perceptions that impede women's effective participation, define livestock ownership, decision making and prevent women from being beneficiaries of livestock vaccines as users, service providers, and entrepreneurs.
- Factors and opportunities needed or already exist to enhance women's participation in the VVC to increase livestock productivity and improve household food security.

1.2. Research Methodology

1.2.1. Ethical approval

Ethical approval for human subjects' research was obtained locally in Rwanda at the University of Rwanda, Office of the Director of Research and Innovation, May 2019 and in the USA, through the Tufts University Social Behavioral & Educational Research Institutional Review Board (#1907033) prior to commencement of research activities. Prior to study commencement, ethical approvals were sought from all relevant bodies at Tufts University, AFROHUN, and partner institutions in the three countries.

Informed consent was obtained prior to participating in the activities. Respect for anonymity, confidentiality, and privacy was always maintained. The participants had the right to withdraw from the study at any time without any penalties or consequences. Government laws and regulations were observed, and local authorities and county leaders were consulted in all areas prior to engagement with the communities, and research team members ensured they were oriented to cultural sensitivities of different communities. All participants in the study were treated fairly, equitably and with dignity, following the basic ethical principles of respect for all persons, justice, and beneficence.

1.2.2. Methodologies

• Chalk talks are set up to capture people's opinions and ideas in transit. They are framed around a simple question (written on a wall or floor with chalk) that people are requested to answer or draw a picture as they pass by. They can be changed daily to capture different answers to different questions. Chalk talks help to capture a community's identity in time and space.

- Focus Groups Discussion: We conducted three types of FGDs for collecting data. The FGD Tool 1 focused on gender and value chain related to chicken and goats. This tool helped in identifying women and men's access to, control over and benefits from resources; gender roles, responsibilities, time use and space including chicken/goat raising activity; identifying animal health issues related to their goats/chickens; identifying barriers/problems to vaccine use, delivery access, purchase, distribution, to prioritize and rank those problems and identifying possible solutions and opportunities for engagement. The FGD Tool 2 was on household patterns of power and decision-making which helped to explore the beliefs, attitudes and behaviors towards men and women, using the Gender Tree, and the Sustainable Livelihoods Analysis. The patterns of power and decision-making implies the ability of people to decide, to influence, to control and to enforce agency. The Sustainable Livelihood Framework analysis implies 5 types of capital for women and men (social, financial, physical, personal, and human). Knowledge attitude and beliefs: what are the cultural norms, beliefs, stereotypes, systems that influence patterns of power and decision making? The gender tree is used to understand the root causes of gender differences, and the consequences of that difference. The FGD Tool 3 helped in identifying all stakeholders and actors in the distribution chain from producer to end user, including regulations, obstacles to women's equal participation at each level and solutions.
- **Key Informant Interviews (KII):** The KII helped in identifying policies and activities that affect vaccination of goats and chickens and women's roles in stakeholder organizations, in finding opportunities to increase women's roles and benefits from VVC, identifying the number of goats and chickens in the households, knowledge about chicken and goats diseases (clinical signs, traditional knowledge, cause, transmission and prevention) and access to, control over and benefits from resources generated by poultry and goats in the household.
- Focus meals are impromptu focus groups over a meal. They are driven by provision of meals in a semi-public setting (e.g. marketplace setting, watering point, hospital waiting room, or milk collection center), which is used as an enticement for people to share their stories and ideas. The group discussion takes place usually over lunch and are limited to 45 minutes. These groups are open to all community members of different genders, making space for those who otherwise may not participate
- **Jar voices** are similar to chalk talks, except that participants write or draw answers to questions and place them into a jar. These can be done at points of purchase such as agrovets, livestock feed stores or mobile money distributors.
- **Gender equality continuum tool:** The gender equality continuum tool was used to assess the gender sensitivity of different actors in the VVC. Gender capacities of participants were assessed by asking them to indicate on a sticky note where they thought they were and provide justification for their placement. Their responses were read out loud to all participants for consensus on where

to place them on the continuum.

- **WELI:** The WELI survey was administered, using the ODK collect, an android app that is used in survey-based data collection. This app was uploaded onto tablets and phones.
- Outcome mapping: A project design that focuses on the behavioral changes to be influenced or supported in line with a target goal, detailed vision, and transformation in selected actors (boundary partners). Using outcome mapping, we conducted stakeholder engagement meetings, stakeholder mapping and identification of key critical partners. We invited potential stakeholders (stakeholders with an ability to influence project intentions beyond the project's sphere of influence) and then had them map out their current roles in the VVC, barriers and opportunities for women engagement. Following the introduction of the institutional mapping exercise which included presentation of a gender sensitive model for the VVC analysis image, participants listed the stakeholders and mapped out institutions engaged in vaccine use, delivery, distribution, and manufacturing for their district. As they mapped, they identified the roles, functions, and resources. Discussions on the relevant laws and regulations, culture and customs, attitudes and expectations, and values. Opportunities and barriers for different stakeholders to engage women in the VVC were identified together with the top five critical partners that the project needed to work with.

1.2.3. Sample expected

The samples expected depended on different categories of respondents and types of data collected as follows:

- 10 Focus Group Discussion (FGDs) [(2 FGD1 Chicken for women, 2FGD1 Goat / women (FG1 goat), 1FGD Goat for men, 1FGD Chicken/Men, 2FGD2 Decision making for women, 2FGD2 Decision making for men, 5 RSHs (VVC Stakeholders/National, VVC Stakeholders Sector, VVC Stakeholders District, VVC Department of Veterinary Medicine at University of Rwanda, RAB)]
- 41 Key Informant Interviews (KII) [(4 Farmer / female group/community leader, 11 Farmer / female, 4 Farmer / male leader, 5 Farmer / male, Stakeholder / Sector / Good Governance and Gender, Stakeholder / Sector/Social Affairs, Stakeholder / vet, Stakeholder / ministry health?, Stakeholder / ministry of age, Stakeholder / FAO/OIE/IFAD/WB, Stakeholder / vaccine importer, Stakeholder / vaccine distributer, 2 Stakeholder / day old chick seller, 2 Stakeholder/NGO leader or officer, Group leader / female / women's organization, Group leader / church, 2 Group leader / village, Group leader / school]
- Focus Drink (2FM)
- Jar Voices (RJV1, RJV2, RJV3, RJV4, RJV5, RJV6)
- Participant Observation (6 participants observation at farmer level, 3 at agrovet level, 2 TOT at Uganda and 6 case studies)

1.2.4. Training of Researchers

Researchers were trained in gender analysis and methodologies for data collection, outcome mapping and WELI. The gender training covered the introduction of SheVax+ project and Theory of Change in order to help team members to become more familiar with project goals and objectives, gender equity and equality, and the USAID five domains of gender analysis framework. The aim was to increase knowledge on gender analysis, introduction to participatory methods and action research and learn about the models of household decision-making, raise the participants' knowledge in research methods and decision making in households. An introduction was done on vaccine value chain analysis and gender equality continuum for VVC stakeholders in order to raise the knowledge of participants in VVC analysis. Field work was organized to allow participants to practice and test all the data collection tools. Other topics covered included: informed consent and ethics presentation, sampling and data collection tools, data analysis and transcription protocols, as well as coding system and uploading data in the SheVax+ Google Docs and authorship. Outcome mapping training was provided separately to each country through a three-day training workshop.

The WELI training consisted of the introduction to the Women's Empowerment in Livestock Index tool, and to survey data collection using ODK collect, an android app that is used in survey-based data collection. This app was uploaded onto tablets and phones. It also covered the computing and interpreting the WELI (indicators, domains etc.), qualitative data collection and analysis for WELI, adapting qualitative protocols for WELI analysis and reporting on the index and qualitative results, including standard reporting templates.

The Outcome Mapping training focused on building participant's capacity on Outcome Mapping (OM) for planning and monitoring, and guiding participants in developing OM Frameworks for project objectives (Outcome and output data for research questions). Some of the themes developed during the seminar included the OM milestones of transformation, developing the BP's progress markers, setting monitoring priorities and plans, developing project vision and mission, identifying Boundary Partners (BPs) and their outcome challenges (OCs), identifying project interventions (activities and outputs) to support change, guides to developing OM plans and journals, and using OM in evaluation and Outcome Harvesting.

The gender analysis training put emphasis on writing up the section on methodology, developing a framework of themes/domains and subthemes as well as key points, starting to organize data from the transcripts according to some of the themes/domains and subthemes and key points and starting to write up the analysis of some of the themes/domains and subthemes/key points.

1.2.5. Data analysis

Data analysis involved a sequence of activities which started at the time of data collection. The first activity of data analysis was to review all data collected for each day. The data were discussed, and the main findings were noted. The second activity was the transcribing of the audio recordings from the

FGDs and the translation of the transcription. The third activity of data analysis was the coding of the translations. The fourth activity was the assembly of the different parts of the translation with the same codes. The fifth and last activity was the triangulation of ideas from different translations of the FGDs, interviews, jar voices and literature in order to draw conclusions and recommendations.

1.3. Field Work

1.3.1. Sample achieved

Table 1: Sample achieved

Tools used	N° of	N° of participants			
	events	Male	Female	Male and female (Mix)	Total
Individual interviews (Semi-	26	11	15	26	26
structured interviews, Key					
Informant Interviews)					
Stakeholder meetings	2	23	17	40	40
Outcome mapping meeting	1				
Focus groups 1	6	22	43	65	65
Focus groups 2	4	20	22	42	42
Focus groups 3	2	10	15	25	25
Case studies/ Jar voices	4				

1.3.2. Recruitment and selection of interviewees

The interviewees were selected in Rwempasha and Rwimiyaga sector of Nyagatare District located in Eastern province of Rwanda. Poultry, especially local chickens, and goat production are dominant in this area. Rwempasha sector borders Uganda while Rwimiyaga borders Tanzania. When selecting our interviewees, we contacted local leaders and technicians in charge of livestock and inquired about the villages with many chicken and goat rearing, and those with women farmers more involved in small livestock keeping. After discussing with the local leaders, we selected three farming communities: Rwempasha, Karushuga and Rutare. We decided to organize our FGDs in those three farming communities. The sector veterinarians and agronomist provided us with the list of farmers, and we randomly selected women and men farmers to participate in FGDs. Our interviewees were between 9 and 12 for 12 FGDs organized, and 15 for one FGD of women leaders organized in Karushuga.

1.3.3. Informed Consent

Informed consent from participants prior to collecting any data were obtained. Participants were scheduled to come to designated meeting locations. When they arrived, an enumerator loudly read the informed consent form and individuals decided whether to participate or not. This procedure was used for participants in FGDs. For KII and stakeholder meetings, informed consent forms were

handed to interviewees and participants in meetings in order for them to read, complete and sign or not sign the consent form.

1.3.4. Confidentiality and organization of the data

Data were collected anonymously. There was no maintenance of a link between identity of research participants and research data. Personal identifiers used in FGDs were only used in FGD and removed in data recording and audio transcribing. They were also removed after completing the questionnaire and interviews. Research records, including all questionnaires, were stored in a locked cabinet in a secured building as well as electronically in an encrypted format with a password protected computer. Only researchers had access to research records.

1.3.5. Participation of the Interviewees in the Study

Key Vaccine Value Chain stakeholders including farmers were invited to participate in the study. This group included women smallholder farmers and their male partners, community health workers (CHWs), animal health assistants, private sector stakeholders (vaccine distributors, pharmacies, and agrovet owners, drug store owners), and livestock feed distributors. Government ministries (veterinary and human sectors), male and female local leaders, non-governmental organizations (NGOs) and community-based organizations (CBO's) that participate in livestock development and vaccine projects in the research areas, were also invited to participate in the study. Research participants were randomized at individual level. All research participants were requested to consent to participating in the study.

1.3.6. Team work, constraints and possibilities for improvements

The Rwanda team working on SheVax+ Project and the team of experts supporting the Rwanda team collaborated and established a good working environment for the smooth delivery of activities in the project. The team members participated in all trainings and shared their views on the project activities. They also participated in data collection and analysis activities.

However, there were some constraints, as two out of the three students who were recruited to work on some project activities failed to continue their activities because their work was unsatisfactory and had to leave the project. The project had to recruit three enumerators who were trained in WELI and the ODK data collection tool. Unfortunately, one out of the three enumerators also got a permanent job and left the project after working only three days during the WELI data collection period. We were also delayed completing the key informant interviews and in organizing the focus meals due to a short timeframe and change in FGDs which took more time than expected. We planned to complete data collection at the time of WELI, but we also failed to accomplish this task as a member of the Rwanda team was involved in a road accident. The new plan to complete the data collection in March 2020 was also not executed due to the coronavirus outbreak which led to the confinement of people and cessation of many activities in Rwanda. It would be good to find graduate students who could have enough time to help in project activities. The two enumerators who conducted WELI show that

this model could be very efficient. They were very committed during implementation of the WELI data collection, and they are currently facilitating the implementation of the COVID-19 impact survey. More capacity building in research methodology, data analysis, and report and manuscript writing could be more beneficial to researchers as well, so as to improve their knowledge and skills in these domains.

1.4. Results

1.4.1. Laws, Policies, Regulations, and Institutional Practices

Legal and institutional frameworks are necessary for the functioning of the country and its different socio-cultural and economic sectors. This could involve, in regard to the ownership of property, giving access to collateral for a business loan, rights to inheritance, to own land, livestock and other assets, travel, to buy and sell, legislation and customary law concerning widows, rights to marry and exercise the marriage rights, etc. Such legal and institutional framework and the benefits and guarantees it provides must be for everyone including women, men, and youth.

An analysis of the laws, policies, regulations, and institutional practices with an emphasis of women and men involved in chicken and livestock development in Rwempasha and Rwimiyaga sectors was done. The main result of the analysis indicates the inequalities in some domains between men and women in benefiting from the legal and institutional framework set up by the Government of Rwanda.

Women and men have equal rights on ownership of property. This is mainly a result of the law guaranteeing the equal share on the household assets. The law was enacted in 2013 and states clearly that women and men legally married under the community regime have equal rights to household assets and one of them cannot use in any form the asset without the consent of the other. This was emphasized by women and men who participated in all FGDs organized for gender analysis. For example, women in FGD 7 and 8 and men in FGD 9 and 10 indicated that "on scale of 100 points, 50 points are allocated to women in exercising the rights on physical assets, for instance, like land. Men remain with the remaining 50 points in exercising rights on the physical assets". One woman in FGD 7 said that "in my opinion no husband can decide to sell a land if her wife don't agree with him". Women in FGD 1 and 2 indicated that the "woman and man has equal right on land, all family members have access on it, they can use it but the decision of selling it is taken by both woman and man, they agreed on it and what the money will be used for". This equal right on land is evidenced by the definitive land title bearing the name of the husband and the woman for each household with partners legally married. According to Law number 43/2013 0f 16/06/2013 governing land in Rwanda published in Official Gazette Number special of 16/06/2013, everyone has 50% and neither the husband nor the wife cannot say that land is my own asset, and I can use it as I want.

However, this exclusive equal rights between men and women on land is less observable for all other assets and especially on the livestock which is the other important asset in rural Rwempasha and Rwimiyaga sectors. The study findings show that the small livestock is mainly the assets of women

while the cattle is mainly the asset for men. Women have almost no rights on cattle and enough rights on small livestock. On the other hand, men have almost full rights on cattle and enough rights on small livestock. The status of men as heads of families and households gives them certain level of the rights on the assets somehow reserved to women in households and families. Women and men in all FGDs on gender analysis recognise men as the heads of family and households and therefore their status of overall chiefs of everything in the family or household. A woman in FGD 7 said that "if I have a banana tree, I can't decide to sell banana without requesting husband so, the women power is 20% on a scale of 100 points."

While men can easily buy or sell cattle, women cannot buy or sell small livestock without the consent of their partners. Women are in a position of ending up by consenting with the proposal of men as far as buying or selling cattle is concerned while men have the right to or to not consent with the proposal of women regarding selling or buying small livestock. Women farmers in FGD 7 and 8 mentioned that "men have greater control over and decision on goats because no woman can decide to sell and buy goats without men's permission. Women can decide on goat or chicken vaccination but when it comes to sell them, men take the lead. However, if it is a cow, a man always takes the lead for vaccination activities". A woman in FGD 8 added that "the woman must be humble because a man takes her from her family and joins the man's family". Also a woman in FGD 7 said that "in my opinion women have less power in everything in households and men have power over everything in households. She indicated that if a husband decides to sell for example the bicycle, what can you do? He may say that bicycle is his property without considering that it is the family asset. He may sell it at FRW 50,000 and tell you that he sold it at FRW 20,000; how can you have the right to the remaining part? He can also sell 10 trees for FRW 20,000 and after he tells you that the trees were stolen, what can you do?". Women in FGD1 added that "women are the ones who are involved in rearing chickens and caring for them like providing with them the food, medicines and so on; but they can't sell them without sitting down and discussing with their husbands".

Women and men have the same rights to participate in the VVC. This is not observable at equal level in Rwemapasha and Rwimiyaga sectors. The veterinary services related to vaccines distribution and administration are mainly the role of men. Most of the cases the vaccination is organized by the Government and the observation is that the veterinarians are mainly men. When there is a need of buying vaccine, the men are the ones to decide the vaccines to buy and when to buy them. The findings show that the focus is put on the vaccines for cattle and the vaccines for small livestock is not men's big concern. Women in FGD 7 and 8 mentioned that "we were requested only to bring goat for vaccination, but chicken have never been vaccinated. We listen that it happens but ours are not vaccinated". Women in FGD 2 in Rwempasha indicated that "we have never vaccinated our chickens and we even don't know where to buy vaccines while the cows, goats, dogs, cats have been vaccinated; but we never had a call for vaccinating our chickens". Women in FGD 7 said that "we were invited to take our animals (goats) to the vaccination site, then our animals were vaccinated without knowing the kind of vaccine and for which disease, but they told us that there is an outbreak of a disease that is concerned without telling us the name of the disease".

Men and women in Rwempasha and Rwimiyaga sector seem not to have enough knowledge on the diseases of their animals. They only reported on the symptoms and not the diseases. The symptoms

reported for goats include diarrhoea, abortion ("you could see like 50 goats aborted". One woman indicated in FGD3 in Rutare cell), overheat or fever, unexpected belly bloating, watery mucus from nose, coughing, turning the neck to different directions like at the back. Very few farmers (1 to 2 farmers in FGD 10 and 9) talked about the Rift Valley Fever as the diseases which attacked their goats. Women in FGD7 and 8 said that the diseases they always experience in goats are contagious ecthyma (ibimwete) and trypanosomiasis.

New Castle Diseases (NCD) is the main disease affecting the chickens. Chickens died from coccidiosis, influenza and high body temperature, diarrhoea, sneezing (they think that it is a worm disease), diarrhoea and sleeping. Women in FGD 8 and 7 mentioned that chickens get sick and die and they do not really know why chickens died.

For fighting against the diseases, farmers do buy medicines; however, they do not really know the disease they are treating according to participants in men FGD 10. Some of the medicines they buy include wormicide and Ngombe. One farmer from FGD 2 said that she used to buy medicine called Ngombe and injected the sick chicken, the medicine helped to inject three chickens if they are younger and five chickens if they are old. Women in FGD 1 and 2 in Rwempasha added that, they also use traditional cures like pepper mix with milk and penicillin.

The lack and limited knowledge on diseases implies that farmers could not know the proper medicines and the difference between vaccine and medicine. One farmer in FGD 10 said that "I know that chicken and goats get vaccines. But we don't know the kind of vaccine for chickens and goats. If we knew the kind of the vaccine to be administered to goat and chicken and where to find them, it can be easy for us. That is the problem we have. What is bad, we can't know about these vaccines." A woman in FGD1 said that "if we knew the vaccine, we could have vaccinated our chickens to prevent them from dying". However, a woman in FGD 7 said that "chicken are vaccinated we know that; but currently we did not vaccinate our chickens except buying the drugs to give them because they mostly suffer from New Castle Disease".

However, the official testing is done by sector and district veterinarians. Authorized private veterinarians do also testing. These private veterinarians are recognized by the local and national administration and have the license provided by the Rwanda Agricultural and Animal Resources Board. When the testing is done, medicines/vaccines are distributed in modern poultry. SASSO and broilers chickens are ones of the modern poultry the administration is focussing on in vaccination campaigns. The traditional chickens are not treated and vaccinated. Farmers indicated that there should be advocacy for including them in testing and vaccination campaigns. One farmer from FGD 10 indicated for example his exotic breed mixed with local chickens were died because they were not vaccinated. A farmer from FGD2 said that "if their chicken were vaccinated, they could keep chickens to produce eggs and sell them to restaurants and gain money to help in developing their living and fight against the malnutrition of their children". This shows the need to including the local chickens in vaccination programs and campaigns.

Regarding the goat vaccination, farmers indicated that they have never seen any vaccination campaign for goats. However, they indicated that they veterinarians came a bit before (August 2019) our descent (September 2019) to their locations to collect the data. They said that "Veterinarians came and vaccinated, for the first time, they came back, and they took blood samples and after they came again for vaccination. It was done for all goats. It was done by sector veterinarians" (men FGD 10 and women FGD 7).

This is because the women are likely to spend more time in caring for animals as they are mainly in charge of feeding them once the forage is available. One farmer from FGD 10 said that "the women know at the first place if the animals are sick because they are at home anytime and they have the responsibilities to always care for the these (chicken and goats) animals in the households". Being at home for long time for women was also emphasised by women in FGD7 who indicated that "drugs are bought by men because women are always at home and men go often outside their home and it is easy for them to access drugs than women". The farmer from FGD 10 added that "women are naturally talented in observation and knowing that there is something good or wrong with the animals. There are some people who attended universities in veterinary and agronomy options, but they don't care for sick animals while they were supposed to help others or share the veterinary knowledge with others in the community who didn't get the chance to access the veterinary trainings. If there were many women who attended these trainings, it'd be better because women are more motivated by these initiatives than men."

The identification of sick animals by women is at high level for small livestock as the small livestock mainly belongs to women. Men do not really care too much for goat and chicken. Their main focus is cattle, and when there are not any problems with cattle, everything seems to be ok with them. This practice of men to attach big importance to cows is also observed to crops with high money value like banana, maize, and rice. This could explain why big resources to use in income generation belong mainly to men and their supremacy in financial assets independence. On the other hand, it also explains the high dependence of women on men for financial assets and consequently almost for everything in the households. This is illustrated by women in FGD 8 and 7 women who said that "men always give order on utilization of finance where they give a share to women and keep another share for themselves". They added that "even if a woman has a job and receives money for that job, she cannot use it without the agreement/permission from her husband". A woman in FGD 7 indicated that "I do not have the power to take and use money without the permission from my husband".

Despite this division of labor in the VVC and some specific considerations for women and men in livestock development and management, the government defines the equal institutional and regulatory framework for women and men. The laws and policies guarantee equal rights to women and men on livestock, particularly on cattle and small livestock. The laws do not guarantee differences in ownership and management of livestock for women and men. Women and men are treated equally in legislation related to the VVC. No special benefits or restrictions in the legal or regulatory framework that explicitly or indirectly target women or men. One farmer from FGD 10 indicated that "usually, with reference to our country's laws, woman and man have the same and equal rights in all domains of life in the country. What we observe is the selfishness of men, but laws guarantee the equality of men and women in all domains of life in

Rwanda." Women in FGD 7 and 8 mentioned that "Men are selfish and want to control everything and want to be respected in their families/ homes; they consider women as weak and should take into consideration culture practices and requirements in their daily living".

1.4.2. Access to and control over assets and resources

This section focuses on the status of access and control of women and men over assets and resources. We consider physical assets such as land, livestock, forest, water, etc., social assets, financial assets either in cash or in the bank, and inner assets/ human assets such as peaceful, humbleness, knowledge, skills, experiences, education, and personal assets such as the lifestyle, experience, education, knowledge, etc.

The access to and control over resources and assets by women and men is not totally equal for women and men in Rwempasha and Rwimiyaga sectors. The worst status is observed on control. Women have less control over assets and the resources compared to men's access to and control over resources. They are not even totally in control of their human and personal assets and resources as they have to request permission for using them. This situation does lessen a bit when it comes to access to assets and resources; however men also enjoy a big room of accessing assets and resources compared to women.

The other interesting thing and good for the households, although a bad practice, is that the income from the resources the women have access to and control over is for the family/households while the income from the resources and assets the men have access to and control over is theirs. The income the women get is used, for example, for paying for health services for family members, the clothes for children and men, school fees, household's girls and boys, household's employees, etc. The income the men get is used when the income the women get is finished and to finance other non-family related things which are difficult to know in some case as men do not have to report on how they use their income.

Women and men in Rwempasha and Rwimiyaga sectors have equal access to land. The land law does play an important role in this equality because the land title is shared between husband and wife. The land title is in the name of both husband and wife. This situation gives the right to any one or both to refuse anything directed to land if he/she does support it. This is possible because the Government has proceeded to register land for every household. According to participants in FGD 10, "women have the same rights as men because men can't do anything with land without the agreement with men". Men have to consult and ask women the permission for anything related to land. Without the agreement between men and women, nothing can be done on the land. Participants in men FGD 10 and 9 and women FGD 7 and 8 indicated that "none between woman and man can violate the equal right principle on land". However, when it comes to control, men have power over deciding on how to use the land compared to women. Men in FGD 10 illustrate this situation by an example of the piece of land to use for planting vegetables as preferred by the woman and potatoes as preferred by the man. A man and a woman could have a discussion for agreeing on which crop to plant on the piece of land. A man can

decide to plant potatoes and a woman decides to plant vegetables. Despite the decision of everyone, the woman knows very well that she has to respect (obey) her husband on what is going to be done. If a man refuses by showing that potatoes are more useful, the woman is likely ready to accept this proposal without too much discussion and negotiation. The woman knows very well that the man has the last decision in the household. This is also observed in family conflict resolution and management. Women in FGD 7 and 8 mentioned that "both men and women must find an agreement on how to use and to control over the resources". However, a woman from FGD8 said that "when the agreement between the wife and the husband is not found, a woman must be humble because a man took her from her father's home to his home". She added that in some cases men give gifts to their wives for convincing them to accept their proposal or decision on what to do. She said that "when a man wants to sell a piece of land, a wife automatically refuses. But next day, if a man comes with clothes, a woman becomes calm and accepts the idea of a man." Always the man has the last decision, and the woman has to accept it for the smooth living of the family. If a woman refuses, they end up in most cases by divorcing. Concerning the forest, livestock and water, the access is relatively good for women, however at a low level compared to men. When it comes to control, men have almost all the power of control over these resources.

Apart from the physical assets, especially land asset for which good improvement has been made for access to and control by women, the access to financial, personal, and inner/human assets is good for women and men. They both have the access to these assets. According to men and women in FGD 10 and 9, men and women have equal access to financial assets. They supported their idea by indicating that if a woman is well informed that you are going to get money from a bank or a saving group while there is no planed activity to be financed, she is allowed to go in to that saving group or bank to request it to stop the loan and they (saving group and bank) have to respect and execute the request of the woman because it will be difficult and impossible to sell the collateral without the agreement of the woman if the man fails to pay the loan. The types of financial assets they referred to are loans and savings and current accounts; salary, CARE groups, selling agricultural harvests like sorghum and banana beers, etc.

However, when it comes to the use of financial assets, men have the final word. According to men in FGD 10 and 9, for a scale of 100 points, men have 70 points while women have 30 in deciding and controlling the use of financial assets within households in Rwempasha and Rwimiyaga sectors. Women participants in FGD 8 said that women have less control over finance (40%) and men have more power over finance (60%). According to them (men), it is because a man contributes a big share to the households. Women from women FGD 7 said that women have 10% of control over finance and men has 90% because wives cannot use the money without the permission of their husbands. One man from FGD 9 illustrates this idea by indicating that "the large part of decision on the use of the financial asset like the household income is reserved to men. If a woman goes to work, she brings money, and me also I go to work and I earn money and I give it to her for keeping. But I can see something judged useful for our family, at that time I decide to buy it without her presence, and I take money, I buy it and I bring it home. And these salaries and others, is the man who is concerned more. Whatever a woman wants, she asks a husband, even saved money, she says, darling, we want this and that. She can take money and use it, but it is not taking as she wants like me, I can't take

it." A woman from FGD 8 said that 'I gain FRW 1000 for a job done and I tell my husband that I have a given problem to resolve using my money, he can allow me to use the money; you see the power to use the money comes after being allowed to use the money or after being allowed to have power by my husband".

Men and women have also equal access to personal assets. The personal assets are self-confidence; being famous and bright, being an artist, being a footballer, hardworking, compassionate, angry, love for others, listening and solving to other people's problems, etc. According to men in FGD 10 and 9, on scale of 100 points, both women and men have 50 points for equal access to their personal assets. However, women in FGD 7 and 8 said that "women have more access to personal assets than men." On a scale of 100 points, women indicated that they have 80 points and men 20 points. According to them, this is because "women are compassionate and like reconciliation." Concerning the control over personal assets, women in FGDs 7 and 8 said that "it can be 80% simply because there are made in one's self character and there is no control from another person". A woman in FGD 7 illustrates this by saying that "women have capacity to express emotional feeling, creativity, and innovation; a man has no big contribution on these, so women have 80% control over personal assets".

Women in FGD 7 and 8 highlighted human capital or assets as education, training, intelligence, skills, health, knowledge, etc. They said that "men dominate women to access human capital where men count for 70% and women 30% for a scale of 100 points". They gave an example of veterinary skills which involves more men than women. They said that "men are created strong and handle easily animals than women. Concerning selfconfidence, men are more confident than women because women lack self-confidence." A woman in FGD 8 added that "even if women have confidence, they don't show it". Contrarily to women, men consider that women and men have equal access to human assets. When it comes to control over human capital, women participants in FGDs 7 and 8 indicated that the "women have less control over human capital despite the skills and knowledge they have; women have no freedom and are controlled by men". Concerning control over human assets, men in FGD 9 and 10 indicated that on a scale 100 points, men have 70 points while women 30 points. They justified this scale by indicating that whatever the circumstances, wives will have to ask for permission from husbands of doing anything using their personal assets. They added that this is different for men because they inform their wives on what they are going to do with their personal assets; they do not require permission. One man from FGD 10 illustrate this situation by giving a good example of happens for women when they need to use their personal assets. He said that "for instance me, just now, I can inform my wife that I got a job in Kigali, and I have to go right now to Kigali for that job. My wife has to receive this information and cannot prevent me to go to Kigali. If it is her, she will have to inform me and ask for permission. Our approaches to deal with this situation are different. The way I request something to my wife, is not the same that she uses in requesting something to me. She informs me on the job she has to apply for and for starting the post won, she has to wait for my authorisation while for me I don't need the permission from her. I just have to explain her the position I won and the benefits from the position. That is all. She knows that she may have provide some arguments and I am not obliged to mandatorily consider them." He added that women have the "ability of being more flexible to receive what men say, want and need; women are created like that. Giving them (women) information is somehow to ask for permission." One participant in FGD 10 indicated that "even if a woman has a confidence of doing a thing, she first asks the permission from the husband, because she knows that the husband can refuse it and in

that case that thing can't be done, but if he says go ahead, she continues". Participants in FGD 1 added that, if they want to join the saving group like Village Saving Group Associations or cooperative, they first have to ask their husbands as their husbands will provide the money to save.

Concerning social assets, women and men have equal access to them according to men participants in FGD 10 and 9. Men and women have equal freedom to participate in social organizations such as SACCOs, care associations, Ingobyi, church, tontine, social ceremonies, parents evening meetings (akagoroba kababyeyi), visiting neighbours, having friends, helping and escorting sick people to the hospital, cooperative called "Ikimina k'Ingobyi" (if a patient dies they find a coffin for burying a body and afterward they fundraise money to donate to the family members who are left by the deceased). Contrarily to men, women in FGD 7 and 8 said that "women have access to social assets at 70% and men 30% for a scale of 100 points as you find that in any social event and activity, women are present in a big number compared to men participation". A woman from FGD 7 added that "women are the ones who give more consideration to social events and force men to attend the organised social events to which they are invited. A husband can plan to miss, but a woman can continue to insist showing the role of friendship within families." A participant in FGD 8 said that "men go to bar to find their friends, but you can't find them coming home"

Although women have access to social assets, men must control them. On a scale of 100 points, women indicated that 80 points are allocated to men while 20 points are allocated to women. Women must request for permission for attending any social event. Men have the right to refuse them the permission or to accept. A woman from FGD 7 said that "myself I can't leave home without informing my husband, imagine who can take care of my children and how he can know where I am". A woman from FGD 8 said that "a man can go in a bar without telling a wife". According to participants in men FGD 10, on a scale of 100 points, 80 points are attributed to men and 20 points are attributed to women when it comes to control over social assets. Participants in FGD 9 attribute 75 to men and 25 to women. One participant from FGD 10 illustrate this scale by indicating that "If people live together, they have to cooperate. But informing and asking for a permission are two different things. Having the right to access something is different from having the right to control it. I inform my wife for letting her knowing where I am, but I am not requesting for a permission to go where I have to go or to participate in planned activities. For her, she will always request for the permission to go and to participate in social group activities. I will have to refuse or to accept depending on my analysis of the objectives of the social group or event and the planned activities of the group or event."

It is obvious that the access to and control over the assets and resources impacts on women and men's involvement in the VVC in Rwempasha and Rwimiyaga sectors. Consequently, the level of involvement of each one contributes to the wellbeing of the livestock they are mainly in charge of caring. As we have seen, women are mainly in charge of small livestock especially chicken and goats and men are mainly in charge of cattle. The power of men in controlling resources are helping in maintaining the wellbeing of cattle to the detriment of small livestock. Men mainly look after the cattle and when there is problem in cattle, men cannot allow resources to go to small livestock. To men, small livestock gets proper value once the cattle have no problem. As the men are the head of the household and women have to follow the guidelines the men provide, it is understandable that the

limited access to and control over assets and resources implies the less wellbeing of the livestock they own and are in charge.

1.4.3. Gender roles, responsibilities, and time use

Men and women in Rwempasha and Rwimiyaga sectors have different roles and responsibilities in their daily life. For domains the roles and responsibilities are the same and what is different is the level of involvement.

In general, the reproductive roles are reserved for women. They are the ones to care for the family members. They have to prepare food, to prepare the pupils and make sure they go to school and do homework, they have to know if the children are sick or not, they have to know if the children are in need of clothes, children are clean, children have eaten, have gone to sleep, have come back from the school, have the school materials (pen, tools, books, etc.), taking children to hospitals, giving children medicine, fetching water the family members use daily, carrying babies, washing the clothes of family members including the clothes of their husbands. Women are also in charge of many reproductive roles at community level: visiting hospitalized people, prepare the food for the hospitalized persons visited, visiting family members and neighbors, participating in choir, cleaning the churches, attending the parents' meetings (akagoroba k'ababyeyi; there are many in these parents' meetings and their husbands request them to attend on behalf of the family or households), etc.

Women also are almost exclusively in charge of small productive activities. The small productive activities in Rwempasha and Rwimiyaga sector are mainly the small livestock especially chicken and goat rearing (FGD 4). Sons and daughters are also engaged in small livestock activities like cleaning poultry house, cutting grasses for feeding goats, feeding chicken at home (FGD 1 and 2). Women also run small businesses, such as boutiques, mobile money, profit women groups like CARE associations and tontine. However, men keep an eye on those small productive activities as the income from them interest men, and women cannot use it without the authorization of men or without informing men. This kind of information is somehow a request for permission because women know that at any time their husbands could ask about the income from those small productive activities and how it was used. By informing their husbands, women are rather predicting or forecasting the responses they will provide once the inquiry is raised.

In addition to reproductive and small productive activities, women are requested to take or to support men in big productive activities. The big productive activities in Rwempasha and Rwimiyaga sectors include mainly the cattle, crops growing like rice and maize, big businesses, such as bars and restaurants, etc. We have noted that these activities seem to be reproductive for women because they are taken as supporting persons and they do not receive revenue from achieving them. The total income from them is perceived by the men who will provide money to use in their families. Speaking of the activities of women, one participant from FGD 9 indicated that women have more responsibilities; they wake up at the same time as men. Men go directly to farming while women stay at home to first clean home, prepare children and breakfast for them and then after these activities,

they go to farm. When they are back home from farming activities, women hurry up to prepare food while men wash themselves. Men wait for lunch, and after lunch they sleep or go out while women start to wash clothes, prepare the dinner. Generally, they have more small activities that keep them busy for the entire day while men work and find time to rest.

Concerning the use of time, women are almost working for the whole day and during evening until they go to bed. In the early morning, they deal with reproductive roles related to cleaning pupils and child, preparing the breakfast, and sending the children to school and bringing other children to maternal schools. After these reproductive activities, they join their husbands in productive activities like farming or businesses such as boutiques and restaurants for providing their support. After providing the support, they have to find time to prepare the lunch and make sure that the pupils have come back from the schools. After lunch, men can go to continue to work for those who have businesses while other men mainly involved in farming activities can either go to village centers or, rarely, visit their farms. Women on the other hand, will continue to achieve reproductive roles like visiting neighbors, friends and family members and start to prepare the dinner. It seems that women do not have time away from their reproductive roles. What is mainly happening is to change the reproductive activity.

Given the nature of the reproductive and productive activities that women are involved in, mainly happening in their locations, they are likely to intervene in the VVC as users. This is so important as they will be able to use vaccines for vaccinating their small livestock especially chicken and goats which are more frequently raised in Rwempasha and Rwimiyaga sectors. However, few women can intervene as distributors as we have seen two women in their areas doing the retailing of animal medicines/drugs. The discussion we had with them show that if they are supported in having proper materials to use in storing the vaccines, they can enter the VVC as deliverers. These two women can be the example for other women in Rwempasha and Rwimiyaga sectors for intervening in the VVC as deliverers and why not as distributers.

Travelling for selling vaccines could not pose a problem, as men are ready to take over reproductive roles as long as they know that the women are involved in income generating activities. Men in FGD 10 indicated that when the woman has an income generating activity, it contributes to family development and reduction of conflict within the family as the quarrel on the use of money reduces because the woman prefer to finance the reproductive roles within the family and men see their independence in managing their income raising.

There were no animal health trainings when we were collecting the data for this study. Farmers in Rwempasha and Rwimiyaga indicated that they have only attended the training on crop growing. There are no projects intervening in the communities except the government programs like Ubudehe program and FARG funds which distributed small livestock to farmers for helping them in raising their livestock activities and in improving their living standards. These projects are managed by local administrators.

1.4.4. Cultural norms and beliefs

There exist gender stereotypes in Rwempasha and Rwimiyaga sectors. One important observation is that the stereotypes which tarnish the image of women in society are more than those tarnishing the image of men in society. In other words, there are many negative stereotypes for women and few negative stereotypes for men and few positive stereotypes for women and many positive stereotypes for men.

The following are the main negative stereotypes for women we found:

- A woman comes from elsewhere. This means that men have all rights in their household. This explains more power in accessing and controlling over assets by men.
- There is a proverb that they say "Uruvuze umugore ruvuga umuhoro" which means that "if it is the woman who decides in the household, man and woman kill each other."
- A woman can only advise men, she cannot make a decision in the household. It could mean that there is no decision from woman. This could explain why they are few in decision making structures at community level.
- No pullet screams when there is a cock, therefore women keep quiet like a hen.
- A proverb saying that "iyo amazi abaye make aharirwa imfizi" which means, "the important person in the household to first care for is the husband."
- Women are weak and men are strong. Or men are stronger than women. The hard work is for men and soft work for women. Women daring to be involved in hard work are called virago (Ibishegabo).
- Women are the ones to take care of children.
- No woman can slaughter an animal.
- Women feel and act as if they are not in their own households.
- "Nta nkokokazi ibika isake ihari" meaning that "No hen scream when there is a cock, therefore women don't have to act and have to wait for men to act"

The following are the main positive stereotypes for women:

- "Ukurusha umugore akurusha urugo" which means that, "who has better wife than yours has better household."

The following are the main positive stereotypes for men:

- A man is always the strongest.
- The man is the head of the family.
- A man is a natural leader of the household or family. It is as if the men are born leaders of the households or families.
- "Amafuti y'umugabo nibwo buryo bwe." "The mistake of a man is his way of doing things."
- A man is a man, and he is responsible of all.
- A proverb saying that "iyo amazi abaye make aharirwa imfizi" which means "the important person in the household to first care for is the husband."

It is obvious that the stereotypes prevent the women from intervening in the VVC. Women are not free to make decisions regarding the VVC as they know that men will always question their decisions and interventions. Some men are afraid of being called virago and avoid vaccinating cattle, for example. Consequently, avoiding some of these activities, like veterinary activities lead people in the community to think that they are reserved for men and are not usually done by women (mothers). They even avoid doing some program studies because they think that they are reserved to men. For example, one participant from FGD 10 indicated that women say that "agricultural oriented activities are not easy as well as being a driver, lorry driving, ... That is why in many cases, agronomy and veterinary oriented lessons are not studied by many women." Women in FGD 7 and 8 mentioned the reasons why women are not involved in the VVC. They include biological reasons such as women are weak and cannot handle livestock during vaccination and sometimes neglect going far way for opportunities like being a sector veterinarian and women can be denied for an opportunity by men. A woman in FGD 7 said that "myself I find that women lack confidence to express themselves".

Women and men value the use of vaccines in livestock, and both can equally access the vaccine market. Both men and women could be service providers on the vaccine market. However, they do not have enough knowledge on the vaccines and the animal diseases especially chicken and goats. For example, they did not know that chicken and goats can be vaccinated. They do not have knowledge on the diseases, and accessing veterinarians is difficult because they are located far away from sector offices. When veterinarians are contacted, they may show up a week later and find that the sick animal died. Drugs pharmacies are far away from the locations of the farmers, with a round trip cost of FRW 6000 for reaching the pharmacy on a motorcycle and the transport cost is higher than the price of the bird. The decision is to let the bird die. In addition, men in FGD 10 indicated that women lack enough self-confidence to embark on providing services in vaccine market. Also, woman in FGD 7 said that "women lack confidence to express themselves".

However, men do not really motivate women to change their behavior and enter the sectors because they are afraid of the stereotypes. Men are afraid to help women because they think that if their partners get enough income from entering some sectors, they will become free and virago.

1.4.5. Patterns of power and decision-making

Women in Rwempasha and Rwimiyaga have limited power in almost all domains of household life. They have to request permission from and inform their husbands for the majority of the things they want to engage in. The power they have in household business is always weaker than the power of the husbands in households. This is observable even in human assets that they fully own. They also ask permission for using their own human assets. For example, if a woman is a veterinarian, she will ask permission from her husband to apply for veterinary post or to open a vet drug shop.

This limited power leads them to fail to take a good share in decision-making at household and community level. Men participants in FGD 10 and 9 indicated that, for a scale of 100 points, men

have from 60 points to 80 points in decision making regarding the control over physical assets such as land, livestock, forests, etc., financial assets such as loans and saving accounts, salary, income from cropping and livestock, etc., personal assets such as education and skills and social assets such membership to some groups. For all these assets that women have, according to men participants in FGD 10 and 9 and women participants in FGD 7 and 8, the remaining points i.e., 40 to 20 points on a scale of 100 points. Women have to request permission to make any decision of using them in way they have defined themselves. If men refuse, they change their decision and rely on men's decision. The illustration was given by a woman in FGD 8 who said that "man and woman when they are at home, a woman can rise problem that needs money and to sell the chicken in order to obtain the money, but if a man doesn't agree a woman can't sell it". When it comes to control over human capital, participants in FGD 7 and 8 said that "women have less control over human capital despite the skill and knowledge one has; women have no freedom and are restricted/controlled by men'. A woman in FGD 7 said that "I am a cooperative leader and I have a little kid of 1.5 years old, and I was invited to represent the cooperative at a district level. I had to agree with my husband, and he accepted the responsibility of taking care for the kid" A participant in FGD 8 said that "many times it happens to women, like the CHWs, they are always in our village, they need the permission from the husband first in order to join the CHWs. One participant in FGD 9 also illustrated the power of men's decision making. He said that "a man is allowed to decide on all things. For example, I can decide to compete for a leadership position without informing my wife. If I am elected to post while my was against my involvement in leadership positions, she has to accept it. But if it was her who decided to do so and inform me after being elected, I can say that I don't want it because I am responsible of the family." He added that even if a woman has everything required for competing for the post, she cannot decide to compete without the permission of her husband. She first asks for permission to the husband, because if a man says no, it can't be done, but if he says go ahead, she continues." One participant in FGD 4 and 5 also said that "no matter on how and level a woman is refusing when a man decides on something, a man does do it. If it is a woman wishes to do something and a man doesn't want it, a woman can't do it. They discuss together but a man has more influence on decision to be taken." "A woman must be humble because a man takes her from her father's home" said by a woman in FGD8.

This weakness of women in decision making is indirectly asked and reinforced by the community in Rwempasha and Rwimiyaga sectors. This is illustrated by the names given to and proverbs describing the image or what could happen if women make decisions. For example, a woman who resists the decision of men is called virago (Igishegabo). The example of proverbs includes proverbs such as "Uruvuze umogore ruvuga umohoro," "Nta nkokokazi ibika isake ihari" meaning that "No hen scream when there a cock, therefore women don't have to act and have to wait for men to act." A man is a man, so called men are despite men (the so called men are men who are not able to feed and lead their families according to men in FGD 10), a man was created while a woman was not created, a woman is not a creature; "Amafuti y'umugabo nibwo buryo bwe" which means that a man doesn't make mistakes, whatever happens when a man is in business is his manner of doing things (FGD 9); women are flexible and simple, so they themselves avoid to be virago (ibishegabo). People also base their thinking on women on the religious beliefs which define the men as the head of family.

The failure of women to efficiently take part in decision making in the above different domains does put aside the VVC domain. Conversely, this situation becomes so worrying in the VVC especially for small livestock as the government, the powerful main actor in the VVC, does put emphasis on the vaccination of cattle in Rwempasha and Rwimiyaga sectors. The majority of women, as well as men, do not know if chicken and goat are vaccinated. They mainly know that there are medicines for these animals when they are sick. Consequently, women cannot think about the vaccines for the animals they own and care about in households when they do not know the vaccines exist for their small livestock. However, we have seen two women selling the vet drugs in Rwempasha sector. They both have small drug shops. There are many women in community groups, such as CARE associations and in Tontines. Men are also members of these groups, though they are few.

1.5. Barriers and Opportunities

a. Description of barriers identified to women's participation in the VVC

- Reproductive roles which are the primary responsibility of women: taking care of children, cooking, preparing children for school etc., were indicated as examples of barriers to women's participation in the VVC. That is why men are the ones who take care of livestock, especially goats.
- The belief that women do not have physical strength to become good veterinarians.
- Young girls fear to undertake scientific subjects at school which is one of the conditions for studying veterinary science. This becomes a barrier to educating women to enter the VVC and to provide an example to other women to participate in the VVC.
- Getting married as early as possible prevents women to participate in the VVC as they have to focus on reproductive roles once married and most of the time request the permission from their husbands for doing anything or any business. Their husbands decide on their behalf and their decisions are mainly based on the fact that women are good at reproductive roles.
- Women have little knowledge about veterinary medicine, vaccines, commercial production, or chicken rearing.
- Men think/fear that if women have and control cash, they may become unmanageable by men and not respectful to them. Men fear that if women have more money, they may become disrespectful to men.
- Women do not attend trainings in case the man is available, and especially when the training location is far from their home. This practice prevents women having information on opportunities in the VVC, and consequently, do not participate in the VVC.
- Limited knowledge on vaccination of animals: some participants in focus group discussions were not aware that goats or chicken can be vaccinated.
- Cultural factors: some capital goods are controlled by men because they are considered as materials for men depending on how expensive they are and its usage. This practice implies that it is difficult for women to find enough resources to use in the VVC and women end up having limited participation in the VVC. Men believe that they are superior to women and also believe that women consider themselves like that. Men consider women as weak in making

decisions and men consider themselves making better decisions than women. Also, men do consider themselves superior because they are confident, and their ideas are the best.

- The community trust men veterinarians more than women veterinarians.
- Some religions like Adventists, do not allow women veterinarians wearing trousers hence a limit of women participation in the VVC.
- Men consider that if the livestock, goats, and chickens are left to women alone, they will not be productive. Men think that they are the ones who are able to manage them, like knowing when they need medicine when they are sick, how to feed them, etc. The men think that women have limited knowledge due to limited access to information.

b. Description of barriers identified to vaccine access, availability, and demand

- Limited knowledge about RVF and other similar diseases.
- The agro-drugs shops do not sell NCD vaccine and farmers have no idea on how and where to purchase it.
- Women cannot be as good as men; their ideas are perceived as weak, and women cannot speak in the presence of men. This implies limitation in vaccine demand and therefore the vaccine availability (supply) and access.
- Private veterinarians are not trusted compared to public veterinarians. This constitutes a barrier in the sense that private veterinarians will not be many and consequently there will be a shortage in supply and demand, especially for the areas not covered by the public veterinarians.
- Women don't currently use vaccines and don't know where to purchase them. The fact that the vaccines are not used by women constitutes a shortage/barrier in demand for vaccines as well as a shortage in supply and availability because the supply responds to demand.
- For making decisions related to vaccination, men decide mainly on cattle vaccination because they are mainly concerned by cattle health. Small animals such as goats and chickens are not a priority for vaccination. Therefore, this constitutes a barrier to goat and chicken's vaccine access, availability, and demand.
- In the vaccination chain, the man is the one who makes the decision about vaccination in most of the case. The government veterinarian is the one who brings and administers the vaccine.
- In most of the cases, women inform men about the chicken/goats' problems, and they suggest what do to. In general, men expect women to request permission regarding what do to with livestock and other assets and resources of the households.

c. Description of opportunities identified for women engagement in vaccine delivery and the VVC

- There are groups of women working together on a particular socio-economic project. For example, there is a cooperative of women promoting women's wellbeing and economic development. Men were also included later in this cooperative; they are thought to have better ideas.

- In the study area, chickens are not vaccinated while some farmers and interviewees are aware that there exist vaccines for chickens.
- There is dominance of men in vaccination activities in the study area. This implies the need to sensitize and train women on vaccination activities. One reason for the shortage of women in vaccine value chain is the lack of capability because they are not trained to do so.
- The importance of women must be improved for improving the family; however, men expressed the need to know what women are being involved in. According to men, women as well the families benefit from having more access to information and available opportunities. Men recognize that training will help women to participate in vaccination activities.
- The culture shift overtime where women are becoming more involved in activities mainly considered for men, like construction, etc. offers the opportunity to introduce other activities related to vaccination. Also, the training will help women to improve their self-confidence.
- The recognition of limited knowledge about gender equality by men and their need of training for behavioral change
- Goats help families easily get income because they are easy to sell compared to other raised livestock, like cattle.
- The men recognize a need to avail a pharmacy in the community as the ones available are in town and requires traveling a long distance and pay high transport costs to reach the pharmacies located in Nyagatare city.

d. Description of opportunities available for engendered vaccine distribution and delivery services

- Men recognize that anyone can help in vaccination either man or woman.
- Men know that the women are different because some women are able to work hard to improve their knowledge themselves and others are not very active. They also recognize that women with more access to information about managing goats can help to improve productivity. Recognition, by men, of the importance of traveling for women as way of acquiring information on different socio-economic activities.
- The existence of legal framework protecting women rights which is recognized by men and women.
- The women visit agro-drugs shops located in Nyagatare city which is too far for purchasing vaccines/medicines. Women already acknowledge the value of investing in preventative medicine because they contact and request the veterinarian to come to vaccinate the other animals they own.
- Both men and women know the usefulness of vaccines, there is no need of consulting men (or women) before vaccination. However, women may consult men because they may need money to buy the vaccines.

e. Description of possible entry points for women for vaccine distribution and delivery

- Regular training of both women and men.

- Training of farmers in chicken and goat rearing practices.
- Training of farmers on gender equality and creating awareness about the benefits of shared decision making.
- Trainings related to animal husbandry, disease treatment, and vaccination of small animals.
- Trainings targeting parents (both men and women) to make them understand more that all children must be treated with equity and equality and promote gender awareness in the VVC.
- Make the vaccines closer and accessible to the farmers.
- Make available and affordable chicken and goat vaccines.
- Support for veterinary drug stores in the community.
- Improve access to medicines so that farmers do not rely on sector veterinarian who is very busy in other activities.
- Creation of women animal health worker groups and short training that would equip women with knowledge to serve as CAHW.
- Formation of women cooperatives to help each other obtain loans and to get products needed for chicken rearing.
- Trainings aimed at changing mindset of both women and men to promote gender equality.
- Trainings to women aimed at raising their self-confidence.
- Increase number of women in services related to animal treatment and vaccination through the sensitization of the society to make women/girls love the veterinary profession (not fear to undertake such programs); allow children choose to study programs that they wish to follow; encourage daughters to pursue careers along the livestock VVC; and sensitization of women to the availability and benefits of livestock vaccination.
- Improve/increase capacity (skills, income, etc.) of women through training of how to operate a business.

CONCLUSIONS

Gender analysis in Rwemapsha and Rwimiyaga sector revealed that there is still work to be done in gender domain for achieving the gender equality and equity within communities despite the clear laws on gender that the administration in Rwanda has put in place. There are still some improvements needed for raising the understanding and appropriation of gender considerations in the daily lives of the communities. The USAID five domains for gender analysis used in investigating gender status in these communities, pointed out main deficiencies in the gender domain. These include the illegal regulatory and institutional framework practices that gives to women defined activities and practices the laws and regulations fight against such as the ownership of small livestock while cattle are for men, the limited access to resources and lack of power in controlling over resources, the limited decision making of women within households, the reproductive activities exclusively reserved to women and their limited involvement in productive activities. There are also stereotypes directed to women such as a woman comes from elsewhere and therefore she cannot have full rights in household, "Urwwwze umugore ruvuga umuhoro" which means "if the woman decides in the household, man and woman kill each other", a woman can only advise man and cannot make a decision in household, women are weak, and women daring to be involved in hard and difficult work are called virago (Ibishegabo).

The limited access to and lack of control over resources of women and the more time spent on reproductive activities prevent them (women) to efficiently participate in the vaccine value chain. Women do not have enough knowledge on vaccines and medicines, some women do not know if small livestock animals are vaccinated while they are in charge of small livestock in the households. Even if men also have limited knowledge on vaccination, their situation cannot be compared to the situation of women. At least they are aware that cattle must be vaccinated, and the wellbeing of cattle is a big concern of men in Rwempasha and Rwimiyaga sectors.

This less involvement of women in the VVC impacts the wellbeing of small livestock and consequently the maximum benefits the households were expected to obtain from small livestock. For example, there could be reduction in household income and the increase in malnutrition of family members, the limited access to health services etc. as the money the women receive is mainly invested in these areas at household level.

The gender equity and equality in Rwempasha and Rwimiyaga sectors is still improving. The implementation of the provision of the laws on gender equality and equity and other laws against the clear and unclear discrimination should continue to take place in order to continue to raise the understanding of people on the importance of gender equality and equity in society and households. There is a need of moving from gender awareness to gender sensitive and transformative for people and communities in Rwempasha and Rwimiyaga sectors.

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