

**GENDER INCLUSIVE VACCINE ECOSYSTEM: ENHANCING DISTRIBUTION
AND DELIVERY SYSTEMS FOR NEWCASTLE DISEASE (ND) AND
CONTAGIOUS CAPRINE PLEUROPNEUMONIA (CCPP) AMONG
SMALLHOLDER FARMERS**

[The GIVE Project]

Stakeholder Mapping Report



September 2021

Table of Contents

1.0. Background and Rationale of the Stakeholder Mapping Exercise	1
2.0. Methodology	1
2.1. Identification of Norms and Practices	1
2.2. Mapping of Stakeholders/Actors	2
2.2.1. Materials for the Stakeholder mapping exercise	2
2.2.2. Mapping procedure	2
2.2.2.1. Identification of the stakeholders	2
2.2.2.2. Categorization of the stakeholders	3
2.2.2.3. Populating the stakeholder’s map	3
2.2.2.4. Creating linkages between stakeholders	4
3.0. Outcome of the Mapping Exercise (Findings)	4
3.1. Barriers, Norms and Practices that Hinder Women from Participating Effectively in the Poultry Production Space	5
3.1.1. Barriers to women’s participation in indigenous poultry production.....	5
3.1.4. Marketing related barriers.....	10
3.2. Actors in the livestock sector (chicken value chain) who influence norms	12
3.2.1 Identified Actors in Kikumbulyu North	13
3.2.2 Identified Actors in Makindu Ward.....	16
3.2.3 Identified actors in Kathonzweni ward	18
3.2.4 Identified actors in Kitise Ward	21
3.2.5 Identified Actors in Mtito Andei Ward.....	23
3.5.6 Identified Actors in Masongaleni Ward:	25

Acronyms and Abbreviations

ASDSP:	Agricultural Sector Development Support Programme
BISEP:	Business Initiative for Survival and Eradication of Poverty
CGA:	Cereal Growers Association
CHVs:	Community Health Volunteers
CRVs:	Community Resource Volunteers
DANIDA:	Danish International Development Agency
FBOs:	Faith Based Organizations.
FIPA:	Farm Input Promotions Africa
GAA:	Germany Agro Action
GIVE:	Gender Inclusive Vaccine Ecosystem
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KALRO:	Kenya Agricultural and Livestock Research Organization
KCEP-CRAL:	Kenya Cereal Enhancement Programme Climate Resilient Agricultural Livelihoods
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KMTC:	Kenya Medical Training College
KRD:	Kitise Rural Development
KWFT:	Kenya Women Microfinance Bank
MCA:	Member of County Assembly
MESPT:	Micro Enterprise Support Programme Trust
NARIGP:	National Agricultural and Rural Inclusive Growth Project
NDMA:	National Drought-Management Authority
SNEP:	Strategic National Energy Plan
SNV:	Stichting Nederlandse Vrijwilligers
USAID:	United States Agency for International Development.
VBAs:	Village Based Advisers
VCSP:	Volunteer Community Surveyor Program

Summary

The Give project team conducted a stakeholder mapping exercise across the six intervention sites/wards between 31st August and 10th September 2021. Through engagement with women and men in livestock production (chicken and shoats) space, the exercise sought to address two specific objectives of the GIVE project, *i.e.* Specific Objective 3 (To establish and understand the norms - social relationships, behavioral expectations and cultural controls - that hinder women from owning and using chicken, participating in and benefitting from the chicken vaccine value chain and utilizing vaccines to improve the productivity of chicken) and Specific Objective 4 (To map out actors who influence these norms and how they affect the participation of women in the livestock [chicken, goats and sheep] value chain).

Participatory approach methods were used in which 3 Focus Group Discussion (FGD) sessions were held per intervention site. Two of the FGDs were gender segregated and featured community members while one was a mixed FGD comprising of local leaders. The FGD participants were purposively selected to include both state and non-state actors as well as community gatekeepers (*i.e.* village elders, opinion leaders, community health volunteers, livestock cooperative and group leaders, community vaccinators).

A total of 105 discussants took part in the FGD sessions. Most 57 (54.3%) of the discussants were women with men accounting for 45.7% (48) of the discussants. In all sessions, women were relatively younger than men. Through the exercise, various actors (both individuals and institutions) who influence or are influenced by the project activities, their extent and depth of engagement and their interconnectedness was ascertained. Some of the identified norms and practices that hinder women in livestock production (chicken, goat and sheep) and engagement in vaccine value chain included; unequitable power relations which favor men than women affecting access to resources such as land, income and inputs, disease burden propelled by recurring disease outbreaks, overreliance on ethno-medicine (ethno-vaccination), traditions that associates men with productive assets such as goats and cattle and women with the birds, women unable to balance multiple roles due to strict division of roles (chicken-related task and variant motives to in attending capacity building and training programs which affect overall intended impact.

Of all the actors identified, those whose influence touches on production norms were identified based on their perceived level of importance (services they provide) and accessibility to the community members (contact between the actor and community). Services provided by these actors were almost similar across the wards ranging from; provision of extension services, vaccine and vaccination services, training and capacity building, bench marking and offering advice and provision markets and marketing links. GIVE research project and NARIGP were mentioned in four out of the six ward as important actors in addressing poultry production issues and changing related norms and practices. In terms of linkages it was established that the perceived working relationships between and among these actors was based on the services provided by each actor, the target audience and the intended goal. With exception of Kitise ward, all other FGDs identified administration and development initiatives and programs to be working closely together, with non-profit organizations and initiatives collaborating closely with administration in nearly all the wards.

1.0. Background and Rationale of the Stakeholder Mapping Exercise

The Gender Inclusive Vaccine Ecosystem (GIVE) project is a 3-years' action research that seeks to enhance the distribution and delivery system for Newcastle disease and Contagious Caprine Pleuropneumonia vaccines among smallholder farmers in Makueni County, Kenya. The project has 5 specific objectives two of which were a focus of this study *i.e.* Specific Objective 3: To examine norms that hinder women from owning and using livestock, participating in and benefiting from the livestock vaccine value chain and utilizing vaccines to improve the productivity of their livestock and; Specific Objective 4: To map out actors who influence norms and practices that affect women's engagement.

A community's shared standards of acceptable behavior as well as gender norms and relations may affect an individuals' capacity to own, use livestock, engage and participate in livestock production and vaccine value chain. For instance, dynamics in livestock ownership, gender roles and decision making at the household and community level may have an effect on access to relevant information, decision making on product sale, incentives from relevant actors or motivation to engage in or participate in livestock production and veterinary services. With this bearing, the GIVE project team, through focus group discussions sought to identify the norms that hinder women from owning and using livestock, participating in and benefiting from the livestock value chain and utilizing vaccines to improve productivity for their livestock.

A clear understanding of key stakeholders/actors in the poultry production chain and their role in influencing uptake of the various technologies is important in the overall success of the project. Project implementation can be delayed or derailed if key stakeholders are not identified and or engaged from the outset. Cognizant of the numerous stakeholders involved in the poultry production chain within Makueni county and the different roles that they play, the GIVE project team also sought to identify, map and categorize the key stakeholders in the poultry production chain within the county, through gender disaggregated Focus Group Discussion (FGD) sessions with smallholder chicken farmers and mixed FGD sessions with local leaders. The exercise also purposed to establish the roles, level of importance, partnership and interrelationships of the various actors with the community.

2.0. Methodology

To identify norms that hinder women from participating in the poultry production chain and map out the stakeholders involved, qualitative data was collected through mixed and gender disaggregated Focus Group Discussions (FGDs) with smallholder chicken farmers and local leaders. Participants were purposively selected based on knowledge of subject matter and being indigenous members of the study site. Local leaders were considered to be cultural custodians, gatekeepers and knowledgeable of the institutions or actors that influence norms. A total of 18 FGD session (three sessions in each of the six intervention sites) were conducted and each FGD sessions took between 105 minutes and 120 minutes.

2.1. Identification of Norms and Practices

Eighteen (18) focus groups, six with leaders (men and women) and 12 with community members (gender disaggregated) were held to identify and discuss gender norms and practices (behaviors, social relationships, cultural expectations and controls) that hinder women from participating in livestock (chicken) production. A 20 to 30-minute participatory plenary session was held with each group with the following guide questions;

1. Type of chicken kept and purpose of chicken rearing? (Commercial, consumption, both, why the preference?)
2. Ownership of chicken in households (sole ownership, joint ownership, proportion of ownership between men and women, is it cross-cutting within the community?)
3. Chicken related tasks (what tasks, who performs them, decision on who perform chicken tasks, men involvement in the day to day management when they fully own chicken)
4. Benefits of owning chicken (who? what way? Shared benefits?)
5. Decision making dynamics (vaccine/drugs/feeds, markets, proceeds of sale)
6. Challenges to chicken production for women (at household level/community-expectations, behavior, markets)

2.2. Mapping of Stakeholders/Actors

A Venn diagram was used to map stakeholders (groups, organizations and people) in livestock production (chicken, goats and sheep) and actors who influence norms and practices that affect women engagement. The Venn diagram is a participatory tool that allows participants views and experiences on the most important aspects in the community such as, institutions, organizations, social stratification within these institutions, inter-and intra-relationships, collaborations among other things.

2.2.1. Materials for the Stakeholder mapping exercise

Flip charts, Manila paper (cut in circular shapes of different sizes), marker pens (of different colours), glue, sticky notes, notebooks, voice recorders and camera.

2.2.2. Mapping procedure

Mapping of the actors was conducted sequentially in a series of steps highlighted below:

2.2.2.1. Identification of the stakeholders

Brainstorming sessions were conducted and participants given the opportunity to identify and list all stakeholders in the poultry production chain with particular emphasis on actors who influence women participation in livestock value chain, while the facilitator wrote on a flip chart. Through this exercise, external and internal organizations, important individuals within the community and groups that are active in the community were identified and their specific roles (in relation to livestock production and changing norms), as well as target audience by gender and wealth identified.



Figure 1. Key stakeholders Identified by Participants in Kathonzweni Ward

2.2.2.2. Categorization of the stakeholders

After identification, discussants were allowed rank the actors based on how much interest and influence they have within the community with regard to poultry production. Trigger questions were used to guide and help identify a stakeholder's interest and influence on the community. The participants were then provided with differently sized manilla papers (cut in circular shape) and marker pens to label the actors/institutions based on their level of importance. The most important actors were captured on the largest circles, somewhat important actors on medium-sized circles and least important actors on the smallest circles. By the end of the exercise, each circle bore the name of an actor with the different sizes signifying the level of importance.

2.2.2.3. Populating the stakeholder's map

To populate the stakeholders map, discussants convened around a table, whereby they placed the labeled actors in the most appropriate location on the stakeholder's map represented by a large circle - signifying the community/ward boundary. The location of the different actors on the stakeholder's map was based on their ease of access and the relationship within the community. On this basis, the actors were either placed (i) inside the circle - for those that were deemed easily accessible to community members, (ii) on the boundary - for those deemed accessible to community members, (iii) outside but close to the boundary - for those deemed somewhat accessible and (iv) outside but far from the boundary - for those deemed to have little interaction with the community.

Table 1: Socio-demographic characteristics of FGD Participants

Sub-county	Ward	Type of FGD	No of participants			Av. age in yrs	
			Women	Men	Total	Women	Men
Makueni	Kathonzweni	FGD women	6	0	6	46.5	-
		FGD men	0	6	6	-	47
		FGD leaders	4	3	7	46.5	49
	Kitise	FGD women	6	0	6	45.6	-
		FGD men	0	5	5	-	34.8
		FGD leaders	3	3	6	41	59
Kibwezi West	Makindu	FGD women	6	0	6	42.1	-
		FGD men	0	5	5	-	37.6
		FGD leaders	4	2	6	45.7	58.5
	Kikumbulyu North	FGD women	5	0	5	41.6	-
		FGD men	0	5	5	-	52
		FGD leaders	4	4	8	49.2	50.5
Kibwezi East	Masongaleni	FGD women	5	0	5	38	-
		FGD men	0	6	6	-	57.1
		FGD leaders	5	2	7	42	50.5
	Mtito Andei	FGD women	6	0	6	42.3	-
		FGD men	0	5	5	-	47
		FGD leaders	3	2	5	47	39
Total			57(54.3%)	48(45.7%)	105	43.9	50.5

3.1. Barriers, Norms and Practices that Hinder Women from Participating Effectively in the Poultry Production Space

3.1.1. Barriers to women’s participation in indigenous poultry production

A number of challenges that women small holder chicken famers face were identified in the FGD sessions. The key ones included disease burden in chicken, low uptake of vaccines and reliance on ethno-medicine, social-cultural challenges, technical and economic challenges as well as marketing challenges as expounded in the sub-sections below.

3.1.1.1 Disease burden

Loss of birds to annually recurring Newcastle disease outbreaks and inability to re-stock upon experiencing such losses demotivates the smallholder farmer, as captured in the excerpts below:

“Women are willing to come together and develop themselves and more often here they do that through animal rearing. But it comes a time when diseases come and kill all their chicken which demotivates them, you can walk to a homestead and they have zero chicken, all because of death from these diseases” (Men FGD discussant, Mtito Andei ward).

“There are other disease outbreaks that kill women’s chicken other than the disease we recently vaccinated against (referring to Newcastle) even when vaccinated. So one challenge I want to say, giving an example of my own home and that of this man seated next to me, we had so many chicken before you brought the vaccines but they all died abruptly. So we need to know how many chicken diseases there are, and when the chicken are supposed to be vaccinated against” (Men FGD, Masongaleni ward).

One of the challenges that we face is lack of finances to acquire input like feeds and chicken drugs. Most of the challenges occur when there is an outbreak of diseases. Let us say for example you may need vaccines which require money and our place is very dry. You may lack a place where you can secure even casual labor, you may even have no food for your family. When there is an outbreak and your chickens are not vaccinated, they all die and this really

discourages you. This is similar in livestock; goats and sheep, but goats and sheep are somehow disease resistant and do well here. The death rate for chickens is very high” (Women FGD, Makindu).

Low uptake of vaccination and poor husbandry practices due to lack of knowledge and unavailability of NCD vaccine stocking outlets in their localities were also cited as challenges to indigenous poultry production among smallholder chicken farmers.

“Some people rear chicken with little knowledge on how to vaccinate so as to protect against certain diseases but the accessibility of the vaccines is also a challenge because the distant to where we get vaccines is far. For this reason, many people fail to vaccinate because they worry on vaccine viability after transporting it from Kibwezi to their homes due to the long distances and poor means of transportation. So they say, God will help. Even getting the other medicine like antibiotics to prevent other small diseases is a challenge due to money problems. Also many times women depend on men for monetary needs, who also have their own budgets and do not understand the need of taking care of the chicken through buying of vaccines, antibiotics” (Men FGD, Masongaleni ward).

Reliance on ethno medicine (ethno-vaccination) for disease prevention was also identified as a barrier to chicken production. Nearly all the FGDs reported that smallholder farmers and particularly those who kept local indigenous chicken relied mostly on herbs and other drugs meant for humans to prevent and treat chicken diseases. Being a trial and error, at times chicken survive while at other times they all die. Besides lack of income/capital and limited know-how on modern prevention methods (vaccines), past experiences of loss during certain months of year discouraged farmers from engaging in vaccination and modern methods of chicken husbandry and disease prevention. The belief that ‘we have always done this in a certain way’ hinders them from advancing:

“Additionally, one of the things I am discovering like a woman in chicken rearing is that, some of the men are typical Kambas. According to them, traditionally chickens were not bought any drugs. Such persons expect the way our fore parents used to do, we do it in a similar way. So if you bring the idea of buying the chickens drugs or anticipate certain disease outbreaks which need to be prevented prior to their occurrence, they ask you how the traditional people were preventing their chickens from diseases. They used to give chickens a certain herb, you are given a highlight of various plant herbs, you are taken back to tradition even with the knowhow that there are vaccines and drugs which are very effective for chickens and that there are some diseases that can be treated and others cannot” (Women FGD, Kikumbulyu North ward).

Change is hard, I mean for change to be accepted it takes time and it is hard. Someone will say what will we learn in those trainings, our grandfathers and grandmothers did this and were using herbs for example, we still do it and things have not changed. So when trainings are announced people tend to have the mentality that ‘I have been rearing chicken this way and I will still do that...’ I mean for us to change and do the required thing (sighs then chuckles). The main thing is that the knowledge has not penetrated well within our community (Leader FGD, Kikumbulyu North ward).

3.1.1.2. Structural, social and cultural barriers to poultry rearing by women

Unitary model of ownership to collective model of ownership of birds has led to a number challenges for both men and women in chicken rearing. The FGD discussions established that men tend to take a back seat in the day to day management of chicken regarding it as ‘women property’. Additionally, personalization of chickens by women “my chicken” emerged to be a contributing factor to the challenges women face in chicken rearing as this in itself discourages men’s support/participation in the chicken rearing activities. This is as summarized in the excerpt below:

“At times, we women give ourselves a lot of power of which men get bitter because of this. That is what at times causes conflicts between men and women. Women mostly cause this problem. A man hates bearing all the time the woman saying “my chickens”, you have personalized them. He concludes it is you and your chickens. Our incomes

here are low and largely depend on rains. If it does not rain you will not have food to eat and also not have food for the chickens. If there is cooperation, you cannot lack food to eat and for the chickens. So if it is for us women, we need first to respect our men such that he knows that you value him and the chickens belong to the two of you.” **(Women FGD, Mtito Andei ward).**

We as men have left the issue of chicken to women, although a normal man will buy drugs or feeds because they know the value which is like home insurance. The thing is, as a man there are things I cannot do such as going to the market to actually sell a chicken, she will sell and then bring the money home, for the homes with unity they sit and plan together or a woman reports to the man on how she used the money” **(Men FGD, Mtito Andei ward).**

“Most of the men from our area assume that chickens belong to women and they are not concerned about them. Furthermore, even after you (the women) sell I (referring to men) will not demand anything from you. That is what they assume. That is like a culture for most men from this area that chickens belong to women. A woman is not expected to tell a man that she has gone for casual job somewhere to get money to buy chicken vaccines. You are not expected to tell a man such words, they hate it” **(Women FGD, Kikumbulyu North ward).**

The minimal engagement coupled with the Kamba tradition that associates women with chicken rearing makes men to assume the back seat and minimize their contribution to the venture. This has negative implication on the chicken rearing venture and cooperation within the home as stated in the excerpts below;

“Our Kamba tradition removed men from chicken and upgraded them to goats and cattle because those are their resources. Men have abandoned the activity and many at times show no concern to women due to belief that chicken belong to the woman. When men are asked for money they, this is your project look for ways to finance your project” **(Men FGD, Kikumbulyu North ward).**

Additionally, the situatedness of chicken production as ‘women’s domain’ adding to their multiple roles affects their participation and full potential in improving chicken production. In as much as women have the freedom to attend training or search for markets for their chicken, ability to handle other increased flocks and household chores diminishes. In addition, the technical know-how, connections to financial institutions and other development agencies that happen through groups becomes a challenge as women have limited opportunities to benefit from such institutions either because of increased household chores and at times being denied permission by men to leave the homestead, and in case they leave, conflicts arise.

“Most men do not like their women leaving home, I am not sure what it is, a tradition or something. You find that if there is a meeting somewhere a man will say it is a waste of time. So most women have been confined at home and not allowed to attend such. He will refuse you permission but will not attend the training himself” **(Leaders FGD, Kathonzwani ward).**

“Inability to leave home because of the responsibilities, since men have left to take alcohol and Marijuana ‘mguka’ so the woman, even where she has the freedom knows that with the task of looking after goats, cattle, chicken and children at home, if she leaves then everything will crumble even when she knows that the man will bring nothing at home in the evening” **(Men FGD, Mtito Andei ward).**

Inequitable power relations in decision making and access to resources in favor of men was also cited as an impediment to women’s participation in the poultry space. Men own chicken by virtue of being men or household’s heads. They also dictate on what happens to the proceeds from sale of chicken limiting women capacity to decide on whether to purchase feeds, drugs or vaccines or to increase her flock. Additionally, having a space to construct a proper chicken house was reported a challenge in most of the FGDs for the woman since they have limited say on land ownership and use. This is as supported by interview excerpts below;

Men dictate on proceeds from sale of chicken. They say chicken are their resources and the woman is also their resource even when it is the woman who takes care of these resources including the goats. Women have the freedom to decide to sell a chicken, but a good woman will sell, inform the husband on how much she sold the chicken, how she used the money and how much is remaining. Then the man will tell her to keep the remaining money or take it from her” (Men FGD, Mtito Andei ward).

“It is a story that I was given by another lady when we were doing the vaccination. She had very healthy chickens and with a lot of weight. When I asked her why she has not kept many chickens, she told me the biggest challenge is because she cannot sell one. Her husband is the one who comes to sell the chickens and once he goes you do not know how the money from the sale is used. She knows how to rear them but does not benefit from them. If she keeps on asking for the money it gets in to a fight” (Women FGD, Mtito Andei ward).

“The other challenge is that women do not have equal decision making powers with men. So a woman may decide to take a piece of land to construct a chicken house while on the other hand the man has a different plan for that piece of land. So, women do not make decisions pertaining land use. So you find that women do not have income sources nor power to make decisions over family resources which is a challenge” (Women FGD, Kathonzweni ward).

Although this was not commonly reported among women and leader groups, lack of proper planning or not having a clear goal by women when rearing chicken was commonly reported among men FGDs as among the reasons of continued low chicken productivity in most households in the area;

“Women keep chicken without a direct goal provided they have many chicken. They are not like men who will rear a goat for two years, sell it to buy something else. Instead, the woman, says I just want to have chicken and often they will refuse us men to sell the chicken with the objection that they have other plans then a wave of disease comes and kills all the chicken. This is a loss for the family” (Men FGD, Kikumbulyu North ward).

Women’s low income levels (mostly casual labour and small businesses) or financial dependency on their spouses affect their participation or engagement in various avenues that promote increased chicken productivity. Strict division of labour at homes (even when the women have freedom to leave home at will), limit women’s mobility to even attend trainings or social gatherings that would otherwise enhance their access to credit facilities (often given through groups not those individually producing), access to information or benefitting from interventions meant to enhance livestock production or marketing capacities.

There are homesteads whereby it is difficult for the women to say that they have to leave home to attend chicken related training probably because the man is not pleased or has never had interest in whatever the woman is talking about. So they deny them the permission and argue that they started rearing chicken long ago but does not see any visible profit and for that reason he does not see the reason to attend the training. Some get permission others do not” (Leaders FGD, Kikumbulyu North ward).

Lack of freedom to seek off-farm income generating activities. Women cannot leave home because of the many activities and responsibilities they have/ assigned to them and if they have to leave, then it is just briefly and then come back home. Men think they are the only ones supposed to leave home at free will but we link this to the lack of knowledge on the importance of those trainings in the long run (Leader FGD, Kikumbulyu North ward).

3.1.1.3. Technical and economic challenges

Limited access to long-term training on changing chicken production norms were some of the technical challenges that affect women’s involvement in the poultry production.

“I wanted to say that one cannot be successful in chicken rearing without the knowledge on how to rear them. So if we could get people to train a few of us on chicken rearing, this could really help. You can be having financial resources but without the knowledge you cannot rear chickens. This is a challenge for the women because they are mostly the people who stay with the chickens. At times they are even denied the opportunity to go to training even when the trainings are done for free” (Leaders FGD, Kitise ward).

“Another thing is that most women lack training on proper chicken care, they only know of releasing chicken in the morning, let them scavenge for food wherever they know. Most people are not aware that chicken are treated or whether chicken feeds are bought from the market” (Men FGD, Masongaleni ward).

Inability to construct up to standard chicken housing structures

“We lack proper houses to confine our chicken and that means they loiter around from one house to another. You find that one woman may have the means to properly take care of her chicken but the other cannot, so these movements from one house to another are not good and they contribute to spread of diseases due to eating random things. So containing them in the required manner is still a challenge” (Men FGD, Masongaleni ward).

“Lack of capacity to build a standard structure is a challenge to increased chicken productivity for women farmers. You would find that women want such a house to maybe transition only subsistence to both subsistence and commercial chicken rearing but due to lack of starting capital they stagnate at rearing for just home consumption” (Leader FGD, Kikumbulyu North ward).

Lack of motivation (incentives) from most of capacity building trainings offered by various development institutions and intervention programmes limit the number of attendees. The common believe that people have to be compensated for attending these trainings even when offered for free also insinuate different motives for attendees who, may or may not be the direct beneficiaries or implementers of the offered services, hence affecting the overall impact of such programmes.

Today, if you look keenly you will realize that village elder, assistant chief or chief Barrazas, are not attended by all people because there is no motivation. People will be motivated if they, in addition to the training, get to go home with salt or an extra tangible thing...this is a mentality and ignorance that people have that means they miss information or certain trainings that would be helpful to them” (Men FGD, Masongaleni ward).

Insufficient knowledge on proper chicken husbandry /good chicken breeds

Some women lack sufficient know-how on how to best care for their chicken and for that reason you find that they can rear chicken, fall sick but are not aware on how to treat them and this drags them behind every now and then. Additionally, they do not even know the best breed to keep because the local breeds chick takes long to mature hence no immediate profit (Leader FGD, Kikumbulyu North ward).

Inappropriate packaging of chicken drugs/vaccines was also reported to a challenge for women in chicken rearing. It was reported that the least package size available in the market was 100 chickens dose which farmers felt uneconomical with majority of them being smallholder farmers having utmost 20 birds. This is as exemplified in the excerpt that follows;

“There is one thing that lacks when it comes to chicken rearing and it cuts across for all family members. There is lack of proper collaboration among family members on the ownership of a certain projects. You find that if it is the woman who has started a certain project for example poultry keeping, you find that she is the only person concerned looking for the chicken feeds, eeh...everything. And even in times when she lacks finances, you find that the man is not willing to support her because it is her project. Likewise, if a man initiates his own project, even the woman would not be willing to support her” (Leaders FGD, Kitise Ward).

“You may find that I have let us say like twenty chickens. When you go to the agro vet to buy vaccines for the chickens, you realize that the least package size is for 100 birds. You find that if I buy the 100 dose to go and vaccinate my twenty chickens it is a loss. So the other challenge in chicken rearing is the packaging of these vaccines. So suppose we could lower package sizes for the drugs, chickens rearing would be better” (Women FGD, Makindu Ward).

3.1.4. Marketing related barriers

High level brokerage which undermines profitability, lack of readily available markets, long distances to the market centers and lack of proper means of transport, particularly for the women put them at a vulnerable position with the brokers taking advantage and showing up at farm gates and villages. Though smallholder farmers are saved from the transportation cost, the buying prices are often very low though most of the farmers overlook this due to pressing needs, emergencies, or fear of loss of their chicken due to disease outbreaks.

“Their challenge is lack of market. Once women have trainings like this, they gain interest take loans from banks like KREP, buy chicken, chicken feed and vaccinate. But once the chicken are ready for market, brokers come in for a hen which normally would cost 650 shillings, a person with a motor cycle and crate tells you that the hen is worth 250 shillings, she will realize that this 250 shillings has no profit based on what she spent on rearing the chicken. Market is important but brokers are so many here” (Men FGD, Kathonzwi ward).

“You find that they will sell a chicken at 200 or 300 shillings to a broker, you see now with that money they cannot even buy chicken feed, so getting profit from the chicken to even get more inputs to care for the other chicken is an issue” (Men FGD, Mtito Andei ward).

“Lack of markets, for those who keep chicken as they have hard times getting markets and they have to endure bad prices from brokers and this is something that discourages the women very much” (Leader FGD, Kikumbulyu North ward).

Other challenges mentioned

- a. Alcoholism and substance abuse by partners and children who steal or recklessly sell chicken without permission to buy drugs or demand that the chicken be slaughtered for consumption. In other instances, men encourage the woman to take loans, then take the money and leave the village.
“There are those challenges that we undergo as women. You may want to rear chickens and get that your husband is a drunkard. When he comes, he may want to eat chicken and I had reared them for business purpose. This becomes a challenge because if every time he comes he demands a chicken to be slaughtered, this may make a woman to lose hope and stop rearing chickens” (Women FGD, Makindu).
- b. Fear of being disrespected, in that men think that once women succeed they may start disrespecting them.
- c. Women’s limited knowledge/low literacy levels that is partly contributed by the spouse. Some women are denied permission to attend to seminars aimed at improving their knowledge levels, since some of the men fear that the woman will be more knowledgeable than them. Other men think that women waste a lot of time attending the trainings, yet most men will not attend such training to gain the necessary knowledge.
- d. Cultural beliefs that inhibit development or visitation of various households e.g. Issuing land for building a chicken structure by NGOs or development agencies even in the best suited place sometimes is a challenge. There are people who say their soil is not touched by other people or do not allow strangers in their homesteads at all.

Most people do not like having their land stepped on by strangers or even welcoming people to their compounds, this is like 5-10% of the people in our area, they will have a nice chat here (referring to the training/meeting areas) then when you go to the villages then you get the real picture (Leader FGD, Kikumbulyu North ward).

- e. The feeling that mobilizers for the trainings tend to pick people who cannot implement what they have learned or disseminate the knowledge (Jealousy, status quo, centralize power)
“This is a challenge; few people are selected from each village since we cannot come all of us. Those who attend the training, return home and relax without passing the knowledge. This means the rest do not

benefit from all those trainings. So for this thing to benefit more women, it has to be brought close to them so that those who are often excluded are able to attend” (Men FGD, Masongaleni ward).

Women being denied the freedom to implement the knowledge acquired through various trainings was also reported to be a challenge as exemplified in the excerpt that follow:

Once women explain to their men on the training received in order to get their support on implementation, the men ignore them and the practicality of the training becomes a problem. Because of the traditions and norms that we have as Kamba people, men ignore because they think women are pushing their own agendas ...there are men who marry a woman who is a teacher and have her fired. It depends on why he married her, but here in Kikumbulyu ward, women are considered as housewives (Men FGD, Kikumbulyu North ward).

3.2. Actors in the livestock sector (chicken value chain) who influence norms

A total of 105 discussants comprising of 54.3% women and 45.7% men took part in the mapping exercise. The exercise identified both external and internal organizations, groups and individuals that have greater influence among community members and their specific roles in relation to livestock production and influencing norms. The actors identified across the six wards in livestock value chain especially chicken, sheep and goats are as shown in **Figure** below:



Figure 3: Actors that influence norms in the six (Wards) intervention sites

The above identified actors are further grouped into following categories: [1] Non-profit organizations/initiatives, [2] Service providers/markets, [3] Government financial initiatives and programmes, [4] Financial institutions, [5] Administration (Local and national government), [6] Collectives (Saccos, groups, cooperatives), [7] Development initiatives/programmes, [8] Government department and ministries, [9] Opinion shapers, [10] Community based organizations (CBOs) and [11] Information platforms. Collectively, 125 different actors/stakeholders under 11 categories were mentioned across all intervention sites (6 wards in 3 sub-counties). More actors were mentioned in women only FGDs than male

only FGDs across all three sub-counties. Considering the regions, more actors were mentioned in FGD sessions conducted in Kibwezi west sub-county (69 actors) compared to Kibwezi east (64 actors) and Makueni (65 actors) sub-counties (Table 2). The most prominent actors were in the “development initiatives” category – most of them being donor funded. Examples of actors under development initiatives include: NARIGP, UDO, ASDSP, BISEP, HAND-in-HAND that mostly work with registered groups, while others such as Watoto wa Dunia-NGO, Generation actors and AFYA 2 working with specific segments like orphans, vulnerable children, the poor and the needy. The second most prominent actors were in the “administration” category that comprised of local administrators (chief, assistant chief, ward and sub-county administrators, village elders/managers, among others) signifying their relative importance and high status accorded to them by community members in influencing norms and opinions within their respective jurisdictions.

Table 2. Category of actors/stakeholders in the poultry production chain across the 3 sub-counties.

Actor/stakeholder category	Makueni sub-county				Kibwezi East sub-county				Kibwezi West sub-county			
	M	F	L	ALL	M	F	L	ALL	M	F	L	ALL
1 Not for profit org/initiatives	4	3	5	8	5	6	6	8	3	5	2	9
2 Service providers/markets	3	4	2	6	5	5	7	9	5	9	4	10
3 Government financial institutions & programmes	0	2	0	2	0	1	0	1	0	1	0	1
4 Formal financial institutions	1	2	5	6	0	4	3	6	0	2	0	2
5 Administration (local & national govt.	7	6	7	10	6	6	9	9	7	6	8	10
6 Collectives (Saccos, groups, coops)	3	3	4	4	3	2	1	4	2	2	5	6
7 Development initiatives or programmes	5	9	6	13	7	9	8	16	3	9	8	13
8 Govt. departments & ministries	2	0	1	4	0	1	0	1	1	0	2	3
9 Opinion shapers	4	3	6	9	5	1	2	5	2	9	8	10
10 CBOs	0	0	0	0	0	1	1	2	0	0	0	0
11 Information platforms	0	1	3	3	0	2	1	3	0	1	3	5
Total	29	33	39	65	31	38	38	64	23	44	40	69

The least mentioned actor categories across all sites were: Community Based Organization (CBO) and government financial institutions/programs. Not a single information dissemination platform was mentioned in the men only FGDs across all intervention sites. A good number of actors were however identified under the “not for profit organizations, service providers and opinion shapers” categories as the main players in the poultry production space that influence women’s participation. The actors are presented per ward in the subsections below (Tables 3-8).

3.2.1 Identified Actors in Kikumbulyu North

In Kikumbulyu north ward, relatively more actors/stakeholders who influence norms and practices that affect women’s participation in livestock production were mentioned in women only FGDs (27) compared to men only (20) and leaders (24) FGDs (Table 3). Of the 27 actors cited in the women only FGDs, 16 (59.3%) were considered most important, 5 (18.5%) somewhat important and 6 (22.2%) least important to

community members. On the contrary, only 25% (5 out of 20) of the actors cited in the men only FGD were considered as being most important, 8 (40%) somewhat important and 7 (35%) least important. Similarly, 29.2% (7 out of 24) actors mentioned in the leaders FGD were regarded as being most important, 8 (33.3%) somewhat important and 9 (37.5%) as least important.

With regard to **accessibility** of the actors by community members, women only FGDs concurred that more than half the actors (62.9%) were easily accessible, 6 (22.2%) were accessible, 1 (3.7%) was somewhat accessible and 1 (3.7%) was not easily accessible. The trend was almost similar in the men only FGDs and also in the leaders FGD.

Actors under the administration category were popular as they were mentioned in all three FGDs in Kikumbulyu North – among them the chief, assistant chief, ward administrator, village administrator and village elder/manager, signifying their relative importance and high status accorded to them by community members. Likewise, NARIGP – a government of Kenya and World bank/International development association funded project that seeks to increase agricultural productivity and profitability in rural communities within Makueni and other select counties was mentioned in all three FGDs.

Women only and leaders FGDs appeared more informed about the development initiatives / programmes in the community as they listed 6 actors each, compared to men only FGD where just 3 actors were mentioned. Not a single financial institution or government driven financial programme in the poultry production space was cited by FGD discussants in Kikumbulyu North ward. Discussants in the leaders FGD, did not mention any actor under the opinion shapers category, while only the politicians were mentioned in the Men only FGD.

A number of actors directly involved in poultry (chicken) production space and who were involved in different aspects of poultry production like provision of vaccines and vaccination services, production inputs, extension services/advise, training and capacity building, marketing and bench marking services, were mentioned. The main actors include; County government of Makueni, AHAs, University of Nairobi, county vaccinators, NARIGP, GIVE research project, KARLO, KCEP and model farmers. It was reported that the county government provides free chicken and treatment, vaccines and vaccination services to chicken farmers and also conducts disease surveillance during disease outbreaks. In addition, the county government offers training on chicken husbandry and chicken diseases. It also provides farm inputs as well as advise on markets. NARIGP not only provides similar services but also offers free inputs and constructs houses for targeted groups (mostly community members in organized groups). KCEP provides subsidized inputs, while KARLO provides training on chicken rearing and markets. Model farmers offers one on one training and bench making services.

Another category of actors identified were those who contribute indirectly to improved chicken productivity by improving or changing norms and cultural barriers that hinder women's participation in livestock production.

In Kikumbulyu North, most actors who influence norms or address chicken production worked with all community members. However, discussants in the leaders FGD and men only FGDs felt that the University of Nairobi worked with specific individuals and poor households, respectively. Other actors like NARIGP, UDO, ASDSP, BISEP, HAND-in-HAND reportedly worked with registered groups, while Generation actors worked with poor people. Watoto wa Dunia-NGO and AFYA 2 worked with orphans, vulnerable children and the needy. Service providers like Eastmeat which provides markets for chicken farmers reportedly worked with individuals, while private veterinary officers were deemed to work with the rich.

Different actors were linked to each other based on their perceived working relationship. Most of the linkages were between actors in the administration and those in the development initiative categories. In

the leaders and men only FGDs actors in development initiatives/programs were mainly linked to local administrators at the county, ward and village level, while most linkages in women only FGDs, were evident among service providers. It was however evident that discussants mostly linked actors that they considered easily accessible or accessible.

Table 3: Identified Actors in Kikumbulyu North

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)
Not for profit organizations/initiatives									
Action Aid	1	2							
Aga Khan Foundation	3	3							
Red Cross	1	1	Group leaders				1	4	
INANDES				3	4				
Watoto wa Dunia				3	4				
Hand in Hand	1	1	CRVs,						
Generation actors							3	2	
Service providers/markets									
Agro-vets	1	1	Private vets, Model farmers, CVs, County vet officers,						
East Meat				3	3				
County Livestock Officer	1	2							
Government vet officers	1	2	Agrovets,	1	1	County dept. of livestock, GIVE, CVs			
County vaccinators				2	1	County vets, GIVE, Groups, Ward admins			
Private vet officers	3	1	Agrovets	2	1				
Community Vaccinators	1	1	Agrovets,						
Administration									
Development committees							2	1	Village & ward admins
Chief	3	1	Assistant chief	2	1	Asst. chief, GIVE, ward admin	3	2	Village elders, Asst chief, Nyumba Kumi, Generation actors,
Assistant chief	1	1	Chief, village elders,	2	1	Chief, village elders	2	1	Chief, climate change, village elders
Ward Admin	2	1	Village admins,	1	1	Village admin, GIVE, Village elders, County vaccinators, groups	2	2	Village admins, Dev committees, NARGIP, KCEP, Climate change
Nyumba Kumi							3	2	Village elders, Chiefs,
Village elders	3	2	Assistant chief, BISEP	2	1	Asst. chief, ward admins, community policy	2	1	Assistant chief, Nyumba Kumi, chief
Community policy				3	1	Village elders			
Project Management Committee							3	1	Village admins, NARGIP,
Village administrator	3	1	Group leaders, CRVs	1	1	Ward admin, cluster leaders, GIVE,	1	1	County agric dept, PMC, CHVs, Ward admins, Dev committees, Climate change, GIVE, NARGIP
Cluster leaders				2	1	Village admins			
Collectives									
Groups				2	1	County vaccinators, GIVE, NARGIP,			
Nyayo Poultry farmers				3	4				
Development initiatives and programmes									
GIVE Project				1	1	Chief, Groups, county vaccinators, village admins, ward admins, Dept. of livestock	2	2	Village admins
NARIGP	1	1	Group leaders	2	2	Groups	1	1	Village admins, KALRO, PMC, Ward admin, County agric dept
KARLO							3	1	County agric dept, NARGIP, KCEP

UoN				3	2		3	3	
AFYA 2	2	2							
SNV									
KCEP-CRAL	1	1					1	1	Village admins, County Agric dept, Ward admin
BISEP	1	2							
ASDSP	2	1	Group leaders,						
UDO	1	1	Group leaders						
Climate change							2	2	Assistant chief, village admin, ward admin
Government ministries and department									
County Dept. of Agric.							1	1	Village admins, KCEP, NARGIP, KALRO,
County dept livestock				1	2	GIVE, Govt. vet officers			
Opinion Shapers									
Group Leaders	2	1	Village admins, red cross, opinion leaders, UDO, NARGIP, ASDSP						
Politicians	3	4		3	3		1	2	Pastors
Clergy/Pastors	1	1					1	1	Schools, Politicians
CRVs	1						2	1	CHVs
CHVs							3	1	Village admin,
Community volunteers							3	1	CRVs
Opinion leaders	1	1	Group leaders						
Model farmers	1	1	Agrovets				3	1	
Information platforms									
Radio	2	2							
Schools							2	1	Pastors
TOTAL	27			20			24		

3.2.2 Identified Actors in Makindu Ward

In Makindu ward, relatively more actors were mentioned in the leaders' FGD (24) compared to women only (22) and men only (13) FGD sessions. Of the 22 actors mentioned in the women only FGDs, 12 (54.5%) were considered most important to the community, 6 (27.3%) somewhat important and 4 (18.2%) least important. Unlike the women only FGDs, only 23.1% (3 out of 13) in the men only FGD and 9 (37.5%) leaders FGD were considered most important.

With regard to accessibility of the various actors by community members, discussants in the women only FGD felt that most (63.6%; 14 out of 22) of the actors were easily accessible, 22.7% (5 out of 22) were accessible and 13.6% (3 out of 22) somewhat accessible. Similarly, 62.5% (15 out of 24) were considered easily accessible, 20.8% (5 out of 24) accessible and 16.7% (4 out of 24) somewhat accessible in leaders FGD. On the contrary, only 46.2% (6 out of 13) of the actors were considered easily accessible, 15.4% (2 out of 13) accessible, 15.4% (2 out of 13) somewhat accessible and 27.1% (3 out of 13) not easily accessible in the men only FGD.

Unlike in the women only FGD, no single actor in the financial institutions, government development initiatives and non-profit organizations categories were mentioned in the men only and leaders FGD sessions, save for Red Plus, (a local non-profit organization) that was cited in the men only session. Also, the men only FGD did not mention any actors in the collectives' category, while 6 actors were mentioned in leaders FGD and 2 in the women only FGD. Information dissemination platforms were only mentioned in men only (4 actors- among them social media platforms) and leaders (2 actors) FGDs.

Various actors that are directly involved in the poultry (chicken) production space that were mentioned in Makindu ward include: Redplus, GIVE research project, Kuku Chic and online platforms (Table 4). All the actors/institutions appeared to offer almost similar type of services to farmers among them training on good chicken husbandry practices, diseases, and marketing. In addition to training, Kukuchic provides

markets and a variety of chicken breeds to the chicken farmers at a subsidized cost while the online platforms not only provide training but also market linkages and referrals.

It emerged that most of the identified actors in Makindu ward work with all community members except; online platforms which target individuals, collectives (See table 3) which provide services to members, BISEP which works with women groups, KCEP which works with registered groups and the department of cooperatives which cooperatives only., The discussants also reported that financial institutions like equity and KCB bank work mostly with the rich, while FSA works with groups and rich individuals. Others like the women enterprise fund and GNCA church work with women groups and church members, respectively.

As was the case for Kikumbulyu North ward, linkage between different actors was more evident in the administration and development initiative categories. Actors in the administration category appear to work closely together as suggested by FGDs discussants from Makindu ward. Most actors in the development initiative category were linked to the county department of agriculture; suggesting a close working relationship between development initiatives and respective ministries within the Makueni County government. Considerable linkages were also drawn between various service providers and also with actors in the administration and government departments in Makindu ward.

Table 4: Identified Actors in Makindu Ward

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	*Level of importance	*Accessibility	Linkages (Who they work with)	Level of importance	Accessibility	Linkages	Level of importance	Accessibility	Linkages
Non-profit organizations/initiatives									
USAID	1	1	VCSP, VBAs						
Red Plus				3	4				
Government financial initiatives/programmes									
Women enterprise fund	2	2	Groups						
Financial institutions									
KCB	3	1	Groups						
Equity Bank	3	3							
Service providers/markets									
East Meat							1	2	Kuku chick
Empire feeds							2	2	Kuku chick
Kuku chick				2	4	Social media	2	3	East meat, kuku chick
County Agric. Officer	1	2	CGA, KCEP, Govt. vets						
County vet officers	2	1	Chief, Agriculture officers	1	1	CVs, GIVE			
Private vet officers	1	2							
Community Vaccinators	1	1	KALRO	2	1	GIVE, Vet officers	1	2	County dept. of agric
Administration									
Chief	1	1	Village elders, Asst. chief, Govt vets,	1	1	Asst. chief, GIVE	1	1	Asst. chief, village elders
Assistant chief	1	1	Village elders, chief	1	1	Chief, village managers	2	1	Village elders
Nyumba Kumi	2	1	Village elders						
Village elders/mangers	2	1	Chief, Asst. chief, nyumba kumi	2	1	GIVE, Asst. chief, Chief	2	1	Opinion leaders, chief
Collectives									
Self Help Groups	1	1	Women enterprise fund, GNCA				2	1	Merry go rounds, table banking
Merry – go round							2	1	SHGs
Table banking groups							2	1	SHG
SACCOs							1	1	
CGA	1	1	VBAs, VCSP, KCEP, agriculture officers				1	1	County govt. of agric,
Development initiatives and programmes									
GIVE Project				2	3	Vet officers, Asst. chief, village managers, CVs	1	1	
FIPS							1	1	County govt. of agric
KARLO	1	1	CVs						

KCEP-CRAL	1	2	Agriculture officers, CGA				3	3	County dept. of agric
BISEP							3	3	County dept. of agric
FSA	3	3							
GNCA	3	2	Pastors						
Government ministries and department									
County Dept. of Coop.							2	2	
County Dept. of Agric.							1	1	VBAs, FIPS, CGA, Lead farmers, CVs, BISEP, KCEP
Opinion Shapers									
Clergy/Pastors	2	1	GNCA	2	1	Makindu hospital, Schools	1	1	
VCSP	1	1	VBAs, CGA, USAID						
Community volunteers	2	3							
Opinion leaders							2	1	Village elders
Model/lead farmers							2	1	County dept. agric
VBAs	1	1	VCSP, USAID, CGA				2	1	County dept. agric
Information platforms									
Social Media				3	4	Kuku chick			
Schools				3	2	Pastors,			
Makindu hospital				2	2	Pastors, KMTC	2	2	KMTC, Pastors
KMTC				2	3	Makindu hospital	2	3	Makindu hospital
TOTAL	22			13			24		

***Rank for level of importance:** 1. Most important, 2. Somewhat important, 3. Least important

***Levels of Accessibility of the actors/institutions:** 1. Easily accessible, 2. Accessible, 3. Somewhat accessible, 4. Not easily accessible

3.2.3 Identified actors in Kathonzweni ward

In Kathonzweni Ward, a total of sixty-three (63) institutions/actors who influence norms and practices that affect women's participation in livestock production (chicken, goats and sheep) were identified. Women only FGDs mentioned the least number of actors (16) while leaders FGDs mentioned the highest number (28) and the men only FGD mentioned 19 actors (Table 5). Of the 16 actors identified in the women only FGDs, 11 (68.7%) were regarded as being most important, 3 (18.8%) as somewhat important and 2 (12.5%) as least important. Likewise, 18 out of 28 (64.3%) actors were regarded as most important in the leaders' 6 (21.4%) as somewhat important and 4(14.3%) as the least important. On the contrary less than half (47.4%) or 9 out of 19 actors mentioned in the men only FGDs were considered most important, 6 (31.6%) somewhat important and 4(21%) least important.,

Most (68.7%) of the actors were considered as easily accessible, 12.5% as accessible, 6.3% somewhat accessible and 12.5% not easily accessible in women only FGD. However, in the men only and leaders FGDs 42.1% and 35.7% were considered easily accessible, 10.5% and 7.1% as accessible, 36.8% and 42.9% as somewhat accessible and 10.5% and 14.3% as not being easily accessible, respectively.

On actors who influence norms that affect women's participation in livestock (chicken) production; leaders and men only FGDs unlike women only FGD, reported that that non-governmental development initiatives and programs played a key role. Men only FGD identified 5 of these actors while the leaders FGD identified 3. The actors mentioned included; World vision, Action Aid, CARITAS, Red Cross and WHO. Only world vision was regarded as being important in the women only FGD. Except world vision that was deemed as being most important in two of the 3 FGDs, the other four actors were regarded as being somehow important despite their huge impact. This could probably be due to the fact that they had already phased out of the communities.

The only category of actors mentioned across all the three FGDs was administration. Under administration, seven actors were identified as influencers of livestock production (chicken and shoats rearing) and also champions of general behaviour change and social issues such as nutrition, family unity, social cohesion and advocacy within the community. They included village administrator, Nyumba kumi officials, county government officers, and sub-ward administrator. Three out of the seven actors were mentioned in all the

three FGDs. Under the collectives' category, Kathonzweni Dairy cooperative and Kitise Rural development were only mentioned in men only and leaders FGDs (Table 4).

Out of the nine actors who influence norms and practices that affects women's participation in livestock production, women only FGD identified five (GIVE, Digi Farm, KCEP, FIPs, Conservation Agriculture), men only FGD identified two (KARLO, FIPs Africa), while leaders FGD identified four (ACRE Africa, SNEP, Africa sand dams, KCEP). Linkages between these actors and with other partners were only provided in the women only FGD with the county department of agriculture and some service providers (community volunteer and community vaccinator) being their close associates.

Women only FGDs appeared more informed than leaders and men only FGD about various government ministries and departments that influence norms within the community. The leaders FGD identified Information platform actors (Open Barraza, seminars/rallies and churches) as common collaborators with Administration actors on community mobilization and dissemination of information.

A number of actors that are directly involved in the chicken production space were identified in the FGDs and these included CARITAS, FIPs Africa, County department of livestock, ministry of Agriculture (MoA), SNEP, model farmers, GIVE research project and KARLO. While CARITAS gave free chicken, FIPs provides subsidized and at times free inputs mostly vaccines and chicken feeds, offers training to farmers as well as improved chicken breeds. GIVE research project, KARLO, department of livestock, MoA all offer trainings while SNEP, in addition to training offers chicken feed through subsidized prices. Just like in Kikumbulyu North, model farmers' offer marketing linkages/advice, bench marking and capacity building to other chicken farmers.

Most of the actors identified worked with all community members. However, conservation agriculture county agricultural department, FIPS and SNEP work with registered groups, while ASA, YARA, DIGI FARM, ACRE FARM, Tala and Branch work with individuals. Some like KREP work with both groups and individuals while KCEP and CARITAS work with women groups. World Vision works with the youth, women and the needy, while Action Aid works with women, youth groups and children). The discussants felt that the police work with the rich, while opinion leaders and village administrators work with few people who are known to them. The Kathonzweni dairy cooperative only works with its members.

The actors under administration category seemed to work closely with each other as demonstrated in all the three FGDs. (Table 4). Development initiatives and programmes were largely linked with government ministries and some with opinion shapers (in the women only FGD). Non-profit organizations and service providers were linked with the county government.

It was however noted that r that these linkages were not based on informed knowledge but on observed behaviour (who they see collaborating with while delivering the service or reinforcing terms of agreement), for instance, development initiatives, non-profit organizations and programmes have to go through administration before reaching the grass root person.

Table 5: Identified Actors in Kathonzweni Ward

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)
Not for profit organizations/initiatives									
World Vision	2	3		1	3		1	3	County government
Action Aid				2	3		2	3	County government
WHO							2	3	
Redcross				3	3				
CARITAS				2	2				
Financial Institutions									
Jirani Smart							1	3	
ASA							1	4	
Tala							3	4	
Branch							3	4	
KREP				1	1	Police, Ass-chief	2	3	Kathonzweni Dairy cooperative
YARA	3	4							
Service providers/markets									
Private vet officers				1	1	County government			
Community Vaccinators	1	1	Department of Vet, GIVE Project	2	3				
Administration									
County government				1	1	Village managers, chief, Ass-chief, KRD, Private vet, CV, Sub-ward admin,	1	1	CARITAS, Action Aid, WHO, Ministry of Gender, culture and social services, Village Admin, World Vision, ToTs, model farmers
Chief	2	1	Assistant chief, village elder	1	1	Pastors, county government, sub-ward admin, police, Ass. Chief, opinion leaders	1	1	Elders, village elders, open Barazzas, Nyumba kumi, Ass. Chief, CHV, clergy,
Assistant chief	1	1	Chief, village elders,	1	1	Barazzas, opinion leaders, police, village managers, pastors, county govt, chief, KREP/FSA	1	1	Chief, village elders/managers
Nyumba Kumi	1	1	Village managers				1	1	Chiefs,
Village admin							2	1	County government
Sub-ward admin				1	1	Chief, county govt			
Village elders/managers	1	1	Ass-chief, Nyumba Kumi, chief	1	1	Ass-chief, county govt	1	1	Chief, Ass-chief
Collectives									
KRD				2	3	County govt	1	3	
Kathonzweni Dairy Cooperative				3	4		3	3	KREP
Development initiatives and programmes									
GIVE Project	1	1	Community vaccinator, department of livestock						
DIGI FARM	3	4							
KARLO				3	3				
SNEP							3	3	
ACRE Africa							2	3	
Africa Sanddam (Mukusya)							1	4	
KCEP-CRAL	1	1	Department of Agriculture						
FIPS Africa	1	1	Community vaccinators, community volunteer	3	4		1	2	
Conservation Agriculture	2	2	Ministry of Agriculture,						
Government ministries and department									
Department of Gender, culture and social services							1	2	County government
Ministry of Agriculture									

County Dept of agriculture and fisheries	1	2	Community volunteer, department of Vet, conservation Agr.						
County Dept of Livestock Veterinary	1	1	Community volunteer, community vaccinator						
Opinion Shapers									
Model Farmers							1	1	County govt, Nyumba Kumi
Politicians (MCA)	1	1	Community volunteer						
Clergy/Pastors				1	1	Chief, Ass-chief			
CHVs							1	1	Chief
Community volunteers	1	1	Department of livestock, agriculture, MCAs						
Opinion leaders				2	3	Chief, Ass-chief			
Trainer of Trainers							2	1	County government
Elders							1	3	Chief
Information platforms									
Open Barrazas				2	2	Ass-chief, chief, police	1	3	Chief
Pastors/clergy (churches)							1	1	Chief, Seminars/crusades,
Seminars/rallies							1	3	Pastors/crusades
TOTAL	16			19			28		

3.2.4 Identified actors in Kitise Ward

A total of 49 institutions/actors who influence norms and practices that affect women's engagement and participation in livestock production (chicken, goat and sheep) were identified in Kitise ward with women only FGD mentioning relatively more actors (20) than local leader (16) and men (13) FGDs (Table 6). In the women only FGDs, half (50%) the actors were regarded as being most important, 8 (40%) as somewhat important and 2 (10%) as least important. On the contrary only 30.8% (4) actors were regarded as most important, 4(30.8%) as somewhat important and 5(38.4%) as least important in men only FGDs. In an almost similar trend, leaders identified 37.5%(6) as most important, 4(35%) as somewhat important and (6)37.5% as least important.

On accessibility of the actors by the community members, an almost similar trend was observed in both the men only and leader FGDs, with 53.8% and 50% of the actors in the men only and leaders FGD being regarded as being easily accessible, respectively. Only 40% of actors were considered easily accessible, 10% accessible, 35% somewhat accessible and 15% not easily accessible in women only FGDs. The most common category of actors mentioned across all the FGDs were collectives with KRD and ten poultry producers cited in all three FGDs.

Discussants in women only FGDs demonstrated being more aware of financial institutions, initiatives and programmes by citing three actors: Tetheka Fund, Uwezo Fund and Jirani Smart while the leaders and men only FGDs did not mention any. Likewise, three of the five service providers were mentioned in the women only FGD, while the men only FGD only identified one service provider (extension officers).

In addition, discussants in the leaders and women only FGDs were more informed about the non-profit organizations and programmes within their community as they were able to mention three out of the four actors identified (*i.e.* Lutheran Relief, Action Aid, world vision, MESPT). However unlike leaders FGDs, discussants in the men only and women only FGDs appeared to more informed on the development initiatives and programmes within their community (Table 5).

County department of gender and social services was the only government department mentioned and regarded as an important actor by discussants in the leaders FGD. The discussants also noted that the department of gender and social services not only champions for behaviour change at the family level but is also an enable of collectives through advocacy, sensitization and ease of registration process.

Four actors under the category of opinion shapers among them clergy/pastors, group leaders, CHVs and politicians were identified in the FGDs. Three out of the four opinion shapers were identified in the men

only FGDs. These actors were reportedly involved not only in changing norms and practices that affect women in livestock production but also in other general aspects of wellbeing like education, nutrition, poverty alleviation among others. Leaders and women only FGDs mentioned only a single actor each.

In Kitise Ward, FGD discussants identified eight actors that are directly involved in the chicken production space. These are: NARIGP, Ten poultry producers, SNV, Agro-vets, KCEP-CRAL, County department of livestock, ASDSP, CGA (Table 5). All eight actors identified offered a common service i.e. training of farmers on proper chicken rearing practices. Besides training, KCEP-CRAL, NARIGP and CGA provide input to farmers, with only NARIGP offering the inputs to registered groups for free and also constructs chicken houses for the same groups.

A number of actors who contribute indirectly to poultry production by influencing of norms that hinder women from participating in the livestock production were also mentioned. A number of actors under the administration and opinion shapers categories were identified as critical facilitators of information which contribute to the desired change in farmers. Non-profit organizations and initiatives that focus on various development aspects within the community were also regarded as significant contributors to behavioral and cultural change.

Financial institutions that extend credit facilities to community members appeared to be more important to women, as they were only mentioned in women only FGD. In nearly all FGDs, participants attributed this to more women than men, being part of local informal or formal groups which are a prerequisite for these financial institutions (Table 5) to offer credit facilities.

In terms of who the actors work closely with in the community, most of the identified actors reportedly worked with all community members except, Uwezo and Tetheka fund which work with women and youth groups, World vision which works with low income women, ASDSP and NARGIP which work with registered groups.

Linkage between or among actors/institutions was associated with kind of services offered to community members. For instance, Kitise Rural Development works with extension officers, while NARIGP works with extension officers. This is an indication that the services offered, goal of the initiative and the targeted audience dictate the categories of actors that work together.

Table 6: Identified Actors in Kitise Ward

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	*Level of importance	*Accessibility	Linkages (Who they work with)	Level of importance	Accessibility	Linkages	Level of importance	Accessibility	Linkages
Non-profit organizations/initiatives									
Action Aid	1	3	Local administrators	3	2	KRD, ward admin chief, extension			
World Vision	1	2	Local administrators, PULA Advisors						
Lutheran Relief	2	4					1	2	KRD, County govt
MESPT-DANIDA							3	4	Ten poultry, county govt
Government financial initiatives/programmes									
Uwezo Fund	1	2	Tetheka Fund						
Tetheka Fund	1	3	Uwezo Fund						
Financial institutions									
Jirani Smart	2	3							
Service providers/markets									
Agro-vets	3	1	AHAs						
Livestock Officer	1	1	KRD, SNV, NARIGP						
Animal health Assistant	1	1	Agro-vets				2	1	KRD, County govt,
CVs							3	1	KRD, County govt,
Extension officers				1	2	NARIGP, KCEP, ACTION AID, politicians			

Administration									
Chief				3	1	Action Aid, Clergy, Nyumba Kumi, Ward Admin	1	1	KRD, Village elders, Lutheran Relief, Clergy
Local administrators	1	1	Action Aid, World Vision, Development committees						
Nyumba Kumi				3	1	Chief			
Village elders/mangers							1	1	Chief
Development committees	1	1	Local administrators						
Ward admin				1	1	Chief, Extension, KCEP,	3	4	County govt
County govt							1	1	Department of culture and social services, ASDSP, MESEPT, CVs, AHAs, MCAs
Collectives									
KRD	1	1	Group leaders, KARLO, CGA, Livestock officers	2	1	Ten poultry, CHVs, Extension,	1	1	CVs, Clergy, CGA, ASDSP, Chief, county govt, CHVs, AHAs, Lutheran Relief,
Ten poultry producers	2	3	SNV	1	2	NARIGP, KRD,	3	3	County govt, ASDSP, MESEPT,
CGA	2	3	Group leaders, KRD				3	4	KRD, County govt,
Development initiatives and programmes									
PULA advisors	2	3	World vision						
NARIGP	2	3	Group leaders, livestock officers	1	2	Ten poultry producers, extension	2	1	County govt
DIGI FARM	3	4		3	4				
KARLO	1	1	KRD						
SNV	2	4							
KCEP-CRAL				3	4	Extension, Ward admin,			
ASDSP							3	4	Ten Poultry, County govt
Government ministries and department									
Department of culture and social services							2	3	County government
Opinion Shapers									
Clergy/Pastors				2	1	KRD, Group leaders, chief	1	1	Chief, KRD
Group leaders	2	1	SNV, CGA, NARIGP, KRD	2	1	NARIGP, KRD, clergy			
CHVs				2	1	KRD			
Politicians (MCA)						Action Aid, KCEP, Chief, extension,	2	2	County govt
Total	20			13			16		

3.2.5 Identified Actors in Mtito Andei Ward

In Mtito Andei ward, more actors (27) were mentioned in women only FGD compared to leaders FGD (23) and men only FGD (18). Of the 27 actors cited in the women only FGD, 13(48.2%) were considered to be most important, 7 (25.9%) somewhat important and 7 (25.9%) least important to the community. Likewise, only 30.4% (7 out of 23) actors mentioned in the leaders FGD were considered most important, 7 (30.4%) somewhat important and 9 (39.2%) least important. On the contrary, up to 66.6% (12 out of 18) of the actors cited in the men only FGD were considered most important, 5(27.8%) somewhat important and 1 (5.6%) least important (Table 7).

The ease of accessibility of the actors had a direct relationship with the level of importance of the actor to the community. Actors considered to be most important to the community members were also termed as easily accessible in Mtito Andei Ward. In the women only FGD, 14 (51.9%) of the actors were considered easily accessible, 4 (14.8%) were accessible, 2 (7.4%) were somewhat accessible and 7 (25.9%) were not easily accessible. An almost similar trend was observed in the men only FGD where 10 (55.6%) were considered easily accessible, 4 (22.2%) accessible, 2 (11.1%) somewhat accessible and 2 (11.1%) not easily accessible. The same was also evident in the leaders FGD where 13 (56.5%) were considered easily

accessible, 4 (17.5%) accessible, 3 (13%) somewhat accessible and 3 (13%) not easily accessible by the leaders.

Four (4) out of all actors were mentioned in all three FGDs. These actors were from the administration category and included: the chief, sub-chief, village elder and Nyumba kumi officials – and all were considered as being most important and easily accessible to the community. Other actors mentioned across the three FGDs were the government vets (Service providers’ category) and GAA which is a development initiative.

Linkage between different actors was provided mostly in the administration and development initiative categories. In the men only and leaders FGDs, actors in development initiatives/programs were mainly linked to local administrators at the county, ward and village level, while most linkages in women only FGDs, were evident among service providers. Generally, linkages were mostly provided for actors who were deemed easily accessible or accessible.

A number of actors from the not for profit organizations category were said to play varied roles in promoting poultry production. World Vision and Hope worldwide for instance offered training on chicken husbandry and chicks support to needy farmers. Likewise, NARIGP and GIVE project played a similar role of training farmers on good chicken husbandry. In addition, NARIGP constructed chicken housing structures for selected groups and financed the acquisition of chicks, feeds and inputs required by the groups. Other actors in the service provision category like agricultural officers, private and government vets, extension officers, and community vaccinators were also important to the community in promoting poultry production. These service providers were reported to be core in training, advisory purposes, vaccination and treatment of chickens for the farmers. Only two actors i.e. the churches or Faith Based Organizations and elders were mentioned and reported to have influence on norms and cultural behavior within the community.

Most actors mentioned in Mtito Andei ward were all inclusive as they worked with all community members. Only Hope Worldwide and Kamene Foundation were said to work with the needy, while private vets were reported to work with the rich. Merry-go- rounds was the only actor identified and reported to work with women only. Other actors like NARIGP, KCEL, KCEP and Heifer International were reported to be working with registered groups of both men and women.

Table 7. Identified Actors in Mtito Andei Ward

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)	Level of Importance	Accessibility	Linkages (Who they work with)
Not for profit organizations/initiatives									
World Vision	1	4	Hope World wide						
Action Aid				1	4	Chief			
Lutheran Relief	3	4	Heifer International						
Caritas	1	1	Agricultural officers				3	2	
Hope World wide	2	2	World Vision						
Kamene Foundation	2	1		1	1	Chief, Sub-chief			
Service providers/markets									
Agricultural Officers	3	3	County Vets,KALRO	2	1				
Private Vets	1	1		2	1				
County Vets	2	2	Agricultural Officers	1	2		3	3	
CVs	1	1	Chief	1	1				
CEV							3	3	
CRVs							3	2	
Extension Officers							3	1	Chief, KCEL-C

Service Providers							3	2	SHGs
Administration									
Chief	1	1	CVs, Sub-chief, Village elders	1	1	KCEP, KWAO, Sub-chief, Community policy, CDF, Kamene Foundation, Development committee, Action Aid	1	1	CDF, GIVE, Su Administrator, officers,
Sub-chiefs	1	1	Chief, Village elders	1	1	Chief, Village elders, Development committee, GAA	1	1	Chief, Village E administrator
Village elders	1	1	Sub-chief, Nyumba kumi	1	1	Sub-chief, Development committee, Nyumba kumi	2	1	Sub-chief, Nyur CRVs
Nyumba Kumi	1	1	Sub-chief	2	1	Village elders	3	1	Village elders
Village Administrators	1	1	WEF, Tetheka, Uwezo Fund				1	1	Sub-chief, NARIGP, Deve committee,
Development Committees				2	1	Chief, sub-chief, Village elders	2	1	Village administr
Community Policy				2	3	Chief,			
Ward Administrators							1	1	Sub-county Adr
Sub-county administrators							1	1	
Collectives									
Table Banking				1	2	Merry-go-round			
Merry-go-rounds				1	2	Table banking			
SHGs							1	1	Jirani Smart, GI Providers
Development initiatives and programmes									
GAA	1	2		1	2	Assistant Chief	2	3	
KARLO	2	1	Agricultural officers				3	4	
KCEL	2	3							
KWAO				3	4	Chief			
KCEP				1	3	Chief	2	2	Extension offic
NARIGP							2	1	Village Adminis
GIVE							2	1	SHGs
Heifer International	3	4	Lutheran Relief						
Community based organizations (CBOs)									
CBO (Not specified)							3	4	
Opinion Shapers									
Churches	1	1					2	1	
Elders	1	1							
TOTAL	27			18			23		

3.5.6 Identified Actors in Masongaleni Ward:

In Masongaleni ward, more of the actors who influence norms and practices that affect women's participation in livestock production were mentioned in leader's FGD (25) compared to both men only and women only FGDs with each mentioning (21) actors. Of the actors listed in the leaders FGD 40% (10 out of 25) actors were regarded as being most important, another 10 (40%) as somewhat important with 5 (20%) being regarded as least important (Table 8).

On the actors' accessibility to community members, discussants in the leaders FGD reported that 8 (32%) actors were easily accessible, 8 (32%) were accessible, 7 (28%) were somewhat accessible and 2 (8%) were not easily accessible. Similarly, in the men only FGDs 7 (33.3%) of the actors were considered easily accessible, 4 (19%) accessible, 7 (33.3%) somewhat accessible and 3 (14.4%) not easily accessible. Discussants in the women only FGD felt that 10 (47.6%) of the actors were easily accessible, 9 (42.9%) were accessible, 2 (9.5%) somewhat accessible. None of the actors was considered as not being easily accessible.

Categories of actors that mostly featured in all the three FGDs in Masongaleni ward were: administration, development initiatives/programs, service providers and non-profit organizations. Actors under the administration category included the chief, assistant chief and village elder/manager. The other actors

mentioned in all three FGDs were NARIGP and GIVE project under the development initiative category, private vets under the service providers category and Red Cross under the not for profit organizations category.

Linkage between different actors were evident mostly in the administration and development initiative categories. Some of the actors who were mentioned and are involved in the promotion of poultry production in Masongaleni Ward are: KCB, Hope Worldwide, NARIGP, GIVE project, Private and Government Vets, Agricultural officers and brokers. Some like NARIGP, Hope Worldwide and Agricultural Officers were reported to play a key role in training chicken farmers on good chicken husbandry, while others like Hope Worldwide supported the farmers especially the needy ones with chicks. Besides training, NARIGP also supported farmer groups by constructing chicken housing structures and financing acquisition of necessary inputs. Financial institutions like the Kenya Commercial Bank was said to provide loans to chicken farmers necessitating procurement of chicks and relevant chicken production inputs. The bank also played a key role of linking farmers to chicken market. Similarly, brokers provided market for chickens albeit at very low prices.

Schools, churches and elders were some of the key influencers of the norms and cultural behaviors identified within the community.

With regard to working relationships, Caritas, NARIGP, KCEP, and Lutheran relief were reported to work closely with select registered groups only, while all other actors mentioned in Masongaleni FGDs were said to work with all community members; both men and women included.

Table 8. Identified Actors in Masongaleni Ward

Actor/institution	WOMEN			MEN			LOCAL LEADERS		
	*Level of importance	*Accessibility	Linkages (Who they work with)	Level of importance	Accessibility	Linkages	Level of importance	Accessibility	Linkages
Non-profit organizations/initiatives									
World Vision							2	2	Agricultural Officers
Compassion International							2	2	Village elders, Nyumba Kumi, Community policy
Lutheran Relief				1	3	Chief, Ministry of agriculture	2	3	Agricultural Officers
Red Cross	1	1	Chief, Group Leaders, Sub-chief, Village elders	1	3	Chief, Ministry of agriculture	1	3	Agricultural Officers
Caritas							2	2	Agricultural Officers
Hope World wide				2	2	Chief			
Government financial initiatives/programmes									
Uwezo Fund	2	2	Group Leaders, JEPE						
Financial institutions									
Jirani Smart	2	1	Merry-go-rounds						
SNEP	2	2	Group leaders						
JEPE	2	2	Group Leaders						
KWFT	3	2	Group Leaders				2	3	KCB, FSA
FSA							2	3	KCB, KWFT
KCB							3	3	FSA, KWFT
Service providers/markets									
Agricultural Officers	2	1	Red cross				1	2	Red cross, World Vision, County Vets, Lutheran Relief, Radio, Caritas, Kenya Forest, KCEP-Cral,
Private Vets	3	3		3	3		2	1	
County Vets							1	2	Agricultural officers, GIVE,, NARIGP, Radio
Brokers				2	1				
Administration									
Chief	1	1	Sub-chief, MCA, Red cross, GIVE	1	1	Sub-chief, Red cross, School, GIVE, NARIGP, Ward admin, Village admin, MCA	1	1	GIVE, Sub-chief, Village elders, Nyumba Kumi, Community Policy

Sub-chiefs	1	1	Chief, Village elders, Red cross, GIVE, MCA	1	1	Chief, Village elders, Schools, GIVE, Ward admin, village admin, MCA	2	1	Chief, village elders
Village elders	1	1	Sub-chief, Red cross, GIVE, MCA	1	1	Sub-chief, MCA, GIVE, Schools,	1		Chief, Sub-chief, GIVE
Nyumba Kumi							3	3	Chief, Compassion International
Village Administrators	2	2	Ward admin, MCA, Sub-chief, Chief						
Development Committees									
Community Policy							3	3	Chief, Compassion International
Ward Administrators	2	2	Village admin, , MCA, Sub-chief, Chief,						
Sub-county administrators							1	2	NARIGP
Collectives									
Table Banking	1	1	Merry-go-rounds						
Merry-go-rounds	1	1	Table banking, Jirani Smart						
DWA Estate				2	2				
Development initiatives and programmes									
GIVE	1	1	Chief, Sub-chief, Village elders	1	1	Chief, Sub-chief, village elders, Ministry of agriculture	1	1	Chief, County Vets, Village elders
KCEP				1	2	MCA, Ministry of Agriculture,	1	1	Agricultural Officers
KSALES							3	1	
Kenya Forest							2	2	Agricultural Officers
Green Life							2	2	MCA
NARIGP	3	3	Group Leaders	2	2	Chief, MCA	1	1	Agricultural Officers, County Vets, Sub-ward Admin
NDMA				2	3	MCA			
Golden Chance				3	3				
EDEP	2	1							
World Bank Electrification Programme	3	2	MP						
DLIGHT	1	1							
Government ministries and department									
Ministry of Agriculture				1	3	KCEP, Chief, Red cross, MCA, GIVE, Hope world wide			
Community based organizations (CBOs)									
Muongano				3	4				
Opinion Shapers									
MP	1	2	World Bank Electrification Programme	1	3	MCA			
Elders									
Group Leaders	1	1	NARIGP, Red Cross, Uwezo fund, JEPE, KWFT,SNEP						
MCA	3	2	Chief, Sub-chief, Village elders				3	4	Green Life
Information platforms									
Schools				1	1	Village elders, chief, sub-chief			
Churches				1	1				
Social Media									
Radio							1	1	Agricultural Officers, County Vets
TOTAL	21			21			25		

***Rank for level of importance:** 1. Most important, 2. somewhat important, 3. Least important

***Levels of Accessibility of the actors/institutions:** 1. Easily accessible, 2. Accessible, 3. Somewhat accessible, 4. Not easily accessible

Conclusion

This exercise sought to establish and understand the that hinder women from owning and using chicken, participating in and benefitting from the chicken vaccine value chain and utilizing vaccines to improve the productivity of chicken) and map out actors who influence these norms and how they affect the participation of women in the livestock [chicken, goats and sheep] value chain). Some of the identified norms and practices that hinder women in livestock production (chicken, goat and sheep) and engagement in vaccine value chain included; unequitable power relations which favor men than women affecting access to resources such as land, income and inputs, disease burden propelled by recurring disease outbreaks, overreliance on ethno-medicine (ethno-vaccination), traditions that associates men with productive assets such as goats and cattle and women with the birds, women unable to balance multiple roles due to strict division of roles (chicken-related task and variant motives to in attending capacity building and training programs which affect overall intended impact.

Actors mapped across all the six intervention sites were categorized in eleven categories namely; Non-profit organizations/initiatives, service providers/markets, Government financial initiatives and programmes, Financial institutions, Administration (Local and national government), Collectives (Saccos, groups, cooperatives), development initiatives/programmes, Government department and ministries, opinion shapers, Community based organizations(CBOs) and information platforms. Although actors mentioned varied from one site to next, from one FGD to another; administration, government ministries and county departments, opinion shapers and service providers were common categories across the six wards.

Actors that directly address poultry issue and influence production norms were identified on the perceived level of importance (services they provide) and accessibility to the community members (contact between the actor and community). Services provided by these actors were almost similar across the wards ranging from; provision of extension services, vaccine and vaccination services, training and capacity building, bench marking and offering advice and provision markets and marketing links. GIVE research project and NARIGP were mentioned in four out of the six ward as important actors in addressing poultry production issues and changing related norms and practices. Other actors directly involved in poultry included; KARLO, KCEP, AHA, model farmer, county vaccinator (Kikumbulyu North), CARITAS, FIPs, County dept. of livestock, MoA, SNEP, model farmers, KARLO (Kathonzweni), Ten poultry, SNV, KCEP, County dept of livestock, ASDSP, CGA (Kitise), RedPlus, Kuku chic, Online platforms (Makindu), Hope worldwide, world vision (Mito Andei) and Hope worldwide, KCB, veterinary officers, brokers, agricultural officers (Masongaleni).

In terms of linkages it was established that the perceived working relationships between and among these actors was based on the services provided by each actor, the target audience and the intended goal. With exception of Kitise ward, all other FGDs identified administration and development initiatives and programs to be working closely together, with non-profit organizations and initiatives collaborating closely with administration in nearly all the wards.