



Rapid gender landscaping analysis in the poultry sector: Nigeria, Tanzania, and Zimbabwe

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Acronyms and definitions

DOC	Day-Old Chick
PREVENT	Promoting and Enabling Vaccination Efficiently, Now and Tomorrow
SSP	Small Scale Livestock Producers
ILRI	International Livestock Research Institute
FGD	Focus group discussion
KII	Key informant interviews
M&E	Monitoring and Evaluation
WELI	Women's Empowerment in Livestock Index
FAO	Food and Agriculture Organisation of the United Nations
Sector 4	Backyard production
Sector 3	Small scale commercial production

Introduction

The PRomoting and Enabling Vaccination Efficiently, Now and Tomorrow (PREVENT) project aims to create an efficient sector of medium-sized African hatcheries by applying hatchery vaccination and proactive marketing methods to initiate and increase vaccinated Day-Old Chick (DOC) sales to poultry Small Scale Livestock Producers (SSPs). Gender is a broad and complex topic with significant historic, cultural, and geographic considerations. The PREVENT project seeks to bring a pragmatic level of understanding of gender dynamics within the poultry sector with the goal of positively impacting women chicken producers through the hatchery intervention. The project includes a gender landscaping component to build an early qualitative picture of the current situation on the ground, focusing on women and men chicken producers with improved backyard, semi-intensive, and emergent commercial production systems.

This report describes the results of the rapid gender analysis conducted in three countries representing East, West, and Southern Africa (Tanzania, Nigeria and Zimbabwe) during the initial stages of implementation. Fieldwork activities were conducted in November 2021. Within the report, we describe chicken producers using the FAO classification systems for poultry production, where sector 4 refers to backyard production and sector 3 is small scale commercial production with low to minimal biosecurity, often with a combination of indoor/outdoor housing (Nyaga, 2007). Each country report can be read as a stand-alone document.

The PREVENT project is a partnership between Ceva Santé Animale and GALVmed, funded in part by the Bill & Melinda Gates Foundation. The goal of these qualitative research activities, implemented by the International Livestock Research Institute (ILRI), is to inform the selection of gender indicators for the monitoring and evaluation of the upcoming project. An introduction to the project and methods used for these research activities can be found in the [Gender Landscaping Guide](#).

This study was issued ethical approval by the International Livestock Research Institute (ILRI) Institutional Research Ethics Committee (IREC), reference ILRI-IREC2021-39. ILRI IREC is accredited by the National Commission for Science, Technology and Innovation (NACOSTI) in Kenya, and approved by the Federalwide Assurance (FWA) for the Protection of Human Subjects in the United States of America.

Nigeria

This section describes the results of the rapid gender analysis conducted in Ibadan, Nigeria as part of baseline landscaping activities for the PREVENT project (Promoting and Enabling Vaccination Efficiently, Now and Tomorrow).



Men's focus group discussion in Ibadan, Nigeria (Photo credit: ILRI Nigeria/Onifade Folusho)

Highlights

- None of the respondents reported keeping local breed chickens.
- Sector 3 women and men relied more on employees than family members for routine tasks.
- High interest rates were a barrier to accessing bank loans.
- Sector 3 women preferred male animal health care workers.

Overview of research activities

Activities consisted of focus group discussions (FGDs) with women and men chicken keepers in sector 4 (traditional backyard producers with up to 50 chickens and improved backyard with 50-200 birds) and sector 3 (semi-intensive producers with 201-1,500 birds and emergent commercial producers with 1,500 plus birds) and key informant interviews (KIIs) with poultry sector actors. In short, sector 4 refers to backyard production and sector 3 is small scale commercial production. See the [Gender Landscaping Guide](#) for more detailed information about methods and the research tools.

Site description

Ibadan is the capital of Oyo State in Nigeria and the third most populous city in the country. Ibadan hosts multiple hatcheries and serves as the commercial hub for chicken production in Nigeria, as evidenced by a key informant working as a poultry breeder who described selling his chicks to all 36 states in the federation and occasionally internationally to neighbouring countries such as Benin. Key informants represented hatcheries with and without formal enrollment in the PREVENT project.

Key actors in the sector include hatcheries, traders, and chicken keepers. Key informant interviews (KIIs) were conducted with two hatchery managers, two animal health service providers, and one poultry breeder. The hatchery managers interviewed explained chicken keepers in Ibadan usually pick up day-old chicks (DOCs) directly from the hatchery. In some cases, hatcheries sell DOCs to traders who supply them to chicken keepers. The traders are mostly used to supply DOCs to chicken keepers staying farther from hatcheries. In some cases, DOCs are sold to brooders who raise them and sell them as teen chicks to chicken keepers, particularly those in sector 4. Most chicken keepers, both in sector 3 and sector 4, reported buying vaccinated DOCs at the hatcheries; some of the large-scale/commercial producers (sector 3) reported taking their eggs to the hatcheries for incubation and hatching.

Men and women chicken keepers reported keeping layers, broilers, or both on their farms. Those who keep layers adopted one or both of the following strategies: 1) buying and raising DOCs to the point of laying and selling them or 2) buying DOCs and keeping them for egg production. Chicken keepers who kept broilers were categorized as: 1) those who engaged in chicken keeping on a seasonal basis, buying broilers in advance of festival seasons (Christmas, Easter, and Sallah) when demand is high; 2) those who keep broiler birds consistently throughout the year, the common ones are farmers who engage in value addition (farmers keep broilers to 6 weeks and slaughter to sell), and 3) those who practice both methods.

Participant demographics

In this section, we provide a summary of the demographic characteristics of the chicken keepers who participated in the focus group discussions (FGDs). Twenty-nine participants attended four FGDs, disaggregated by gender (women and men) and production system (sectors 3 and 4) as shown in Table 1. The following summary statistics give additional information about the participants, but the study was not designed to give representative statistics generalizable to a larger population.

Table 1: Summary of FGD participants in Ibadan, Nigeria

	Sector 4 women	Sector 3 women	Sector 4 men	Sector 3 men	Total # participants
# of participants	8	7	7	7	29

The respondents' ages were between 35-60 years, apart from three women, whose ages fell between 18-34 years. Most men and women in the sector 3 FGD were married; only one man was single. For sector 4, all the men and most women were married except one woman who was a widow. Ninety-six per cent of the respondents in both men and women FGDs from both sector 3 and sector 4 had attained the secondary level of education and above (Figure 1). Most (86% of all participants) depended on farming as a primary source of income. All participants self-reported having purchased chicken feed within the last three months.

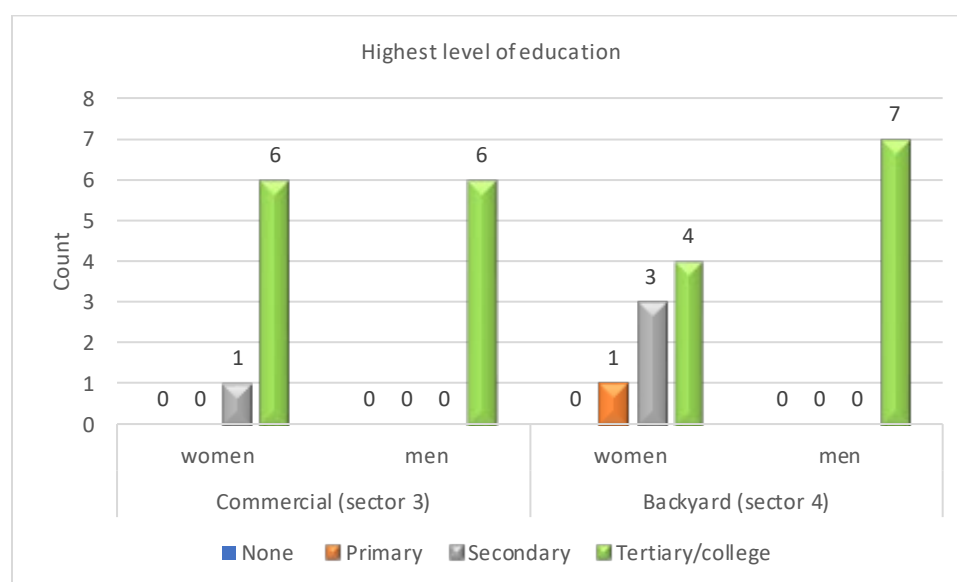


Figure 1: Education level of participants, Nigeria

Figure 2 shows that battery-cage was the dominant system practised by sector 3 men and women and sector 4 men. Most women in sector 4 kept their birds in a deep litter system. Only one man in sector 3 practised the free-range system.

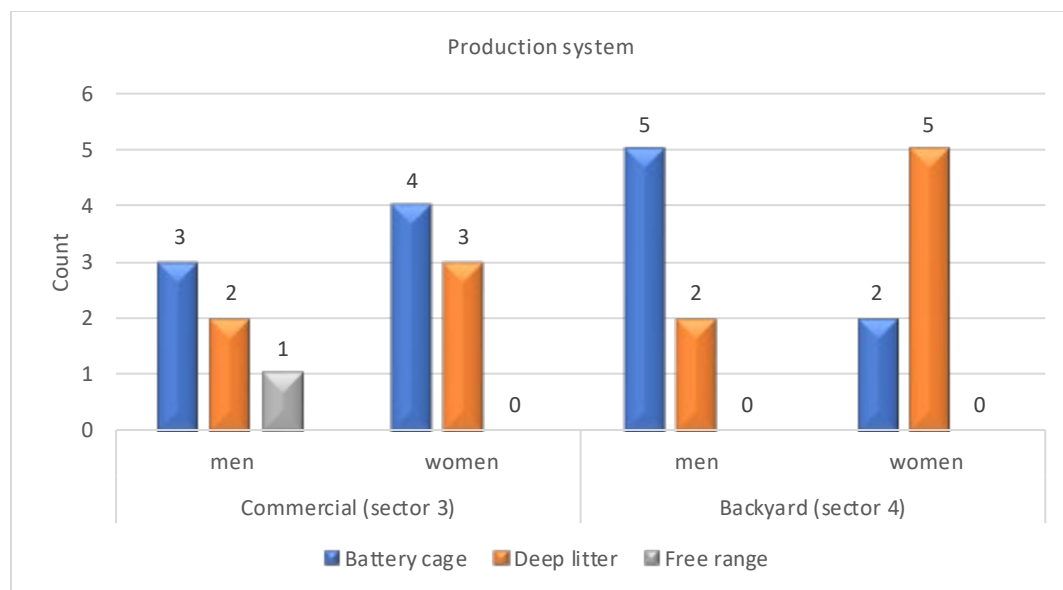


Figure 2: Production systems, Nigeria

Figure 3 illustrates the type of chickens reared. For chicken keepers in sector 3, layers, followed by broilers, were the dominant type of chicken kept, while for chicken keepers in sector 4, most reared broilers, with a few keeping layers and improved chickens. Improved chickens are breeds such as Kuroiler that have genetic contributions from local breeds. None of the participants reported keeping local breed chickens.

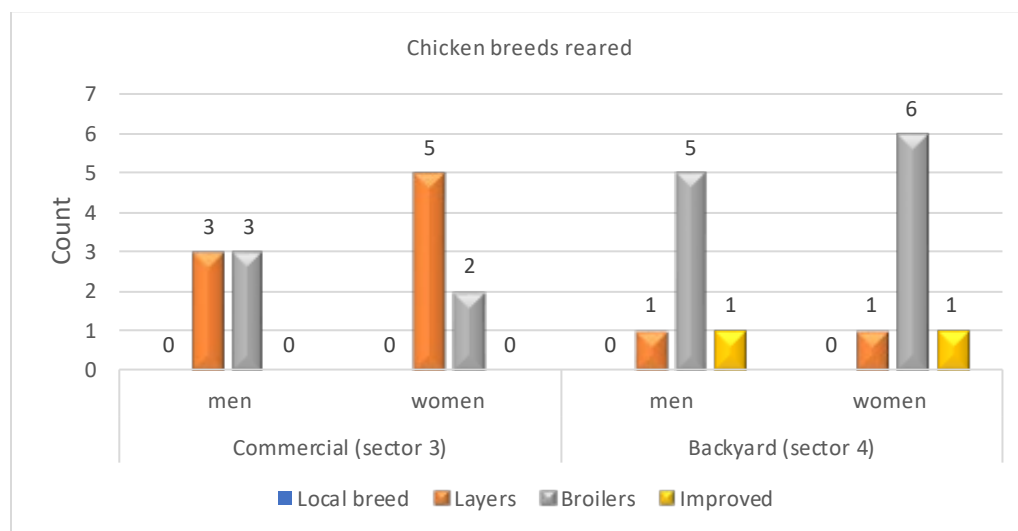


Figure 3: Types of chickens reared, Nigeria

Participants were asked whether they had used day-old chicks (DOCs) or teen chicks (1-4 weeks old) for rearing in the last three months from the time of the survey. Figure 4 shows that most participants

across the four FGDs had used/ purchased DOCs and some had used/ purchased 14-28 days old chicks. Women in sector 3 reported using only DOCs.

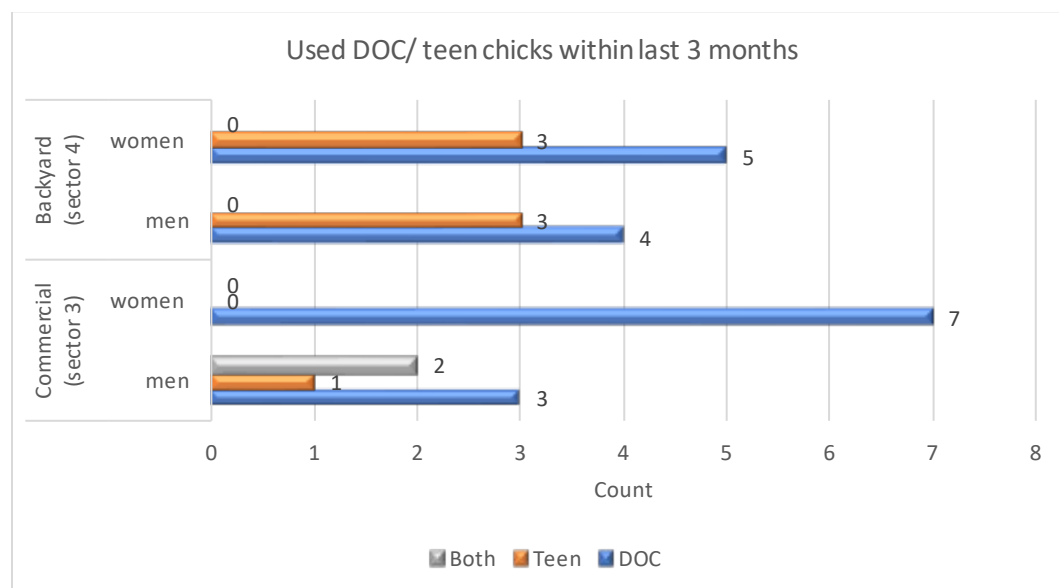


Figure 4: Purchase/use of DOCs and teen chicks, Nigeria

Most participants reported having purchased chicken vaccines within the previous three months, except for two women in sector 3 and a woman in sector 4.

Table 2 shows that the men participating in the FGDS owned more chickens than the women. In sector 3, men owned an average of 7,333 chickens with a median of 3,250 compared to an average of 1,821 chickens with a median of 2,000 for women. In sector 4, men owned an average of 200 chickens compared to an average of 104 chickens for women.

Table 2: Flock size (# of chickens), Nigeria

	Sector 3 men	Sector 3 women	Sector 4 men	Sector 4 women
Mean	7,333	1,821	200	104
Median	3,250	2,000	200	90

Six key informant interviews were conducted with an animal health professional, a hatchery worker/ CEO of a private animal health consultancy, two hatchery managers, a poultry breeder, and a commercial chicken farmer. All the key informants were men between 35 and 60 years, except for the hatchery worker with the private consultancy who was under 35 years.

Reasons for keeping chickens

Men and women from both sectors overwhelmingly agreed the primary reason for keeping chickens was for financial benefits. From selling chickens to pay school fees (Sector 4 women), to “improving the

standard of living” (Sector 3 woman), to simply “making money” (Sector 4 man), keeping chickens was viewed as a business activity. Participants in three of the four focus group discussions (FGDs) also mentioned intrinsic motivators, keeping chickens because of passion, interest, or “liking to see them around”, suggesting that while keeping chickens is a business activity, it is an activity people actively chose. Market opportunities encouraged a woman in sector 4 to raise chickens after noticing a shortage of eggs in her area. Only one to two people from each focus group discussion mentioned household consumption of chicken as a motivation for keeping chickens, reinforcing that chickens are viewed primarily as a financial asset.

Workload and time allocation

Keeping chickens involves routine tasks, such as feeding, watering, cleaning, and checking for health issues as well as management tasks, such as vaccinating, selling chickens or eggs, and restocking through the purchase of new chicks. Sector 4 women described doing most of the routine tasks themselves, spending 30 minutes to two hours per day, with occasional help from willing family members, usually primary school aged children or other women in the household. For the purchase and administration of drugs or vaccines, two of the women described assistance from their husbands while the remaining four women bought and administered veterinary products themselves because “it’s a sensitive part of raising poultry” that requires “extra care”, meaning the activity was not entrusted to children or other household members who assisted with daily tasks. None of the sector 4 women described employees participating in any activities. Sector 4 men described a similar daily time commitment for daily activities, which they did themselves or with assistance from children or household employees. Men described preferring to feed themselves to “prevent wastage” and avoid mixing layer and broiler feed thereby “killing my birds”, although occasionally entrusted an employee or older child with feeding after giving clear instructions and training.

For men and women in sector 3, intensification was made possible by increasing reliance on employees. Checking birds, cleaning, feeding, and watering were described as taking 30 minutes to one hour twice a day, although as one man explained, “it is a whole day’s activity because you keep checking from time to time.” Specialized equipment and different requirements of larger flocks changed the tasks slightly from those described by sector 4 chicken keepers. Added activities included flushing pipes, turning on heaters, soldier ant control, packing eggs, keeping records, mixing feed, and waiting on customers. One woman explained that her farm was located outside of town about 30 minutes down a bad road, so commuting added time to her other activities.

One cannot do it alone because it is tedious.

–Sector 3 woman, Ibadan

The introduction of employees by sector 3 chicken keepers provided a glimpse of who is participating in the sector. Sector 3 women described hiring young men and women, usually between 25-35 years old, and working closely alongside them for daily tasks. Sector 3 men also hired men and women employees who shared routine tasks such as cleaning and feeding but described more specialization of their roles, and stronger preferences for who should do certain tasks. For example, “There are activities where you

need a male and a female. For example, when it comes to climbing to check the water level, you don't expect a woman to do that." Another explained, "I have one female and four male workers. Women collect and sort the eggs. I have female workers because they interface, this makes them good in marketing. They also help to handle the female customers. Most of my customers are women." One man with approximately 10,000 chickens described more specialized roles all around, not necessarily falling on gender lines, in part due to the increasing numbers of chickens. "Packing is done every 14 days. I have a vet. I am not too involved because I have other work and I delegate a lot of work for people to do. Everyone has different activities." In contrast, the largest number of chickens kept by participants in the women's sector 3 FGD was 3,000. Sector 3 women had more complaints about the reliability, training, and level of dedication of their employees than sector 3 men. Although the research tool did not specifically address whether employees were hired only for chicken keeping only versus for other household activities, the sector 3 women had smaller numbers of chickens compared to men (women's mean and median flock size was 1,821 and 2,000 chickens compared to 7,333 and 3,250 for men). It is likely sector 3 women engaged employees who were responsible for other household activities in addition to chicken keeping, as opposed to sector 3 men, who with larger numbers of birds, could have employees dedicated only to chickens.

One notable exception to delegating tasks to employees was the purchase of drugs and vaccines. All sector 3 respondents, men and women, reported buying drugs and vaccines themselves, with reasons including wanting to ensure quality, cold-chain adherence, and brand preferences. Two sector 3 men did not purchase veterinary inputs themselves but delegated the task to specialized employees, a veterinarian and a manager, respectively. Restocking is discussed further in [Box 1: Access to day-old chicks \(DOCs\), Nigeria](#).

Decision-making and control of income

Closely related to understanding who is conducting management tasks is knowing who is making decisions in chicken production. Here we consider who makes marketing decisions about buying and selling chickens and eggs and choosing which type of breed or chicken to keep. We also look at who controls income from the sale of chickens and eggs and how decisions are made about the shared household resources used for chicken-keeping.

The business is mine, but the money is ours.

– Sector 4 woman, Ibadan

Sector 4 women described marketing decisions were made by "my husband because he is mobile and has those connections on where to sell", made by the woman alone, or done in conjunction with a husband depending on "who is first to see a customer." One woman sold back to her teen chick supplier, which prompted whispers from other participants that the profit would be taken by the supplier. Those who made the decisions alone explained other family members are busy or disinterested (e.g.: my husband has other businesses, the children are in school, or "usually they are satisfied with my decision.") Two women acknowledged their husband's participation in chicken production in times

when finances were tight, one saying her husband pays for feed, the second saying she makes the decisions but consults “just to prepare his mind of any need for assistance in the course of production because there might be a time when I will be short on cash.” Women made decisions about which breeds or types of chickens to keep, primarily layers and broilers, based on market demand and personal preference. Decisions about using shared resources, such as land, to dedicate to chicken production were almost always made jointly with husbands, except for one woman who was a widow. Women described the money from the sale of chickens and eggs as being used for family matters, with school fees as an example. When asked who owns the chickens, one participant stated, “They are mine,” a sentiment shared by the other women in the group.

Sector 4 men described making decisions about buying and selling alone or “with discussion with my wife and children because it’s a backyard business.” They did not elaborate on where they choose to sell chickens and eggs. They reported making decisions about shared household resources and type/ breed of chickens to keep alone without consultation with other family members. Like sector 4 women, most chose layers and broilers because of market demand and did not mention any breed preferences. Responses on how income from chickens was used varied, from men making sole decisions to consulting with family members. One participant explains why he makes the final decision: “Even though it’s a family business, [I make the final decision] because of the sustainability of the business,” a sentiment that resonated with other participants. Given that men may bear the responsibility for supporting a struggling enterprise in tight times, they felt it was in their best interest to remain informed and involved in business activities. Responses about ownership varied, with one man describing he is the owner because his wife fears the chickens, another saying the chickens belong to the family, and a third who succinctly stated, “My money, my chickens.”

Sector 3 women described making decisions about buying and selling chickens, choosing type/ breed, and making decisions about income without significant input from family members, although sometimes after consultation with a veterinarian, especially when purchasing new birds. They based marketing decisions on where the best price could be obtained, agreeing it was frustrating that wholesalers can decide on the price of the products, especially for eggs during glut periods. Most of the women said they owned the chickens, though one participant said, “at times, the family,” and another described co-owning the business with her husband. “It is my office and decision-making is solely on me, so I make the decision because I am in the field and know what is required. I will give him reports and always update him. Of course, he is interested in what is going on and how much profit is made.” Business proceeds were most often re-invested in the business, with participants mentioning the cost of restocking and the growing cost of feed. One woman explained how she uses profits to support her family, “...being a widow, I pay my children’s school fees and the rest.”

The sector 3 men were sole decision-makers in all areas, citing the work experience and educational qualifications that gave them the ability to manage a large-scale chicken business, from controlling diseases to managing staff. They described sophisticated marketing strategies, including branding, online retailers, managing a frozen section for retail, timing annual holiday and wedding seasons, and raising groups of birds specifically for large clients. Many reported consulting with professional contacts and experts to assist in making decisions but did not typically consult with family members. “I make the

decisions. My expertise is in livestock, I studied it.” Two participants described that their wives had also studied livestock, although gave the impression they were involved in other business activities. When responding to the question about chicken ownership, the men were diplomatic, with one saying, “even the children own the chickens,” acknowledging the social obligation of men to provide financially for their families using the profits from their businesses.

Access to and control of resources

In this section, asked respondents to identify what resources they need for chicken production. We also highlight where and how people purchase chickens and whether they have access to day-old chicks (DOCs). Challenges in accessing needed resources are discussed further in the [Goals and barriers](#) section.

Credit is most important; with its availability, the business can be taken to any level of desire.
– Sector 4 woman, Ibadan

In the end, it's always back to square one because of the high interest rates.
– Sector 4 man, Ibadan

I attempted to go to microfinance banks, but the interest was too high.
– Sector 3 woman, Ibadan

You will go for a bank loan, unless you have a rich family member to assist you.
– Sector 3 man, Ibadan

Sector 4 women and men mentioned the most needed resource was money or credit to pay for additional stock and feed, which was increasingly expensive. Cages to house chickens were discussed, with one woman explaining her area was rocky and another wanting to introduce cages for disease control to reduce the cost of medication. One man mentioned he needed additional space and distance from the farm to prevent predators from attacking the chickens. Sector 4 women described getting what they needed from the marketplace (feeds and other inputs) while sector 4 men spoke about taking out loans or saving to get what they needed for chicken production. The high interest rates of loans were a barrier for women and men.

The wish list of Sector 3 women included slaughter equipment, pens, and feed millers. Multiple women mentioned the challenge of accessing water, wanting additional boreholes or generators that could be used to pump water and mill feeds. Some women already owned or had access to land, but as one woman described, “I need land because the land I’m currently using is borrowed. My friend gave it to me, and I pay, but now it is too small because I intend to expand.” The story below, told by a woman with 3,000 layers, highlights how the size and location of her land influenced her business activities.

I own the land I am currently using, which in the past was on the outskirts of the town, but now there are houses around. The farm is currently surrounded by residential buildings. The community members used my water to build their houses but two of them came to me and complained about the smell of the poultry farm. I told them, “I was here before you, what do you

want me to do? Buy another land?" So, I went to meet the community elders to avoid trouble and they gave me conditions to keep the farm running: fence the farm and control the smell. This is one of the major reasons I stopped keeping layers and I mostly buy them at the point of lay, and I don't keep broilers because they make a mess everywhere. I change the litter every two weeks to minimize the smell. It costs me a lot of money. I have to make them my friends (referring to community leaders) and bring them chickens every year so I can get little favours.

Multiple women used cooperatives or women's savings groups for startup capital. Another sold a piece of land. Only one woman secured a bank loan, which she attained "with my husband's support, he was a banker at that time."

Sector 3 men did not focus on access to money or capital, but on the government policies and market trends that limited their ability to succeed in business. These discussions centered around the high cost of feed and feed inputs. "Money is not our core asset. Our assets are corn and soy, which constitute 80% of our production costs, that is why the price of feed keeps increasing day by day."

Box 1: Access to day-old chicks (DOCs), Nigeria

Given the goal of the PREVENT project to improve hatchery capacity, this section focuses on where and how people purchase chickens and their capacity to handle DOCs.



(Image credit: ILRI/ Stefano Bianco)

Sector 4 women: *"I can't be nursing baby and birds together."*

Most women purchase 4-week-old "teen" chicks from suppliers or farms, citing the stress of managing DOCs.

Sector 4 men: *"Buying from the hatchery involves a lot of bottlenecks and might take months."*

Most men preferred purchasing DOCs from farms or distributors, and sometimes choose to purchase point of lay birds. Challenges associated with DOCs included poor vaccination, problems with parent stock, and high cost of feed.

Sector 3 women: *"The (early) period is critical for their laying life because if they are not well cared for, the production expectation might not be met."*

Women reported having access to DOCs, most driving or traveling 30 minutes to three hours directly to one of three hatcheries. One purchased from a distributor, and one is herself a DOC distributor. They thoughtfully compared the pros and cons of DOCs versus teen chicks. DOCs could be managed and fed well in the critical early period for better laying or weight later but are challenging to brood until they can be caged. Teen chicks are costly, struggle to adjust to new environments, and may be underfed or unvaccinated on arrival. Overall, the women seemed to prefer DOCs to teen chicks.

Sector 3 men: *"I want to deal with a hatchery. I want something consistent, which is why I want to produce at a scale where I can have a say."*

The sector 3 men had larger scale operations, purchased DOCs directly from hatcheries, and did not mention handling problems. They were frustrated hatcheries couldn't provide preferred breeds and lacked transparency about supply/ disease problems. Consequently, they discussed with colleagues before purchasing, even from known hatcheries. "If you go to the hatchery directly, and there is a problem, the hatchery will not help. To avoid it, you can sample farmers' opinions, and then get an appointment to plan when to get the birds and the breeds you want."

Access to and source of information on chicken keeping

Most men and women in sector 3 and sector 4 described getting information on chicken farming from friends and relatives with experience. Women and men in sectors 4 and 3 noted that obtaining information on chicken farming from friends and family members is less costly; however, one can get conflicting opinions/advice, making it hard to trust the information. Most women in sector 3 got information on chicken keeping from seminars/agricultural training. They noted that learning through seminars enabled them to get reliable information and they were able to learn from demonstrations and interactions with experienced farmers during the training sessions. However, two women in sector 3 said the sessions were long and time-consuming. Two women in sector 3 noted that a few chicken keepers attend seminars due to poor publicity and high attendance fees.

Women in sector 3 and some men in sector 4 obtained information from the internet, which is easily accessible and reliable; however, they said that this channel is costly since it consumes a lot of data. Some women in sector 3 and sector 4 noted that they also get information on chicken keeping from input suppliers, including poultry feed companies, agrovets, and hatcheries. Agrovets are supply stores for farmers, selling seed, fertilizer, animal feed, and veterinary inputs such as drugs and vaccines. Although feed companies and hatcheries provide reliable information, two women in sector 3 claimed the feed companies pressure them to buy feed in exchange for information on chicken management. Another woman said, “we are sometimes forced to register as customers.”

Goals and barriers

Short-term goals

In this section, men and women were asked to state their short-term and long-term goals for their chicken production activities. Most women and men in sector 3 and sector 4 desire to expand their chicken production by increasing the flock size. Most women in sector 3 wish to keep different types of birds (both layers and broilers) and increase the number of pens to hold the increased flock size. A woman said, “I would like to expand, add more pens, then add broilers to my production, and sell at 5 weeks instead of waiting for the layers to reach 4 months before selling. That way, I would make more money on time to take care of other things.” Women in sector 3 said they wanted to create job opportunities by hiring more casual labourers to support them in chicken management.

Some women in sector 3 wished to increase their profit margins by looking for better markets for their products and venturing into chicken value addition, acquiring chicken slaughtering and processing equipment. One woman in sector 3 claimed to own chicken processing equipment; she wanted to increase the number of birds she holds and then start slaughtering and selling chicken meat. A man and a woman in sector 4 wished to diversify their income base by keeping birds and other smaller livestock species such as turkey and rabbits, respectively. A woman in sector 3 described wanting to fence her farm and place some security measures because it is exposed to thieves and predators.

Long-term goals

Regarding long-term goals, women and men in sector 3 and men in sector 4 largely thought of expanding their production to the extent of becoming major suppliers of eggs and chickens, even

accessing markets for their eggs and birds outside the Ibadan region. Two women in sector 3 hoped to increase the security measure on their farms by fencing and constructing better structures. One woman in sector 3 wished to buy bigger pieces of land for chicken production, which would allow her to expand further and create more employment opportunities. She explained, “I will need to relocate if I want to expand to 10,000 or 20,000 layers and get a bigger piece of land that can accommodate my chicken production, fence it, drill a borehole, and create more employment opportunities.” In line with her sentiments, two women and a man in sector 4 aimed to empower other people by creating job opportunities and training other farmers on chicken production. A man in sector 4 said, “I want to empower people in the poultry business by having a vocational school to train people.” A woman in sector 4 preferred to use the income from chicken production to start rearing larger livestock such as cattle.

Hindrances to achieving goals

Women and men in sector 3 and sector 4 considered lack of capital as the greatest hindrance to achieving their short-term and long-term goals. Women in sector 3 noted while they need money to pay chicken management bills and buy feeds, it is hard for them to access loans; interest rates are high, and the terms and conditions of using the borrowed money are strict. These sentiments are consistent with what women said in the [Access to and control of resources](#) section, where they noted that the high interest rates make it hard for them to access loans. Even if they are approved, they do little with the money as most of it goes back to repay the interest. Women in sector 3 said they are forced to use the loans to buy equipment in most cases, yet they stated that they need the money to buy feed, drugs, chickens, and to pay employees. A woman in sector 3 described the plight of an acquaintance who received a bank loan: “I know a lady who secured a loan of 5.8 million Nigerian Naira (about \$14,032 USD), but the microfinance bank staff took a whole 1 million Nigerian naira for themselves. She bought the equipment, worth 4.8 million Nigerian Naira, but she is still sourcing for more money and she is yet to start the business. That discouraged me from applying for a loan.” She recommended creditors give money to the farmers to buy what they need since it is a loan. Some women and men in sector 3 noted when they are not able to pay their employees well, employees may start stealing from them, which hinders their expansion plans.

Two women in sector 3 complained of general insecurity and rising kidnappings as affecting their expansion plans. One explained “Security is another issue. Kidnappers are dealing with us. It is by the grace of God we are here. They kidnap farmers nowadays and is so bad.” Kidnapping by “hoodlums” or “bandits” of unknown origin is a problem across the nation, and because farms are located on the outskirts of towns, some of the participants reported poultry farmers were being attacked on the way. Another woman described a personal incident. “I was once trailed from bank to the farm by two men on a motorcycle. When I reached the farm, I noticed it and shouted, and people came to my rescue.”

Some men and women in sector 3 and sector 4 complained of harsh government policy and regulations hindering their ability to access international markets. Some men in sector 3 mentioned a lack of good chicken management knowledge as a hindrance; hence they prefer to be trained. They also noted a need to strengthen the capacity of local experts, service providers, and casual laborers.

Training time preferences

Preferred months

Many men and women in sector 3 preferred to be trained any month within the year but requested advance notice so they can plan and create time. Some men and women in sector 4 and sector 3 noted January and February are the best months to be trained because fewer holiday activities are taking place compared to other months of the year. Two women in sector 4 mentioned January is the best month for training since they would have disposed of most of their birds during festival seasons and would therefore have time to allocate for the training because of fewer birds to manage. Two women in sector 4 preferred August since it is the right time to gain more knowledge as they rear stock to be sold during festival seasons (December). Some women chose August because they have free time as schools are closed, so children are at home to help them with domestic chores.

Preferred days of the week

Many men and some women in sector 3 preferred to have the training any day of the week, but they should be informed earlier to enable them to prepare and create time. However, most women in sector 3 noted that Sundays should be excluded because it is a day to worship. Men and most women in sector 4 preferred to be trained on Friday or Saturday since they are free from other engagements. Some women in sector 4 noted that Monday and Thursday are market days, hence not suitable for the training.

Preferred time of the day

In terms of the time of the day, many of the participants in men and women FGDs in sector 3 could find time in the morning or evening with advance notice. Some men and women in sector 3 and sector 4 mainly preferred to be trained during morning hours, 8 am to 12 pm, since there is less distraction from children as they are at school. Some men in sector 4 said they have more free time during morning hours, so it is the best time for the training. Many men and women in sector 4 stated that the cooler weather during morning hours is conducive for them to learn and grasp what is being taught. However, a woman in sector 4 said she prefers to be trained in the evening since she is usually at work (off-farm) during the day.

Animal health services

In this section, we summarize preferences chicken keepers may have about the gender of the agrovet or animal health care worker they work with and hear from animal health care workers about the services they provide in their communities. Lastly, production considerations, such as access to feed, and environmental factors, such as extreme weather, that affect chicken health are discussed.

Two sector 4 women said they do not have a preference for a man or a woman as an animal health service provider, as long as they are knowledgeable and give good service. Others indicated they agree. One woman had never worked with a woman veterinarian, another person preferred women because men “are fond of prescribing common drugs,” and a third preferred male veterinarians because they are good at “cutting costs in terms of drug prescriptions with better results.” Three sector 4 men preferred

men because “I am used to men,” because women cannot be contacted at any time especially if they are mothers, and because women are “always wanting to show off that they are better than their male counterparts.” One man said he works with either and mainly cares about the experience and quality of service, because “it is business”, a sentiment which two others agreed with.

Sector 3 women largely preferred men animal health care workers, citing reasons such as “they are more hard-working,” they come at any time, are more “agile”, “punctual”, and “passionate”. One woman’s claim that men were more experienced prompted another to disagree, leading to a discussion concluding that both men and women could be experienced. Sector 4 men were unfortunately not asked this question.

Issues relating to animal health brought up by key informants included access to quality feed, access to vaccines, diseases, and adverse weather.

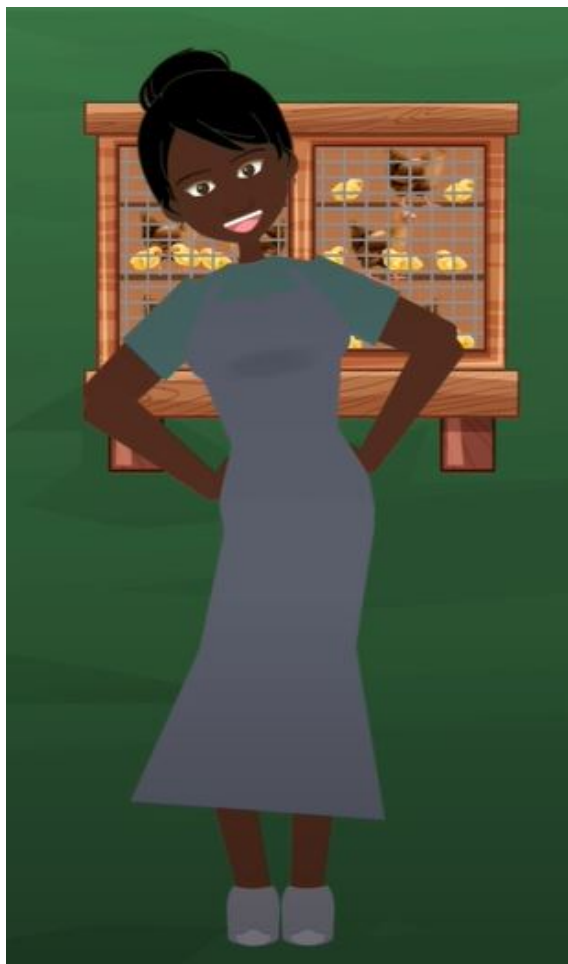
Multiple key informants said chicken keepers find it hard to access good quality chicken feeds. Although some chicken feeds are branded, they can still be of poor quality or substandard because they lack the required major nutrients and other essential additives. Key informants reported that the commercial farmers (sector 3) rarely fall victim to low quality or substandard feed due to their ability to formulate their chicken feed to the required standard. The cost was another issue, with prices of feed too high for most smallholder farmers to afford. A veterinary service provider explained, “Poultry farmers in Ibadan are using poor-quality feed with an aim of cutting on the production cost, which consequently lowers output or production of the birds. Poor quality feed retards bird’s growth, causes poor weight gain, and leads to health challenges due to malnutrition.”

Key informants reported chicken keepers in Ibadan to have limited access to vaccines. In most cases, they are forced to buy more than the required dose of vaccine; for example, there are vaccines with a minimum package of 1,000 doses, yet a farmer has 200 birds. Key informants noted this challenge mostly affects chicken keepers in sector 4 due to a smaller number of birds. Hatchery vaccination of day-old chicks, as described as standard procedure by one of the hatchery managers, can minimize the number of vaccines a chicken keeper is responsible for. Not all disease threats can be prevented with vaccines. Key informants reported diseases such as coccidiosis and chronic respiratory posing a danger to poultry production in Ibadan; the challenge is more severe for farmers with bigger stocks of birds as there is a high risk of losing the entire flock to diseases. Another key informant further noted that sector 4 producers find it hard to vaccinate or treat their chickens when ill because they find it expensive to pay for services provided by veterinary service providers and they lack knowledge. In contrast, those in sector 3 may have more resources to employ professional service providers when it comes to the treatment or vaccination of the chickens. An animal health technologist who specializes in poultry expressed that among his professional colleagues, lack of experience in the field of practice contributed to incompetency. “Most of them rely on what they learned in school; I will say they are half baked.” Professionals with limited training in poultry diseases may also pose a challenge to chicken keepers accessing vaccines and using best veterinary practices.

Lastly, insecurity and extreme weather can adversely affect chicken production and health. A key informant echoed farmer concerns when describing general insecurity in Ibadan; there are high cases of live bird and egg theft for those with poorly constructed chicken sheds. He noted that commercial farmers are better secured in terms of building structure and have a larger number of employees who help in providing security, but the small-scale/backyard chicken keepers are more predisposed to theft due to a lack of these resources. A poultry farmer and animal health technologist described chicken keepers in Ibadan are also affected by adverse weather conditions like the harmattan (cold season), which usually results in an increase in bird mortality and slows the growth of birds. He noted that people spend more money on drugs during harsh weather conditions. The adverse weather condition was reported to be severe among sector 4 producers because commercial producers have better pen structures equipped with facilities and more farmworkers, making temperature control during adverse weather conditions easier and more efficient.

Poultry sector trends

Key informants described women as the majority of small-scale chicken keepers, with men dominating the large scale, commercial enterprises. A distributor of DOCs claimed most of his customers were men, mainly middle-class people wanting to supplement their income. He noted benefits of increasing commercialization included less need for labour with improved systems (such as battery cages), the ability to employ security guards to reduce theft, and the ability to purchase a feed miller to produce high quality feeds, thereby avoiding health and production problems. He anticipated improvements in waste management in the poultry sector in the next 10 years, allowing for more urban production. The CEO of a private, agriculture consulting business said customers come from all over the country to purchase chicks in Ibadan; there is even a market where DOCs are sold. Most of his customers were men, with only about 20% women. He observed that men had “more exposure to market strategies,” a factor which made it easier for them to succeed in business. The cost of feeds was a limiting factor for all chicken producers. A hatchery manager noted a recent increase in women and retirees and anticipates growing numbers of youth in coming years. He hopes increased government involvement will lead to more mechanization in the poultry sector. His hatchery vaccinated chicks on demand only, however, he acknowledged hatchery vaccination would reduce stress for farmers, reduce disease outbreaks between farms, and be cheaper per bird than if farmers do it themselves. A manager at another hatchery explained, “Men buy more chicks than women. Women buy within the range of 1,000 and below while men can buy up to 5,000. The quantity of birds the women purchase is based on the amount they can afford.” He suspected capital is a limiting factor for women, describing a time when women were given birds on credit to sell through the hatchery, paying back the difference after selling. This policy no longer exists. He noticed his customers struggling with a lack of technical knowledge on vaccinating, high cost of feeds, and hygiene-related diseases such as coccidiosis. Both he and a large-scale farmer cited the highly variable prices of DOCs as a production challenge.



A fictitious story about a chicken-keeper named Amina is a tool for conversations about social norms. (Image credit: ILRI/Stefano Bianco)

Norms and community perceptions

In this final activity, we asked people to respond to a story about a woman in the community named Amina (sometimes modified to Aminat) who is growing a successful business keeping chickens. One day, her husband asks to discuss the business with her. (See the [Gender Landscaping Guide](#) in the Appendix for the full prompt.) The purpose of this activity is to identify and describe a tipping point where a women's involvement in business, especially at a more commercial level, may shift from being viewed positively to being viewed negatively by a spouse, family members, or society at large. We examine how Amina is perceived by her husband, her community, how her time use and activities area are affected, and ultimately, how the business may change Amina and her family's life in the coming year.

How is Amina perceived by her husband?

All focus groups discussed the possibility of Amina's husband perceiving her either positively or negatively as a result of her activities in the chicken business.

The husband has seen the profit from the business is high and is probably ready to join hands in the business. Or complain that Aminat is not giving enough time and attention to the family.

– Sector 4 woman

Probably, the husband wants to take over the management of the business. – Sector 4 woman

The man may feel Aminat is not giving enough time in the house and therefore wants to advise her on recruiting people to work with her. – Sector 4 woman

The husband probably wants to complain about Aminat's relationship with customers and the fear of losing her to another man. – Sector 4 woman

Sector 4 men noted the financial benefits of the enterprise, but also discussed jealousy and a concern that Amina may become "pompous."

The husband has seen the prospect, he wants to invest into the business to make more. – Sector 4 man

Just pray he's not jealous because some men could be, thinking that this woman is probably earning more than me. I also hope Anima is not becoming pompous. – Sector 4 man

Aminat must not be a pompous person because of the way she has been doing it, otherwise the business would have collapsed long ago. The husband would have stopped the business already. – Sector 4 man

Sector 3 women also discussed the potential of positive or negative responses. As in the sector 4 women's FGD, jealousy and men's concerns about infidelity were mentioned.

The man has seen that this woman is doing well, the discussion will be "let me join you" and he will add more capital. – Sector 3 woman

He will say there is no more attention, that you are focusing on the farm more than the children. So, you have to stop. – Sector 3 woman

The husband is probably seeing the business growing and will want to assist her. – Sector 3 woman

Maybe the man is jealous she is doing better than him, that he is not getting her attention, and other men are eyeing her. She is getting more money. He might think one day she will not be submissive to him. He is afraid. – Sector 3 woman

Sector 4 men also raised the potential of the husband investing in the business and concerns over Amina's time use.

It is either the husband wants to invest more money into the business so that they can partner, or Amina doesn't have time for the family, which the husband does not like and wants to stop it. She should choose either the family or the business. It seems she does not have time for the family; she spends her time caring for the chickens. – Sector 4 man

The question is a two-edged sword. The family issue has come in or the husband wants to expand the business. – Sector 4 man

How does the community view Amina?

Reactions from children, other family members, neighbours, and the community at large also had the potential to be positive or negative. Sector 3 women only provided negative examples. Sector 4 men considered how Amina would be perceived by the community if the husband chooses to invest in her business, thereby giving the story a happy ending.

They may be jealous and because of that want to cause confusion and problems in the family. – Sector 4 woman

Aminat will be perceived as an industrious committed, and hardworking person. – Sector 4 man

Those who know her from the beginning see her as committed and industrious, they will even want to learn from her. She will have many apprentices who will learn the trade from her. – Sector 4 man

*They might develop hatred for her because she is doing well.
– Sector 4 man*

Yes, they will encourage her, and some will want to join her. – Sector 3 woman

Family members may feel deprived of her attention. – Sector 3 woman

*If she starts the business and her husband decides to invest, it will give her more confidence and the community will see her as an empowered person. If her husband is investing in her business, he wants her to grow, and she will have more respect from people in the community.
– Sector 3 man*

How have Amina's time use and activities changed?

Next, FGD participants were asked how Amina's time use and activities have changed now that she is growing her business and keeping chickens commercially. Sector 4 women agreed time on chicken keeping will increase with the number of birds, and while she might spend more time on the phone with customers, travelling is not likely. Sector 4 men discussed Amina balancing her time with responsibilities as a mother, with several participants expressing she was managing her time well. Sector 3 women explained travelling and talking to customers on the phone late at night would not be acceptable.

She will spend more time on the farm taking care of the birds, particularly feeding, before considering food for anyone at home. – Sector 4 woman

Time spent on phone calls for Aminat will be great as she will always have reasons to interact with customers. – Sector 4 woman

I think Aminat has learned to manage her time well since the husband has not complained, though we don't know why the husband has called her. – Sector 4 man

And she is a mother, maybe she is not having a problem with her time. – Sector 4 man

*People will be coming to her house for advice and seeking information about the business.
– Sector 4 man*

*The husband may not like her traveling but it is easier to make a phone call. She can make a call.
– Sector 3 woman*

How will life change for Amina and her family?

Lastly, participants consider how the business will change Amina and her family's life over the coming year. Sector 4 women agreed Amina's business prospects and quality of life depend on how her husband perceives her. Sector 4 men were largely optimistic about the outlook for Amina and her family. When

responding to the question, sector 3 women and men assumed the husband would choose to invest in the business.

Aminat's life is likely to change for good or bad depending on the perception of her husband about her. – Sector 4 woman

*Nothing is permanent or certain in life, but hopefully, the business continues to grow.
– Sector 4 man*

I think the family will be okay, they will be able to afford more things. They will have built houses, changed the children's school, and taken care of the family through the help of the business. – Sector 4 man

Hopefully, the husband will become her accountant. – Sector 4 man

If the husband can support her financially and put more capital into the business, in another year, you will see the difference. – Sector 3 woman

The standard of living of the family will improve. – Sector 3 woman

If the husband invests, the whole story will change. It will not be Amina's chicken business anymore. When the husband invests in your business, it becomes a family business. The whole story of the community will change. – Sector 3 man

Study limitations and next steps

This study was designed as a landscaping activity to learn more about chicken keepers' activities, perspectives, and production challenges to identify potential gendered impacts of the PREVENT project and informing recommendations for indicators to use in the ongoing project. As qualitative work with a limited number of participants taking place in only one to two sites per country, the findings, particularly the descriptive statistics of participant demographics, should not be considered generalizable to a larger population. Recurring themes across focus groups and geographies, such as challenges accessing credit, increasing reliance on employees as intensification increases, and the presence of social norms impacting how an entrepreneurial woman may be perceived by her husband, family members, and community are likely to be relevant beyond the participants we worked with, and can inform work with chicken keepers or future research projects.

Tanzania

This section describes the results of the rapid gender analysis conducted in Pwani and Iringa regions in Tanzania as part of baseline landscaping activities for the PREVENT project (Promoting and Enabling Vaccination Efficiently, Now and Tomorrow).



Women waiting for a focus group discussion to begin in Pwani, Tanzania (Photo credit: ILRI Tanzania/Aisia Ngowi)

Highlights

- Family members contribute labour for routine tasks, even for sector 3 producers.
- Sector 3 men view chicken keeping as a viable form of self-employment.
- More biosecurity practices were reported by Iringa chicken keepers compared to Pwani.
- In Iringa, proceeds from chicken keeping financially supporting agriculture.
- Local breed chickens and eggs are in demand, however, DOCs for local breeds are not available.
- Land is a limiting factor for some women and men across sectors 3 and 4.

Overview of research activities

Activities consisted of focus group discussions (FGDs) with women and men chicken keepers in sector 4 (Traditional Backyard producers with up to 50 chickens and Improved Backyard with 50-200 birds) and sector 3 (Semi-intensive Producers with 201-1,500 birds and Emergent Commercial Producers with 1,500 plus birds) and key informant interviews (KIIs) with poultry sector actors. In short, sector 4 refers to backyard production and sector 3 is small scale commercial production. See the [Gender Landscaping Guide](#) for more detailed information about methods and the research tools.

Site description

Research activities in Tanzania were conducted at two sites, one in Pwani region on the coast of Tanzania, and the second in Iringa region in the Southern Highlands. Pwani region is adjacent to Dar es Salaam, the most populous city in Tanzania, thereby benefitting from nearby urban consumers of eggs and chicken meat. Iringa region is in the Southern Highlands, where a cooler climate and fertile soils make it part of the agricultural belt of Tanzania. Pwani region has several hatcheries while Iringa is primarily served by a single, large hatchery and several small hatcheries. Some chicken keepers in Iringa reported owning incubators. Additional local resources for chicken keepers included a livestock research center and livestock laboratory in Iringa which produces and sells drugs and vaccines to hatcheries and farmers and chicken feed factories located in Pwani selling chicken feed directly to farmers or through sales agents.

Key informants described the hatcheries as providers of Day-Old Chicks (DOCs) to customers located throughout Tanzania. One hatchery transported DOCs to farmers in Morogoro, Dodoma, Iringa, and Dar es Salaam for free because the hatchery has selling centers, while in regions where they incur flight costs, such as Mwanza, Bukoba, Tarime, Kigoma, Tabora, Mbeya, and Songea, chicken keepers pay a transportation fee.

A government livestock officer in Pwani reported chickens as making up the largest proportion of small livestock kept by small-scale farmers. While chicken production is practised on large and small scales, small-scale production is dominant, with most producers owning one to 150 chickens. The few large-scale chicken farmers are in peri-urban and urban centers, mainly keeping layers, broilers, crossbreeds, and local breeds. In contrast, small-scale chicken producers are located primarily in rural areas and peripheral urban areas, with a majority keeping local chickens. Small scale producers also exist in urban areas, mainly keeping chickens for household use. Key informants in both regions reported chicken keeping is mainly done by women because they are more available at home compared to men. Men

were reported to engage in periodic activities like constructing chicken houses. Youth participation in chicken production was described as low by some key informants; this was attributed to lack of capital and interest in chicken farming, however some FGD participants were youth. For context, youth in Tanzania is typically someone between 18 and 35 years old. A veterinary service provider in Iringa described chicken keepers preferring local chickens and improved chickens (breeds such as Sasso or Kuroiler with genetic contributions from local breeds). In Iringa, chicken keeping is often seasonal, “like from May to December people engage in chicken keeping and stop from January to April.” This is in part due to competing agricultural activities during the rainy season and increased demand for chickens during the holiday season.

The hatchery employees stated most of their customers are women, estimating 80% and 70% of customers for a hatchery in Pwani and Iringa, respectively, are women. A Pwani hatchery employee further noted out of the 80%, 50% of the women are small-scale chicken farmers, a topic discussed further in the [Poultry sector trends](#) section.

Participant demographics

In this section, we provide a summary of the demographic characteristics of the chicken keepers who participated in the focus group discussions (FGDs) in Pwani and Iringa. Sixty-six participants attended eight FGDs, disaggregated by gender (women and men) and production system (sector 3 and 4) as shown in Table 3. The following summary statistics give additional information about the participants, but the study was not designed to give representative statistics generalizable to a larger population.

Table 3: Summary of FGD participants in Tanzania

	Site	Sector 4 women	Sector 3 women	Sector 4 men	Sector 3 men	Total # participants
# of participants	Pwani	9	8	8	8	33
	Iringa	8	8	9	8	33
Total		17	16	17	16	66

Participant ages ranged from 23 years old (sector 3 and 4 women) to 72 years (a sector 4 woman). The median ages were 28 years for sector 4 women followed by 30 years (sector 3 women and sector 4 men) and 40 years for sector 3 men. Many of the participants were educated; most of them had acquired primary, secondary, or tertiary education (Figure 5). Only two men in sector 4 reported no formal education.

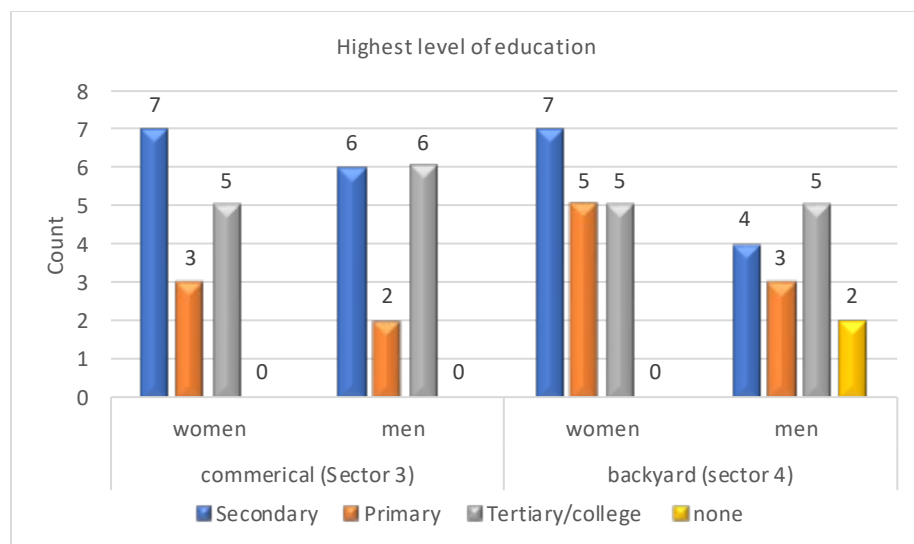


Figure 5: Education level of participants, Tanzania

Figure 6 shows all the men and many women in sector 3 practised deep litter system, apart from one woman who reported practising free-range production. In sector 4, men and women practised deep litter and free-range systems, but slightly more women than men practised deep litter systems. One of the women in sector 4 used a mixed system (both deep litter and free-range). None of the participants used battery cages.

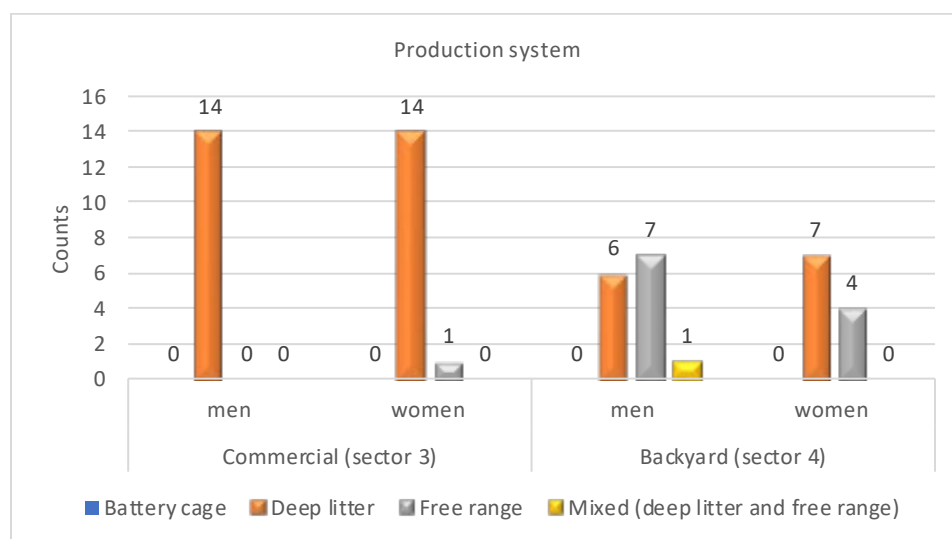


Figure 6: Production systems, Tanzania

Men and women in sector 3 mainly kept broilers, layers, and improved breed chickens while in sector 4, men and women mainly kept local chickens, with a few keeping improved chickens. Improved chickens

are breeds such as Sasso or Kuroiler with genetic contributions from local breeds. Only two women in sector 4 reported a mixture of layers and broilers on their farms (Figure 7).

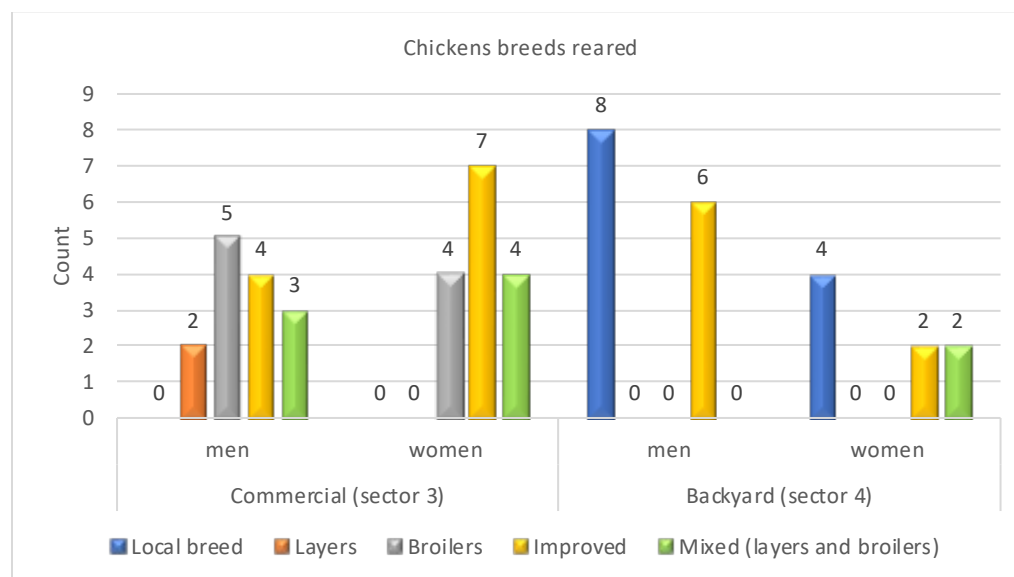


Figure 7: Types of chickens reared, Tanzania

Figure 8 shows many men and women in both sector 3 and sector 4 purchased DOCs and teen chicks. All participants reported purchasing chicken vaccines and chicken feeds within the last 3 months as of the time the survey was carried out.

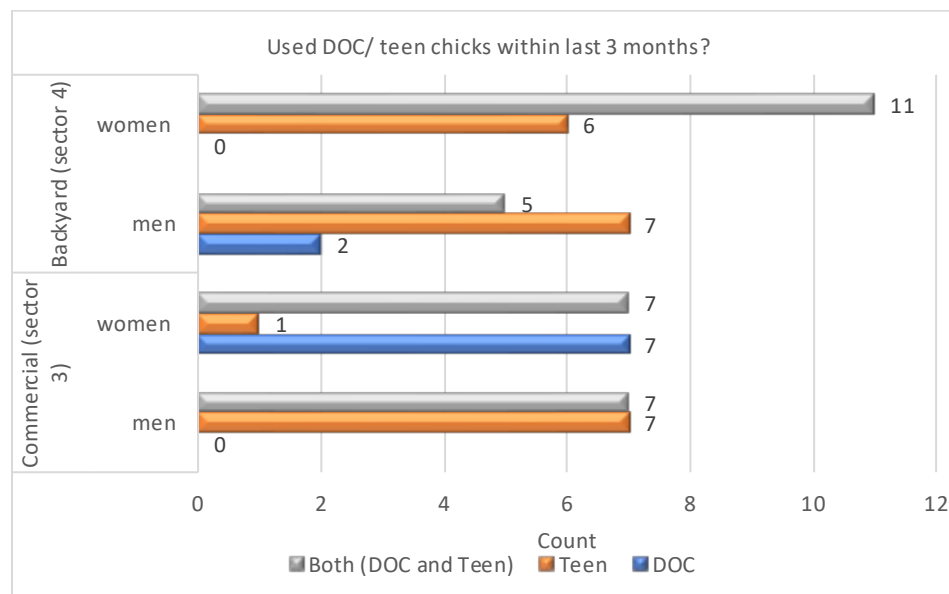


Figure 8: Purchase/use of DOCs and teen chicks, Tanzania

The median flock size was similar for men and women by sector (800 chickens for sector 3 men and women and 49 and 50 for men and women, respectively, in sector 4).

Table 4: Flock size (# of chickens), Tanzania

	Sector 3 men	Sector 3 women	Sector 4 men	Sector 4 women
Mean	843	1115	57	88
Median	800	800	49	50

In addition to the FGDs, six key informant interviews were conducted with an agroveter, hatchery employee, and animal health professional in Iringa and an animal health professional, hatchery employee, and lead farmer in Pwani. The hatchery employee and animal health professional in Iringa were both women, and three of the key informants were under 35 years (Iringa hatchery employee, Pwani hatchery employee, and Iringa agroveter). The commercial farmer in Pwani was over 60 years old.

Reasons for keeping chickens

Women from sector 4 (backyard producers) described keeping chickens for income, to improve economic status, for self-employment, for “subsistence in life”, and to pay for children’s school fees or agricultural inputs. Compared to sector 4 chicken-keepers in Nigeria, they were more likely to mention household consumption, especially of eggs, as a motivating factor. As a woman in Pwani region explained, “I just started recently. I expect good things and for now, I get food for my family (eggs).”

Sector 4 men also described keeping chickens as a source of income and food, with men in Iringa noting the benefit of chickens as a source of manure for agriculture and vegetable farming. One man reported selling about four bags (100 kg total) monthly for 10,000-15,000 Tanzanian shillings (TZS), equivalent to \$4.30-\$6.50 USD. A man in Pwani explained the chickens are for his wife. “Sis a domestic woman, this helps her to have something to work on at home.”

Women in sector 3 (commercial producers) described keeping chickens for income, with larger financial benefits than sector 4 keepers, including earning “a lot of money which I couldn’t earn doing any other kind of livestock keeping” (Pwani), “housing improvements and paying school fees on time” (Iringa), and “self-economic freedom that enabled my participation in savings groups like VICOBA (a micro-credit program called Village Community banking)” (Iringa). Women in Pwani described gaining access to more nutritious food by raising chickens for household use that don’t contain medicines or drugs, consuming healthier white meat, and eating vegetables without inorganic fertilizers. Another woman in Pwani explained she sells about 200 50 kg bags of manure each year for 2,000 TZS each, earning an estimated annual total of about \$174 USD. Sector 3 men also described income as a primary motivator, with household consumption of eggs and meat and manure for farming or sale as added benefits. Men in Iringa found the market reliable, and two explained they left paid employment to become self-employed chicken keepers. “I was earning a low income that was not enough to sustain life. I decided to keep chicken as a means of self-employment that helps me to earn income quickly and easy.” A man in Pwani previously worked for commercial chicken keepers, which gave him the experience to start his own business. “So, when I got my benefits from my job, I didn’t want to waste any time, I decided to start keeping chickens. I built a house for my family through the chicken business.”

Workload and time allocation

Keeping chickens involves both routine tasks, such as feeding, watering, cleaning, and checking for health issues as well as management tasks, such as vaccinating, selling chickens or eggs, and restocking through the purchase of new chicks. Sector 4 women in Pwani reported spending 2-6 hours per day on routine tasks, with the help of female employees (“house girls”), younger brothers and sisters, and older teenage children (17-18 years old). Reasons for being the main person doing these tasks included being “at home most of the time”, having experience, and not having a dust allergy. Only one woman in Pwani reported her husband’s involvement in routine tasks, describing “My husband is working on feeding and checking on the chicken’s health more. My female employee does all the other activities like washing the dishes, but inspection is my responsibility.” In contrast, sector 4 women in Iringa reported doing most activities themselves to avoid the spread of diseases, with two women sharing the responsibilities with their mothers. “The interactions are not good for the improved breeds. I don’t allow other people to enter my chicken house to avoid the spread of chicken diseases.” Sector 4 men in Pwani described routine activities could be done by a range of family members, or in some cases, casual labourers. “I hire a young man to clean the chicken house because am allergic to dust. I can’t allow my wife or child to clean the chicken house.” Another man explained, “I do all activities apart from cleaning the chicken house. I have also trained my wife and other family members to do it. There is no specific activity for a specific person.” The main deciding factor seemed to be availability at home. In Iringa, sector 4 men described spending 30 minutes to four hours per day on chicken-related activities, with more family members sharing chores than reported in Pwani. The men sometimes shared routine responsibilities with their wives or younger siblings, because “the children are too young to work with chickens,” “I attended a training, so I am more skilled than anyone, and also to reduce movement in the chicken house”, and because “me and my young brother are only two in the household.”

Sector 3 women also reported undertaking routine management themselves, or with the assistance of employees and family members, and occasionally husbands. A woman in Iringa explained routine chores were done by, “Myself, an employee, and during weekends my husband supports us. Most of my time I spend on my chickens. When I have chicks, I even spend some night hours caring for them.” Two women in Pwani described doing many of the tasks when they were younger, but now rely on employees. “Due to my age, I have hired a worker to do these activities. I trained him on chicken keeping and now he has enough experience. He is looking at the chickens and giving me feedback on what’s happening. He is taking most of the responsibilities. I can stay 5-6 hours without going to the chicken house.” Sector 3 men in Pwani described doing most of the routine activities themselves or with employees. Household members seemed to play a relatively small role. “I perform these activities on my own in the morning, during the day there are employees who assist in performing the duties.” Another added, “I work with my wife but there are employees who assist. I have employees but I love working with my chickens on my own.” In contrast, most men in Iringa reported doing the activities with their wives, except cleaning the chicken houses, which men did themselves. As with sector 4 groups, the Iringa participants mentioned biosecurity much more than the Pwani participants, using it as a justification for limiting the number of people involved. “Me and my wife (perform daily tasks) to ensure efficiency because broilers can’t tolerate the movement of many people. They are easily stressed and can die.” Time estimates for Sector 3 chicken keepers varied widely, from 1 hour to 9 hours per day. They agreed the time spent

varied based on the number of chickens and increased if they were raising young chicks. For example, a woman in Iringa elaborated, “I may spend 4 hours a day when the chickens are growing. When I receive chicks, time increases, and I may spend 7 hours a day.”

Periodic activities included constructing housing, purchasing and administering vaccines and drugs, selling/ marketing chickens and eggs, and restocking. Marketing is discussed in the [Decision-making and control of income](#) section and restocking is discussed further in [Box 2: Access to day-old chicks](#). Sector 4 women in Pwani were evenly split between managing construction or construction supervision themselves or together with their husbands. The same was true for purchasing and administering vaccines and drugs. Sector 4 women in Iringa spent 2-3.5 hours vaccinating birds, and vaccinated themselves, with the occasional assistance of family members, or veterinary officers in the case of intramuscular fowl pox vaccines. Most of the women explained they can do this because of receiving training and described training the family members who helped. Family members included fathers, mothers, and sisters. “Me and my mother; I got training and trained her. I use both traditional herbs and modern vaccines/drugs.” “Both me and my sister because we are all knowledgeable and it is our business together.” Sector 4 men in Pwani felt a responsibility for taking care of housing construction, because “the nature of this activity suits me more than any other in the household,” and most preferred to vaccinate themselves, because “it is very sensitive to leave to any other person.” Sector 4 men in Iringa also mentioned periodic mixing of feed, an activity taking 1-2 hours, which they did together with wives, mothers, and younger brothers.

Sector 3 women in Pwani engaged male family members to assist in constructing or supervising construction of chicken housing, from fathers-in-law to husbands and sons. One woman did it herself because her husband was sick. “I can’t use an employee for this task because most of them are not faithful,” another explained. Vaccinating was done alone, or sometimes with a husband or employee. Sector 3 women in Iringa reported handling vaccines and drugs themselves, although “If I am not around, my husband and an employee assist in drugs and vaccines.” Women reported spending 15 minutes to 1.5 hours purchasing veterinary inputs, depending on the distance. Housing construction was largely handled by men. Sector 3 men in Pwani spent more time purchasing veterinary inputs, with reports of 2 hours to purchase from a nearby hatchery to 3 hours to travel to Dar es Salaam, “if I need many drugs at once.” Sector 3 men in Iringa all reported vaccinating chickens themselves, “because am comfortable and sure when I do it myself.”

Decision-making and control of income

Closely related to understanding who is conducting management tasks is knowing who is making decisions in production. Here we consider who makes marketing decisions about buying and selling chickens and eggs and choosing which type of breed or chicken to keep. We also look at who controls income from the sale of chickens and eggs.

Sector 4 women in Pwani all reported they should be consulted when chickens are sold, with one woman widening the circle to include other family members: “To sell, my husband, my niece, or I should be consulted.” The response was similar in Iringa, with all needing to be consulted, and two participants saying a husband or sister would also need to be informed, respectively. Most women in Pwani sold

wholesale to traders who paid in advance or in cash upon sale, and a few sold directly to consumers. In Iringa, the main buyers were street food vendors, small restaurants, and retail customers purchasing for their households; only one woman mentioned selling to a trader. The women all made decisions themselves about which breeds to keep, reportedly keeping broilers, layers, improved local chickens, and mentioning Kuchi and Kuroiler breeds by name in Pwani and Sasso breed in Iringa. Their preferences were based on market demand, time to rear, rearing cost, and in the case of local and improved local chickens, disease resistance. They described using income for household and family needs, including school fees and food. One woman in Pwani said she uses 80% of the income to “boost another business like my mobile money transaction business.” In Iringa, women also described using income to pay for agricultural inputs such as fertilizer or chicken feed. About half the women in Pwani said they are the sole owners and the other half said they own the chickens jointly with their husbands. Most women in Iringa said they are sole owners, with two cases of co-ownership with husband and sister, respectively.

Sector 4 men in Pwani reported making decisions jointly with their wives about the price for selling chickens, with two men saying their wife does this alone, and one sharing decision-making with a younger brother. Customers in Pwani were again mainly traders or customers from other households. One man described a chicken keeping group which helps him link with buyers. In Iringa, men were evenly split between making decisions themselves alone or with wives or sisters. “Both (me and my wife) because we always set the price.” Only two men mentioned traders, with most in Iringa selling to food vendors or directly to customers in their village or Iringa town. Men in Pwani made breed decisions alone or with a spouse or family member, preferring local breeds because of high price and market demand, with a few mentioning Kuroilers for their “resistance to disease compared to other improved breeds.” Men in Iringa chose the breed alone, preferring local breeds for the lower costs and Sasso because of the reliable market. Men in Pwani all reported decisions about income were made jointly with their wives. Income was used for expenses such as “flour and sugar”, soap, school fees, utility bills, hospital bills or returned to the chicken business through buying feed or drugs/ vaccines. The only exception was a single man who made decisions together with his younger brother, but who reported similar uses of the income. In Iringa, siblings also played a role in deciding what to do with income for three of the participants. Additional uses of income included contributing to other businesses: “we managed to buy dairy cows” or “to increase capital for my mother’s business as a food vendor” and personal purchases: “I use it to buy clothes” or “refreshment” (alcohol). In Pwani, three men reported joint ownership with their wife, two reported their wife owns the chickens, and one man co-owned with his younger brother. In Pwani, three men claimed sole ownership, with the rest co-owning with wives and/ or adult family members.

Most of the sector 3 women in Pwani were the primary person involved in the business, and as such, made sole decisions about selling chickens and eggs, as one woman explained, “because I am the founder of the business and more familiar with the business than other household members.” One woman made these decisions jointly with her husband; “It’s our business, everything is participatory.” In Iringa, a few women made decisions alone, others jointly with their husbands. One woman described “Me and my husband must be consulted to sell. But to bargain, I must be consulted.” Women in Iringa sell to retail customers and businesspeople in Iringa and nearby Mafinga (80 km) and Ifunda (45 km).

Pwani women primarily made breed decisions together with husbands, keeping both broilers and layers, with one participant mentioning keeping Kuroilers (an improved local breed) and local chickens to diversify her market. Iringa women preferred Sasso and Hy-Line (layers). One woman explained she kept local chickens until receiving Sasso breed chickens from a project. Another kept layers with her husband, then later wanted to diversify into also keeping broilers. “I decided on my own and proposed the idea to my husband. It took him six months to agree.” Women in Pwani reported deciding jointly with husbands how chicken income should be used, with one participant saying her father-in-law decides because he is the manager of the project. Sector 3 women in Iringa were less specific about who makes decisions but described income from keeping chickens as making up one to two-thirds of all family income (four participants estimate 60-70%). “Chicken keeping contributes a huge percent compared to farming activities,” said one woman. This income contributes to household needs, protecting capital, savings, farming inputs, and school fees, even tuition for a university student in one case. Three women described sitting down with their husbands to discuss how the income should be spent, while others did not specify. Women in Pwani all said they owned the chickens jointly with their husbands, except one woman who explained, “I am the only one involved in the business because my husband is sick.” In Iringa, more women described themselves as the sole owners, with others saying they owned jointly with their husbands.

Sector 3 men in Pwani described selling to retail and street customers and visiting nearby shops and supermarkets in search of markets for eggs. “Marketing is a challenge. Sometimes I delay for a week.” Another explained how he networks for customers.

I call my customers on the phone, and they come to my home. As for broilers, when they are ready to be sold, I call my customers early. I post on social media, and on groups of fellow chicken keepers. They come and look, you bargain, and then they give you a date when they'll come to pick up the chickens.

Multiple men described once a sales plan and price had been decided, multiple household members could make the actual sale. “Any of us can sell, what’s importance is to keep the sale in writing.” Men in Iringa made decisions alone, “because father is father,” or in some cases, either the man or his wife could make the decision. One explained that he must be consulted for any sales of chickens “because it’s my business but eggs may be sold by an employee as the number of trays are well known.” In Iringa, chickens were sold to traders or directly to consumers. Most men in Pwani decided on the breed or type themselves, preferring broilers and layers, with a few mentioning Kuroilers specifically. One reported he decides, but informs his wife, and another said his wife decides. In Iringa, most men decided themselves to keep Sasso chickens for their resistance to disease, with a few also keeping local chickens. Two men reported making joint decisions about breed with their wives. Pwani men explained most of the income goes to family needs, such as other projects, school fees, and even hospital costs. “The use of the money depends on the needs of the family at that moment.” Iringa men explained money must first be returned as capital for the business, then the remainder can be used to pay for household expenditures. When asked who the final decision-maker is, a 49-year-old electrical technician explained, “I decide after getting opinions from all household members.” Another added “jointly, but if we fail to reach consensus, I make the final

decision.” Most of the men in both study sites described the chickens as jointly owned by husband and wife.

It’s a family business. – Sector 3 man, Iringa

Access to and control of resources

In this section, we asked respondents to identify what resources they need for chicken production. We also highlight where and how people purchase chickens and whether they have access to day-old chicks (DOCs). Challenges in accessing needed resources is discussed further in the [Goals and barriers](#) section.

I use family land. They allowed me because I assist in solving the family’s problems.

– Sector 4 women, Iringa

I need land. Local breeds cannot be kept fully sedentary; they need to be free-range at some point, so it requires a large area to keep many local chickens, unlike other breeds.

– Sector 4 man, Pwani

Credit and loans are available, but the interest rate is high. – Sector 3 woman, Pwani

Capital and credit are big challenges for chicken keepers. – Sector 3 man, Pwani

Sector 4 women in Pwani identified needing the following additional resources: land to expand chicken housing, knowledge about building quality housing, a greater variety of breeds, affordable drugs, and access to market. They identified the government and NGOs as potential allies in getting needed resources. All of the women in Iringa reported using land borrowed from relatives or landlords to keep chickens. One woman only paid rent, with most women describing the expectation of other kinds of compensation. “I used to give a chicken to the family as compensation for using the area.” Another explained, “I borrowed land from my landlord. It wasn’t difficult for her to allow me because she is also a chicken keeper. She learns about chicken keeping from me.” Iringa women listed the following additional resources they needed: a larger chicken house to segregate chickens by age, capital, “my own land”, and training. Potential ideas to get these resources included forming a group to ask for a loan, advertising the business through social networks, and participating in business exhibitions or social gatherings such as ceremonies.

In Pwani, sector 4 men identified need for veterinarians and animal health officers, training, credit to “help a farmer in case of any loss but also to raise capital”, land, reduced prices for feed and drugs/ vaccines, and market access. “Available markets are not adequate. It will be much easier to access markets if we formed cooperatives. Middlemen should be eliminated; they destroy the market.” Clarifying on the content of training, a 40-year-old driver raising local chickens said, “We need more knowledge on improved chicken keeping, how to identify diseases and treat them, how to feed chickens, and to how to identify poor quality drugs and vaccines.” Sector 4 Iringa men co-operated with family members to find customers and cited a reliable market as one of the greatest needs, along with loans for capital, and additional knowledge and skills on chicken-keeping. Some of their proposed solutions for meeting these needs included government loans, NGOs finding a reliable market, a set

price per kilogram for chickens, and the establishment of a farmer's group to attract a common market. They also discussed chicken brokers, who they felt were helpful, especially during the low market season, but brokers set a low buying price.

Sector 3 women in Pwani identified loans as the most critical resource needed for production, “for capital but also to purchase DOCs and feed.” A 69-year-old woman keeping broilers explained a loan would help her “build better infrastructure, for example modern chicken houses that allow droppings to fall automatically without removing them manually.” A widowed woman of similar age added the interest rates on loans are high. “Loans with simple requirements would be a solution to this.” Women in Iringa cited the need for more reasonably priced drugs and better knowledge about their usage, more extension providers, access to markets, and “credit based on individuals, not groups, because the level of trust is low.” Most of their potential solutions involved government assistance, especially for the provision of individual loans with affordable interest rates, and improved services from the hatchery, including additional extension, assistance identifying markets, and the ability to get DOCs on credit.

Sector 3 men in Pwani and Iringa overwhelmingly agreed one of the largest challenges is capital; credit and loans with reasonable interest rates are not available to chicken keepers. In Pwani, men also explained the high costs of inputs, especially DOCs and feed, were a challenge. A 29-year-old with a university degree keeping 1,200 broilers explained, “For example, now the price of one chick is 2,000 TZS (\$0.87), if only 500 TZS were deducted to minimize the cost, it would be better for chicken keepers.” Other issues included delays receiving chicks, access to markets, and low-quality drugs. One proposed solution was hatcheries providing credit to chicken keepers or cost sharing orders of chicks for payment of the full balance later when producers start to sell their birds. One participant reported two hatcheries are already provided this service to some extent. In Iringa, the focus was on loans, and for one participant, land. A 35-year-old man keeping layers, broilers, and local chickens described competing with a large hatchery for market “at the times they rotate batches of layers,” thereby flooding the local market with lower cost chickens. Multiple participants wished to have access to DOCs for local breeds, which are in demand by customers around Iringa.

Box 2: Access to day-old chicks (DOCs), Tanzania

Given the goal of the PREVENT project to improve hatchery capacity, this section focuses on where and how people purchase chickens and their capacity to handle DOCs.



(Image credit: ILRI/ Stefano Bianco)

Sector 4 women: *“A lot of time should be allocated to managing day-old chicks.” – Pwani*

Women in Pwani reported having access to DOCs from three hatcheries, another woman brought her own eggs to a brooder for incubation. Other reported having an option of vaccinated chicks for a higher price or unvaccinated chicks for a lower price. Time commitment, heat regulation, and requirements for high hygiene were challenges mentioned in managing DOCs. Women in Iringa got Sasso breed DOCs from the hatchery, but other participants mentioned wanting local breed chicks. “Local breed DOCs are not available, unless a chicken hatches at home, otherwise a keeper should purchase a 3- or 4-month-old chicken and raise it.” One woman described paying in advance for chicks and receiving her order within one week. A government livestock officer for the ward facilitated transport for chicken keepers in her area for a fee, a service described by only the women’s FGD. “She places the order for us. You pay her 5,000 TZS (\$2.17 USD) and she brings them up to your home.” Another described, “It is 3 hours distance by car (to go and return). I pay 6,000 TZS (\$2.61 USD) for my travel fare and DOC’s transport.” Challenges managing DOCs included inadequate extension knowledge, long wait time (2 weeks in Iringa), eye and leg disorders, and the high cost of feeding starter for the first month.

Sector 4 men: *“My chickens hatch chicks themselves.” – Pwani*

“We are paying cash to the hatchery agent, half before receiving DOCs and half after.”

- Iringa

Sector 4 men in Pwani reported low access to hatchery chicks with some access to incubators to hatch eggs they procure themselves, while men in Iringa had relatively convenient access to DOCs through the hatchery. Most Pwani men vaccinated their chicks themselves, with one participant mentioning not trusting the hatchery to vaccinate for him.

Access to DOCS (continued)

Sector 4 men (continued)

Only one participant, a 28-year-old teacher, had access to DOCs from a hatchery, paying 2,500–3,000 TZS (\$1.09–\$1.30 USD) per vaccinated DOC and 1,800–2,000 (\$0.78–\$0.87) for unvaccinated DOCs. “If I have money, I vaccinate the DOCs at the hatchery but if I don’t have it, I vaccinate them in day two to three.” Another man explained why he brings his own eggs to the hatchery for incubation, “There is no place where I can get a pure breed of DOC, that is why I buy eggs and take them to the hatchery.” A man keeping only local breed chickens described a bad experience. “Previously, I got DOCs somewhere and lost most of them. I would like to have a credible source of DOCs.” Challenges included finding DOCs hard to raise, receiving chicks in poor health that have not been vaccinated at the hatchery, and being disappointed about hatching rates for those who procure their own eggs or collect from home. In Iringa, men described paying an advance to a hatchery agent, who then brought the DOCs to a specified location in Iringa town for men to pick up. Their transport costs to Iringa ranged from 5,000 TZS for motorcycle fuel to 15,000 TZS for a hired motorcycle (\$2.17 and \$6.51, respectively). They described challenges including providing the required temperature for brooding, transporting back to the rural area (cost and poor roads), and poor access to chick feed.

Sector 3 women: *“We are taking different numbers of DOCs depending on level of production.”*

– Pwani

Pwani women all reported having access to DOCs through one of the hatcheries, taking between 300–1,000 DOCs at a time depending on levels of production, and waiting 2–4 weeks to receive them. Women in Iringa accessed DOCs through the hatchery, where one box of DOCs was sold at 140,000 TZS (\$61 USD) and delivered at no extra cost for pick-up in Iringa town. Waiting times were estimated at 1–3 weeks for Sasso and up to 6 months for Hy-Line breed. Reported challenges included “handicapped” chicks that were small, blind or had “leg problems” and insufficient knowledge to deal with this. A trader keeping 600 Sasso chickens added, “Men regard this (managing DOCs) as a women’s business, but when the business grows, they intervene.” Challenges managing DOCs included inadequate extension knowledge, long wait time (2 weeks in Iringa), eye and leg disorders, and the high cost of feeding starter for the first month.

Sector 3 men: *“The hatchery brings improved DOCs at their own cost, but we don’t have access to local DOCs.”* – Iringa

Sector 3 men in Pwani had access to more hatcheries but with longer wait times than men in Iringa, who were only served by a single hatchery, but had shorter wait times for receiving chicks. A 63-year-old raising broilers explained he can get from multiple hatcheries.

Access to DOCS (continued)

Sector 3 men (continued)

“You might send the order to the hatchery and find the order is filled after six months, or year. Sometimes it may take 2 months, 6 months, or after a year in December. At first it was this hatchery. Later on, there were challenges, so I shifted to another.” Another agreed that “Chicks from [hatchery name] are of good quality, the only challenge is the long queue.” In contrast, men in Iringa reported waiting times of only 2-4 weeks, even one week for Sasso chicks, but many wished for more breed variety, particularly access to DOCS for local breeds. Challenges included the time commitment for chicks during days 1-14, brooding at the required temperature especially without electricity, lack of skills for feeding and constructing housing, and in Pwani, diseases, with participants mentioning fowl typhoid, coccidiosis, and Newcastle disease. “Rats are also a problem; they eat the chicks.” The men felt the challenges of raising DOCS were the same for men and women.

Access to and source of information on chicken keeping

Women and men in sector 3 and sector 4 largely mentioned fellow farmers as one of the key channels of obtaining information on chicken keeping. Most of the chicken keepers, both men and women, from sector 3 and sector 4 noted talking to fellow chicken keepers was the fastest way of getting information and solutions to the problem they are facing. Participants explained they learn and get inspired/motivated when they share ideas and find solutions amongst themselves, while acknowledging information obtained from fellow farmers is not always reliable, particularly from those who are less experienced and knowledgeable. A woman in sector 3 in Iringa elaborated, saying if information obtained from a fellow farmer fails to work or leads to losses, it usually results in hostility and conflict between the farmers.

Internet (social media such as WhatsApp, Facebook, and YouTube) was reported to be used by most chicken keepers. Men and women in sector 3 and sector 4 said internet was the fastest way of getting information and solution to the problem they face in keeping chickens. However, they the cost of purchasing data, and it is a one-way mode of communication without opportunities for questions or feedback. A woman in Iringa, sector 4, said the internet is only good for the learned and those farmers who know how to use technology (internet-enabled devices such as mobile phones and computers). A man in sector 3 in Iringa noted it is difficult to access information on chicken production from the internet mainly because of the language barrier; most of the online content is in English. Two men in sector 3 in Iringa noted some of the information accessed through the internet is not credible nor verified; hence it can mislead chicken keepers.

Some men and women in sector 3 and sector 4 reported accessing information on chicken management from media (television, newspapers, and radio). Men and women in both sectors felt information accessed through media was reliable as it is provided by professionals, but women in sector 4 reported limited access to televisions and radio making it hard for them to access information. A woman in sector 3 noted chicken management information given through media is run for a limited time so is of limited

use. In addition, some men and women in sector 3 found suggestions gained through media difficult to implement because they are theoretical and lack practical demonstrations.

Men and women in sector 3 in Iringa described receiving training from the nearby hatchery. The hatchery provides free training to chicken keepers who purchase more than 300 DOCs at once. Women in Iringa reported receiving diverse information on topics ranging from taking care of DOCs to egg handling. Those who take less than 300 DOCs would need to pay a considerable cost to attend, \$65 USD for a six-day training. Sector 3 chicken keepers in Pwani reported training opportunities from a nearby hatchery.

Another source of information reported was veterinary officers or agrovets. Agrovets are supply stores for farmers, selling seed, fertilizer, animal feed, and veterinary inputs such as drugs and vaccines. Respondents noted while the information provided is reliable, the veterinary/agrovet personnel are money-oriented, rarely creating enough time to share information. Some men and women across the sectors complained agrovet personnel are not qualified; hence, they give misleading information. A woman in sector 4 in Iringa reported getting information from the annual agricultural on *Nane Nane* Day, a public holiday in Tanzania recognizing the contribution of farmers every August 8 (*Nane* means “eight eight” in Swahili, the date of the holiday). She explained farmers get a lot of information at once through this platform, but unfortunately, it only happens once a year. Some sector 4 men and sector 3 women in Iringa reported getting information on the management of DOCs from Feed the Future, a US government initiative to address hunger and food security. While they found the information reliable, it was considered unsustainable because it is provided within a short duration. Some women in sector 4 in Iringa got information from extension officers. Again, the information was largely viewed as reliable, but with limited numbers of extension officers in the region, it was hard to access them. One of the women said some extension service providers are not qualified.

Goals and barriers

Short term goals

In this section, men and women were asked to state their short-term and long-term goals for their chicken production activities. Men and women in sector 3 and sector 4 in both Pwani and Iringa regions wanted to upgrade their production by increasing the number of birds; most of them aimed to increase the number of birds they own by two or three times the current flock size. Women and men in sector 3 in Iringa and Pwani regions wanted to construct better housing and increase the number of modern pens to accommodate more chickens. One of the women in sector 3 in Iringa wished to install water taps in her home to enable her to get enough water for her chickens. Four women and a man in sector 4 in Iringa region aspired to buy a piece of land for expanding their chicken businesses. Women in sector 3 in the Iringa and Pwani region wanted to expand their capital base and stop depending on loans to run their poultry activities. A 40-year-old woman in sector 3 in Iringa wanted to venture into breeding. A man in sector 4 in the Pwani region expressed wanting his products to go from reaching markets in Kibaha, one of the districts in Pwani region, to reaching urban customers in Dar es Salaam.

Long-term goals

In the long-term (over the next five years), most participants wanted to further expand their production by keeping more chickens; they claimed this would help them create more job opportunities for themselves and even hire people to work on their farms. Some men and women in sector 3 and sector 4 in both regions wish to continue expanding the number of birds they keep in the long run since they see great market potential for poultry products. Others wanted to venture into value addition after expanding their production, for example a woman in sector 4 in the Pwani region aspired to own an egg and meat production factory. A 26-year-old man in Iringa wished to start selling chicken meat.

Some men and women wanted to make improvements on the input side of the business. For example, a sector 3 woman in Pwani wanted to start selling chicken feed. In Iringa, three men in sector 4 described the goal of buying an incubator and selling DOCs, citing challenges accessing chicks from the hatchery. Some men in sector 3 wished to reduce the costs of production by investing in modern cages and automatic feeder systems.

Lastly, respondents shared goals of improving their lives in various ways using income from keeping chickens, such as buying land, constructing a house, or starting another type of business. One sector 3 woman in Iringa wanted to buy a piece of land and diversify her income base by venturing into other farming activities such as planting avocados, another hoped to buy a car. A 23-year-old woman wished to use the money from keeping chickens to construct a house and start a family. A 63-year-old woman in sector 3 in the Pwani region noted she hoped to channel the income to construct a better house. Some women and men in sector 3 and sector 4 in both regions aspired to be commercial and famous chicken farmers in the region.

Hindrances to achieving goals

Participants in all FGDs considered a lack of capital as the major hindrance to their envisioned goals. Men and women noted although they want to engage in the processing of poultry products and even own hatching machines, they do not have enough capital to buy the needed equipment/machines. Men and women also complained about the cost of production, especially feeds, making it hard to increase the number of chickens they keep.

Lack of sufficient skills, both in chicken production and financial management, was considered a challenge by men and women; a 25-year-old woman in sector 4 in Iringa noted her expansion dreams are limited by a lack of proper financial management skills. A 36-year-old man in sector 4 in the Pwani region said inadequate training on improved chicken production/management skills was the greatest hindrance to expanding his business.

Men and women in sector 3 in the Iringa region complained of a lack of reliable market for their birds. Some women in sectors 3 and 4 complained of limited access to land as a hindrance to production, a topic also discussed in the [Access to and control of resources](#) section. Most women in sectors 3 and 4 wanted to use the income from chicken production to buy a piece of land and construct better pens.

A man in sector 3 in Pwani region explained high prices of DOCs hinder him from expanding his chicken business. In Iringa, a woman in sector 4 noted poor quality DOCs affect her ability to expand production.

Sector 4 men in Iringa noted the COVID-19 pandemic might affect their long-term goals since it affects the poultry value chain. Men and women in sector 3 and sector 4 in both regions complained of delays in delivery of DOCs; as a man in the Pwani region explained, lack of assurance in access to DOCs was a hindrance to achieving long-term goals of expanding his business. Climate change was cited as contributing factor to delays in achieving production goals by a sector 3 man in Pwani. Women in sector 3 and sector 4 in the Iringa region complained of chicken diseases, as in most cases, the disease can wipe out an entire flock.

Training time preferences

Preferred months

Most women in sectors 3 and 4 and men in sector 4 in the Iringa region preferred to be trained between April and August since there are fewer farming activities after they have harvested their crops; hence, they can get time to attend the training. Some women in sector 3 in Iringa preferred May-June since it is a dry season with fewer farming activities. A woman in sector 3 in Iringa noted May and June are too dry, resulting in an eruption of many chicken diseases. However, most men in sector 3 in Iringa had no preference regarding the month of the year. In the Pwani region, men and women preferred between January and July because the long rains at that time result in a lot of chicken diseases, hence it is an ideal time to be trained on how to manage diseases. A woman in sector 3 preferred June for training since schools are closed and children are at home to handle household chores.

Preferred day within a week and time of the day

Men and women in sector 4 and sector 3 in the Pwani region preferred to be trained during morning hours, especially on Saturdays, since they are more flexible during weekends as children are at home to support household duties. In the Iringa region, both men and women in sector 3 and sector 4 preferred the training to be conducted in the afternoon and particularly during the weekends as they are free to attend then. Women in sector 3 in Iringa agreed with men and women in the Pwani region; they said it is easier to create time for the training during the weekends because they can delegate household responsibilities to their children since they are not going to school over the weekends.

Animal health services

In this section, we summarize preferences chicken keepers have about the gender of the agrovet or animal health care worker they work with and hear from animal health care workers about the services they provide in their communities.

Three sector 4 women in Pwani had no preference about the gender of the agrovet they work with, saying “Seriousness is what matters.” A 28-year-old woman with primary school education said she preferred to work with a woman. Another woman of similar age, but who had studied at university, preferred a man as a vet or agrovet because “it is easier to get service; women have a lot of responsibilities.” Another woman agreed, saying, “women (professionals) do not feel comfortable, thinking veterinary service provision is for men only.” In Iringa, three women had no preference, one

saying, “I believe I can understand when served by anyone”, four preferred men because they were “timely”, and one single woman in her early twenties preferred a woman “because I will understand.”

Sector 4 men in Pwani felt there was no difference in the services provided by men and women and were content to work with anyone who was capable. “Sometimes having a preference for men or women can prevent you from getting the service because what if the person you prefer is not available?” remarked a single 24-year-old with 20 local chickens. Three said they had never worked with an agrovet or veterinarian at all. In Iringa, three men preferred a woman “because we may have a long conversation about existing challenges, like feeds or vaccines” and because “they are generous and friendly.” A 30-year-old man said he didn’t have a preference, “service is service”, but noticed “women give more explanation for a problem.” Two men preferred men agrovet or veterinarians because they have “polite language” and “you can make a phone call even at night.” “I don’t know,” said a 35-year-old carpenter, “I have always worked with a woman, and the service was good.”

Most sector 3 women in Pwani had no preference, saying “a doctor is a doctor,” and another saying she had never been served by a woman vet or agrovet. Two preferred men, with one 50-year-old woman keeping broilers saying, “women have a lot of excuses, stomachaches, going to the hair saloon, going to a wedding.” Another married woman in her late fifties recounted a story.

For instance, I was once served by female veterinarian who used a stick to turn a chicken instead of touching it with her hands and she just wrote down the name of drug to purchase. But when I brought the same case to a male veterinarian, he operated on the chicken, and after looking inside, gave me a solution to the problem.

In Iringa, most women preferred a male veterinarian or agrovet, saying, “Women are not willing to enter the chicken coop as men do. They are not serious. You might be talking to her, and she is busy with her phone.” Another elaborated, “Men are so sure of their work. They treat the chickens very well. They are more professional than women. Women’s level of understanding of things is also low compared to men.”

Sector 3 men in Pwani, like their women counterparts, did not have a strong preference, although one man mentioned if a woman is shy, it can lead to miscommunications. In Iringa, three men preferred women because “if they can’t solve the problem, they will let you know” and “women are more committed; I lost chickens due to a delayed male veterinarian.” Two had no preference, though one noted a perceived trade-off, saying “men are more practical, women are theoretically good – they explain more, and we like more explanations.” One had only worked with a man so did not have an opinion.

A government Livestock Officer in the Pwani regional office said the hatcheries in the area, as well as small and large feed factories, provide some services and information, but chicken producers he works with still face challenges in disease management skills, namely vaccination at farm level for common diseases such as fowl pox, Newcastle disease, and fowl typhoid. He acknowledged government animal health professionals are few, often with inadequate facilities, and private professionals are expensive. While there is a chicken producer’s association at the national level, “it has not yet reached the ground

level.” He also spoke about the high price of feeds, with many farmers and even feed sellers not understanding feed composition or how to handle feeds to maintain quality, for example, “drying the maize bran every day reduces nutrients and poor storage can cause aflatoxin poison.” When working with chicken producers, he found some farmers don’t trust some of the service providers “due to their perceptions”, and because of limited resources for transport and extension, it is difficult for him and his colleagues to provide training or advisory services without farmer associations. He also mentioned depending on one laboratory in Temeke District, Dar es Salaam for inspecting specimens. When asked what would change if more chicks were vaccinated at hatchery level, he was optimistic. “Vaccinating at the hatchery will be safer because it is done by animal health professionals. But also, it will ensure all old day chicks get vaccinated, because if it is left to farmers, they may ignore some of the vaccines because of cost and lack of skill.”

In Iringa, the research team spoke to a government Livestock Officer serving Mufindi ward in Iringa Rural District. The main challenges of the chicken producers she worked with were the cost and expertise required to make nutritious feed, and managing diseases, primarily “flu”, fowl typhoid, and diarrhea. Despite challenges, the presence of one large and two smaller hatcheries, farmers with personal incubators, and the livestock research center for the Southern Highlands to ensure availability of drugs and vaccines meant greater support for chicken keepers compared to those in other locations. Transportation to reach rural farmers is a challenge for her and colleagues, posing an even greater challenge to women colleagues, “especially when they are pregnant.” She explained farmers have low awareness about vaccines. “Some farmers think vaccines are provided for free which is not true, so this can make them lose trust in livestock officers.” A private veterinarian running an agroveter shop in Iringa agreed misconceptions about disease transmission and drugs versus vaccines are a challenge in his work as well. “A person comes in multiple times complaining about reoccurrence of coccidiosis, and meanwhile the same person enters the chicken house the moment they come from outside activities without sanitizing their shoes.”

Some of the chicken keepers do not have any knowledge about the chickens. A person can take the DOCs and stay with them for three weeks without vaccinating just because he/she lacks knowledge. - Veterinary service provider, Iringa, Tanzania

He described fluctuating prices of drugs and lack of capital as a challenge within his agroveter business. “There are drugs I can’t afford due to shortage of capital, and if you take risks to buy them, people won’t buy due to price.” He also observed while the hatchery is a local resource, “All the feeds in this region are from there, there is no competition. It is a problem.”

Poultry sector trends

What do you think the poultry sector will look like in your community in ten years?

It may not exist anymore. We will have a few large scale chicken keepers, the rest will be keeping 2 - 5 chickens for food. Very few people will commercialize chicken keeping. – Iringa agroveter owner

Women are stepping into the business as intensification increases because most of them are housewives, so they have a lot of time to look after chickens. – Hatchery employee in Iringa

Behaviors of chicken producers will remain the same, especially sharing inaccurate information among themselves on the use of drugs. – Hatchery employee in Pwani

Marketing systems will change; there will be more slaughtering centers and butcheries that will help the marketing of chicken to be done in kilograms. – Hatchery employee in Pwani

Many key informants within the poultry value chain spoke about the risks and rewards of increasing commercialization. Different demographics perceived or were impacted by the risks and rewards differently depending on resources available to them and social norms. A hatchery employee in Pwani elaborated:

Eighty percent of our customers are women and 20% are men. Out of the 80% women, 50% are small scale producers and 30% are large scale producers. Women are stepping up more in the sector than men because they are encouraging one another once they meet in their financial group meetings, especially VICOBA (Village Community Banking, a micro-finance program). Women are doing the business as a passion/hobby, but men are taking it as a financial opportunity. Once they have a loss, they step out, that's why they are fewer in the sector.

The Livestock Officer in Pwani observed youth participation in chicken production is low, because of “lack of capital and mindset,” but believes if the sector shifts to becoming more commercial, more youth will be interested. He feels even as commercialization increases, “women will still take many roles in chicken production because they spend more time at home compared to men.” An agroveter owner in Iringa also noted amongst his customers, “youth below 35 years are very few, between 10-15%. Most youth lack consistency; they want to get profits very fast and they are afraid of challenges.” In Iringa region, a Livestock Officer highlighted the potential harm of stereotypes about women that limit their participation in commercial chicken keeping.

She can end up lacking support from the household level and community in general. A husband can discourage a wife from doing commercial chicken production, worrying she might change her conduct if she earns high income.

A veterinary service provider in Iringa noted the number of chicken keepers in the Iringa region is increasing and is mainly done seasonally. “One year back the number of chicken keepers compared to the current number has increased. Many people start by keeping local chickens, and later they shift to improved chickens. So, the number of people increases daily.”

Norms and community perceptions

In this final activity, we asked people to respond to a story about a woman in the community named Amina who is growing a successful business keeping chickens. One day, her husband asks to discuss the business with her. (See the [Gender Landscaping Guide](#) for the full prompt.) The purpose of this activity is

to identify and describe a tipping point where a women's involvement in business, especially at a more commercial level, may shift from being viewed positively to being viewed negatively by a spouse, family members, or society at large. We examine how Amina is perceived by her husband, then her



A fictitious story about a chicken-keeper named Amina is a tool for conversations about social norms. (Image credit: ILRI/Stefano Bianco)

community, how her time use and activities change, and ultimately how the chicken business may change Amina and her family's life in the coming year.

How is Amina perceived by her husband?

All focus groups discussed the possibility of Amina's husband perceiving her either positively or negatively as a result of her activities in the poultry business. Sector 4 women in Pwani took inspiration from Amina, complimenting her on her patience and persistence during an earlier time when they perceived her husband was less supportive, and hopeful he would become more involved in the wake of her success.

In my opinion, most men are not easily convinced. If you tell him something without evidence, it is

always hard for him to agree with you. Even me, when I told my husband that I want to keep chickens, he asked "Will you manage? Do you know chickens? Chicken can die anytime," and things like that. But later on, when he saw the chickens had grown well without problems and had started producing eggs, he said okay, add another batch. So that is how they are, they don't believe until they see it practically. So, the same is true for Amina's husband, he realized that Amina is good in chicken production, so he decided to talk to her about how to improve her business. I think it was advice, for instance, to add chicken houses.

The women mentioned the possibility of Amina's husband wanting her to stop the business. "On the other hand, sometimes men are jealous, especially when a woman earns so much money. So, he can prohibit the business in his household. Just like that. Everyone has his own attitude; we are not similar."

Sector 4 women in Iringa were more pessimistic about the outcome of Amina's husband calling her for a discussion, with one woman saying, "The husband was not perceiving Amina as a good person."

What I have seen in Amina's transition from subsistence chicken keeping to commercial chicken keeping is that she was focused on chicken production and abandoned the family, that is why her husband wanted to talk to her. I think the talk was not to find a market because Amina has already attained a certain level of business. The husband must be angry with Amina because Amina was based on business and forgot about family.

Two women brought up Amina potentially earning more than her husband as the source of the problem. "As long as Amina had more income than her husband, it seems the husband was disrespected because

of that.” Another chimed in, “I think the talk was, ‘money makes you disrespectful.’” Others imagined Amina may not have been truthful with her husband about the income she was earning or did not share any of the income with her husband previous to the conversation.

Sector 4 men in Pwani described Amina as a “role model” for moving from small to large scale production but acknowledged the potential for the conversation to be positive, with the husband wanting to invest in the business or negative, with him asking her to stop the business. “We don’t know what the husband will talk to her about, it can be positive or negative because sometimes men have got problems. He can tell her to stop the business because she is now earning a lot of money, or he can top up capital for her and transform a business to a company.” One participant questioned where Amina was able to get the capital for expansion, highlighting the real challenges of shifting from small scale to larger scale. “Though the story doesn’t tell how she got capital, but just all of a sudden, her chickens increased. Another thing which puts me in a dilemma is the story doesn’t tell if she was supported by anyone. Even the family and her husband were not supporting her.” In Iringa, sector 4 men suggested the husband would decide to support his wife and work together or possibly want to take over the business. “From the story, what I think is Amina’s husband wanted to terminate the business by telling her ‘Women are not doing business, so from today I will be the one owning the business.’” Another participant disagreed.

Amina was talented in chicken keeping as she started before she was married and benefited from it. I believe her husband wanted to give her knowledge on the business as well as to congratulate her because what she does is beneficial to the family and the whole society.

Sector 3 women in Pwani concluded Amina’s husband wanted to contribute to her business through investing capital and identifying customers or wanted to know how much income she is making, possibly with the intention of borrowing money. One participant questioned both the state of Amina’s marriage and where she had gotten the necessary capital for the business.

Amina started keeping chickens alone since she was a young lady, even when she was married, she was keeping chicken without involving her husband. I don’t even know where she got money for keeping the chickens. But I think there must be a compromise within the household. The husband must know where the money for keeping chickens came from. But I also wonder why the husband didn’t ask his wife from the beginning about where his wife got the money to be successful. This means previously, the husband was not interested in keeping chickens. Amina also failed to convince her husband to work together. Now, here I do not understand what kind of house or marriage this is.

Sector 3 women in Iringa initially reacted to the story by humorously describing a series of negative reactions from Amina’s jealous husband. “The man might think mmh, this person is busy with chickens rather than me. So, we have to talk about this business if she sees the chickens are better than me.” Another imitated a whining husband, “This woman is no longer respecting me, she is no longer taking care of me, she devotes all her energy to chickens. There is no more love to me, all the love is showered to chickens.” The same participant added, “It’s like when a woman has a baby, if a woman had a baby, and she was in love with the husband, all the love transfers to the kid. So, the love has shifted to

chickens.” This caused a good laugh amongst the other women. Later, a married woman in her early thirties reflected thoughtfully:

What I understand here is we still have the patriarchal system in our society. When the chickens are small, and he saw that you did not sleep, he didn't involve himself, but when the chickens grew, he fully involved himself. So, after the hardships the woman goes through on her own, then he starts arranging the prices for sale, or the use of the money received from the business while his money is not calculated that way. Maybe men also need awareness trainings on tolerance in the patriarchal system? That is why even I have kept money aside for myself. I don't know what my fellows think about this.

Sector 3 men in Pwani talked about the risks in business, the benefit of having multiple small businesses in case capital is lost in one failed business and agreed the husband had noticed opportunities in Amina's business. One man likened it to a woman who cooks buns to sell to school children in the morning, “most of the time men ignore if a woman cooks small things like buns”, but he knows one woman who started getting orders for thousands of buns. “As a husband, you must be careful with this thing...if money is being earned, we must make it so that it will help us all.” In Iringa, one man suggested, “perhaps wanted to know if the business is suitable to be a family business.” Other participants agreed Amina's husband would see the potential for making money. One participant adamantly disagreed, saying, “There is no man who is comfortable living with a woman with more income than him!” and insisted the husband “might talk about a lot of issues which portray his insecurity about Amina's income because obviously Amina will start having a voice in the household.” In his opinion, Amina's husband could only choose to support the business if he is “wealthy enough” himself.

How is Amina perceived by her husband?

The sector 4 women in Pwani were certain Amina's success surprised community members. Multiple women referred to Amina as now being “famous” in the community.

Another thing in the community, most people regard chicken production as an unprofitable venture. “Do you keep chickens? Don't they die? Are you not scared of loss?” They only think of losses. So, for that reason, perhaps the community was not considering Amina in a serious way, people thought she was wasting her time. But when Amina started to earn more income, wearing nice clothes, and her family was doing well, they became interested in her business, hoping it is a good business.

Despite criticism of how Amina had handled things with her husband, sector 4 women in Iringa were complimentary of her business skills and relationships with community members, which they perceived as critical to her success as a businesswoman. “It seems Amina is charming, likes to make peace with everyone.”

Amina had a good relationship with people in the community. So, the community perceives Amina as a good person because she is doing business and she is on good terms with customers.

Sector 4 men in Pwani did not speak much about society's perceptions, but sector 4 men in Iringa discussed Amina as a positive role model and an example of changing norms.

For my side, Amina has been a lesson to the society because of how she started chicken keeping. If there are society members who perceive Amina as dependent to her husband, this is because most African societies have grown in the environment where "father is provider of everything."

Society's perception is they respect Amina due to the determination she had towards the business. Societies with negative perception might hate Amina, but I believe she is considered a role model in a modern society.

Sector 3 women in Pwani also felt the community viewed Amina positively, perceiving her as "an independent woman because other women wait to be provided for by their spouses" and "a very talented woman in livestock keeping; she loves livestock. If you love livestock, they love you back." A third added a caveat that members of society make judgements without fully understanding the situation at home, saying "I think society regards Amina as a role model, but society doesn't know about their home arrangements with her husband, they just regard her as a role model." Most critical was the following: "The society can perceive her as a woman with an ego who despises her husband, and she feels he can't add any value to her life due to money she earns from her business." In contrast, sector 3 women in Iringa spoke about Amina abandoning societal responsibilities after gaining more income. "Amina abandoned the society. She didn't participate in societal activities." Another added, "I think the society portray Amina as a woman who is driven with by pride, money, arrogance. She did not gather with her fellows in society issues because she was busy with chickens." They did not clarify what exactly these societal issues or activities were.

Sector 4 men in Pwani decided the community sees Amina as an "entrepreneur and on the other hand she might be seen as someone who forgets her responsibilities," "a fighter," and "creative." One participant described the range of possible reactions from community members. Note: In Tanzania, a freemason is someone who makes sinful deals with the devil in exchange for money or power.

I think the community perceives Amina as a hardworking woman, she is capable of carrying responsibilities, taking care of the family, but for some of the community members because peoples thoughts differ, they must think negatively. Maybe she is a freemason or maybe she has someone giving her money, because she can't get where she is now just from chicken business.

The sector 3 men in Iringa described Amina as "a hard worker" and "a role model who can inspire other community members" while acknowledging some community members would view her negatively, asking themselves "'Why only Amina and not anyone else?' and start making comparisons between her success and her background."

How have Amina's time use and activities changed?

Not all FGDs had sufficient time to address this question. Some sector 3 men in Iringa thought because Amina focused on chicken production full time, she was able to solve challenges on time, but others believed she was "probably destroying her marriage because most of the time she was busy taking care

of her chickens.” They also talked about the changes in Amina’s time use and decision-making after marriage compared to when she was single.

Previously, Amina was free because she was single, she was free to decide what she can do regarding to her chicken production. But after marriage, her time use changed; she has to make time for chickens, husband, and family.

In light of the profitability of the business, the sector 3 men largely agreed she should continue but formulated some advice for Amina so she could balance the business and family.

In general, the business is profitable. So, the business should continue. But something she should change is her commitment in the business. She should change her time allocation so she can be able to attend other responsibilities of the family and community so as to harmonize the situation. Because it won’t make sense to the community; she could even fail to attend a funeral ceremony because she is busy with chicken production. So that is what she should work on.

Two participants suggested she employ people to help, not only with routine tasks, but even someone she could supervise to handle sales and marketing. “The issue of market, market activities are always unpredictable. Let’s say a customer calls at 6 pm need a chicken, the same time she needs to prepare food for her husband, this is where the problems start. Another thing, assume she receives an order for 3,000 chickens in Dar es Salaam while a child is sick, how could she divide herself? So, I think this issue of market she should leave to someone else and remain a supervisor while sticking in production.”

How will life change for Amina and her family?

This final question was also not asked within all FGDs due to time. Those who did respond were optimistic about the prospects for Amina and her family.

I think as the business goes well, as the income increases, we expect to see changes in different areas. We believe if she was living in a rented house, because the income increases, she will buy a plot and start to construct her own house. On the other side, she is already married and has kids, so it is also a development. For her life in general, if she was walking by foot, we expect if the income keeps on increasing, she will have transport now, so life in general will improve.

– Sector 3 man, Pwani

A sector 4 woman took to heart a reminder about the patience required to keep chickens amidst challenges including disease and losses. She was hopeful for Amina and herself, but personally aware of the time and effort required for success.

Something I have noted in Amina’s story is Amina was tolerant and had a love for what she was doing. Because if you love something, you will be patient with it. We have seen she was keeping chickens since she was young, before she got married, until she got married. I think there are a lot of years that have passed through the process. This is a lesson to us; we have to be patient in chicken keeping. There are deaths, diseases, and a lot of challenges. So, we as chicken keepers, we must be patient because it is process, just like how a child grows, it is stage after stage. A

baby cannot be born and suddenly start to walk. So, let's continue keeping chickens, and we are going to see its benefits in the future.

Study limitations and next steps

This study was designed as a landscaping activity to learn more about chicken keepers' activities, perspectives, and production challenges with the goal of identifying potential gendered impacts of the PREVENT project and informing recommendations for indicators to use in the ongoing project. As qualitative work with a limited number of participants taking place in only one to two sites per country, the findings, particularly the descriptive statistics of participant demographics, should not be considered generalizable to a larger population. Recurring themes across focus groups and geographies, such as challenges accessing credit, increasing reliance on employees as intensification increases, and presence of social norms impacting how an entrepreneurial woman may be perceived by her husband, family members, and community *are* likely to be relevant beyond the participants we worked with, and can inform work with chicken keepers or future research projects.

Zimbabwe

This section describes the results of the rapid gender analysis conducted in Masvingo, Zimbabwe as part of baseline landscaping activities for the PREVENT project (Promoting and Enabling Vaccination Efficiently, Now and Tomorrow).



Highlights

- Most sector 4 women described owning the chickens themselves while most sector 4 men described chickens as owned by the family.
- Marketing chickens and eggs is often a family affair for sector 3 chicken keepers, with some women relying on their husbands to navigate male-dominated markets and social networks, and some men using the social connections of wives and family members to identify customers.
- In Masvingo, chicken keepers agree supply of DOCs is not currently meeting demand.
- Insufficient abattoirs and slaughtering facilities in Masvingo limit chicken keepers from selling to larger markets.
- Youth may be playing an active role in peri-urban and urban chicken production.

Overview of research activities

Activities consisted of focus group discussions (FGDs) with women and men chicken keepers in sector 4 (Traditional Backyard producers with up to 50 chickens and Improved Backyard with 50-200 birds) and sector 3 (Semi-intensive Producers with 201-1,500 birds and Emergent Commercial Producers with 1,500 plus birds) and key informant interviews (KIIs) with poultry sector actors. In short, sector 4 refers to backyard production and sector 3 is small scale commercial production. See the [Gender Landscaping Guide](#) for more detailed information about methods and the research tools.

Site description

Masvingo, a city in south-eastern Zimbabwe, is the capital of Masvingo Province and is located about 320 km from the national capital of Harare. The primary hatchery in the areas breeds DOCs, both broilers and layers, supplying and selling vaccinated DOCs to farmers across the country. Key informants agreed women were the most active demographic in the poultry sector, with disagreement about the extent of participation of youth (18-35 years old). A veterinarian observed low overall participation of youth, while a district livestock specialist noted youth playing an active role in peri-urban and urban chicken production.

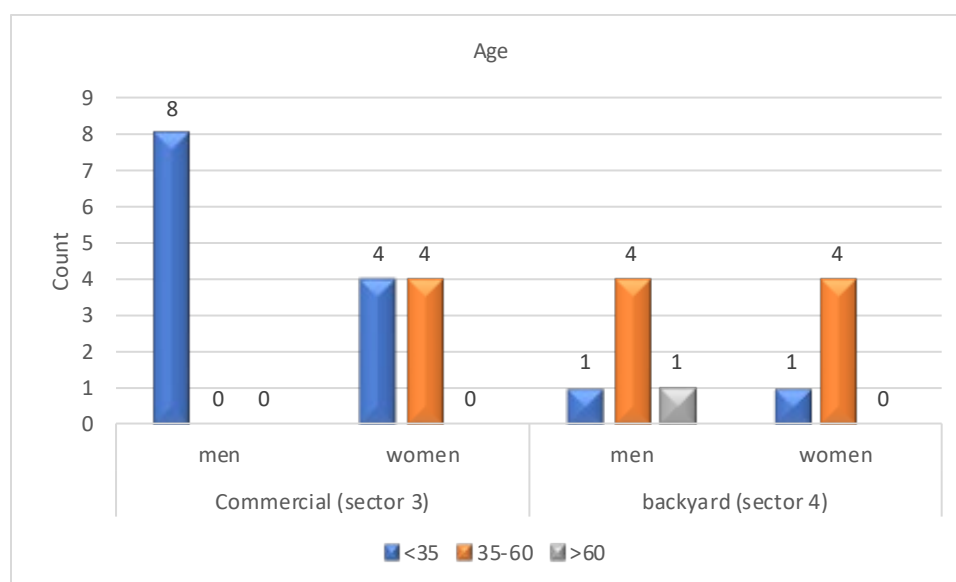
Participant demographics

This section summarizes the demographic characteristics of participants in the FGDs. Twenty-seven chicken keepers participated in four FGDs (Table 5). Due to the recruitment process of participants using community mobilizers, the Zimbabwe FGD participants are not necessarily demographically representative of their sector, but the findings still provide an opportunity to understand certain types of chicken keepers. For example, the sector 4 men's FGD consisted of middle-aged participants with high education and off-farm income, so we refer to them as the "hobbyists." The sector 3 men were young, all under 35 years, well educated, and kept flock sizes on the threshold of sector 3 and 4 with production systems typical of sector 4 producers (e.g.: free-range), so we refer to them as the "youth." The sector 3 women were middle-aged with flock sizes and production systems more typical of commercial producers. We will use the nicknames of "hobbyists" and "youth" for the men's FGDs as guides to contextualize the findings.

Table 5: Summary of FGD participants in Masvingo, Zimbabwe

	Sector 4 women	Sector 3 women	Sector 4 men	Sector 3 men	Total # participants
# of participants	5	8	6	8	27

Sector 3 FGD participants were relatively young compared to those interviewed in sector 4 (Figure 9), especially in the men's FGD. In sector 3, all the men and a half of the women were under 35 years of age, with the remaining sector 3 women falling in the age category of 35-60 years. In sector 4, the ages of most of the FGD participants in men and women FGDs were between 35-60 years, with one woman and one man under 35 years of age. One man in sector 4 was older than 60 years. The following summary statistics give additional information about the participants, but the study was not designed to give representative statistics generalizable to a larger population. In other words, the youthfulness of the sector 3 participants is interesting, suggesting young men particularly in Masvingo find chicken-keeping worthwhile, but it may also reflect the research recruitment process and is not necessarily representative of the sector. Most of the participants in sector 3 (both in men and women FGDs) and men sector 4 were married. Three of the five women in sector 4 were widowed.

*Figure 9: Age categories, Zimbabwe*



Young men attending the sector 3 FGD in Masvingo, Zimbabwe (photo credit: ILRI Zimbabwe/Thelma Mpofu)

All the sector 4 men reported education levels past secondary school, with four of the six reporting salaried or off-farm income. The sector 3 women, in addition to being older to their sector 3 counterparts, also had more education, with seven of the women reporting education past secondary school (one woman did not respond to the question) (see Figure 11).

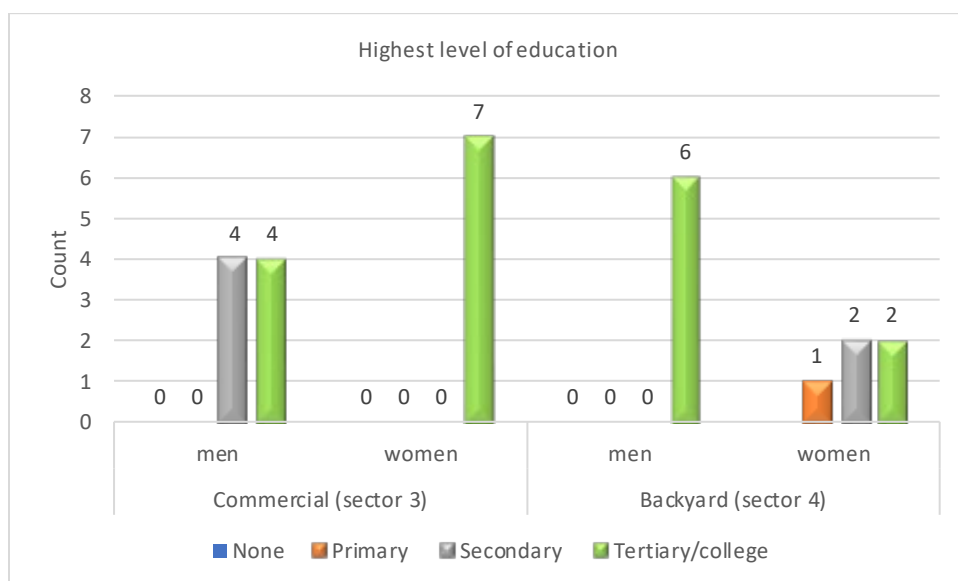


Figure 10: Education level of participants, Zimbabwe

Figure 12 shows sector 3 men (the “youth”) mainly practiced free-range production, while most of the women in sector 3 and sector 4 practiced a deep litter system. Sector 4 men (the “hobbyists”) mainly

reported practicing a battery cage system. This is an unusual finding as battery cage systems require a higher up-front investment and therefore are often used in more commercial settings. Further, free-range production is difficult to maintain with increasing flock sizes. The demographics of the FGD participants provides some explanation; many participants in the sector 4 men's FGD had off-farm income, possibly allowing them to support more costly production systems, while the sector 3 men were young, maybe recently out of school, and had a median flock size of 210 chickens, just on the threshold between the sector 4 and sector 3 cutoff used by this study.

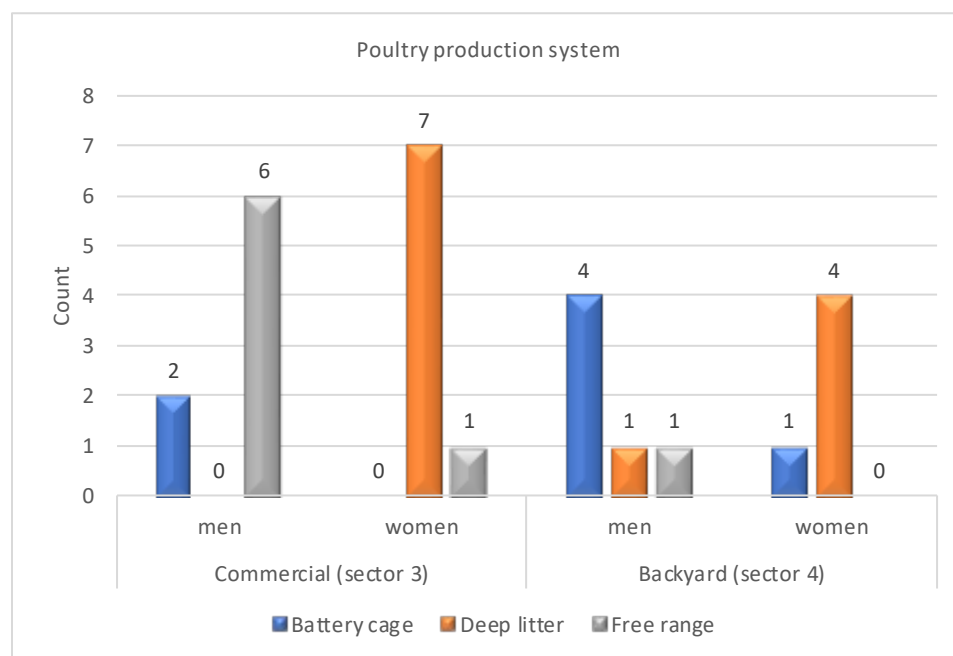


Figure 11: Production systems, Zimbabwe

Broilers were the most common type of chicken kept by respondents in all four FGDs (13). Two men in sector 3 and one woman in sector 4 kept both layers and broilers, with one man keeping layers. One man in sector 3 and another one in sector 4 kept layers. Only one sector 4 man reported keeping local breed chickens. Only two participants reported keeping improved chickens (breeds such as Kuroiler with genetic contributions from local breeds).

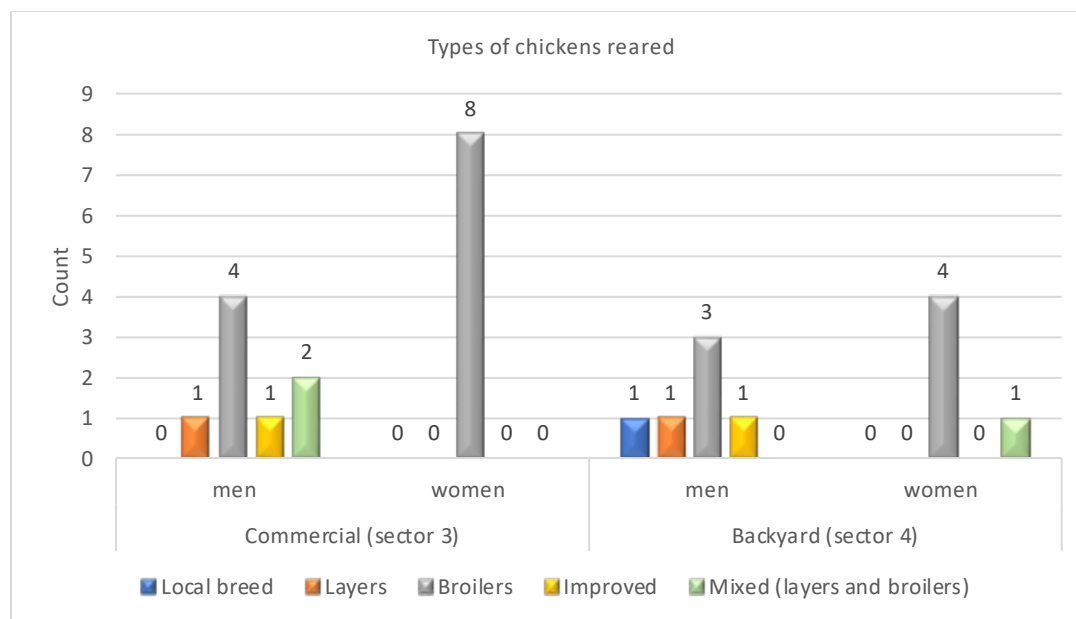


Figure 12: Types of chickens reared, Zimbabwe

The FGD participants were asked if they had purchased DOCs or teen chicks (chicks 1-4 weeks old) in the last 3 months (Figure 14). All the sector 3 women (the commercial keepers) and sector 4 men (the “hobbyists”) reported purchasing DOCs. Sector 3 men (the “youth”) and sector 4 women reported purchasing DOCs and teen chicks. All sector 3 men (7/7) and most sector 3 women reported purchasing vaccines within the last three months, compared to only 31% of the sector 4 men and women (4/13).

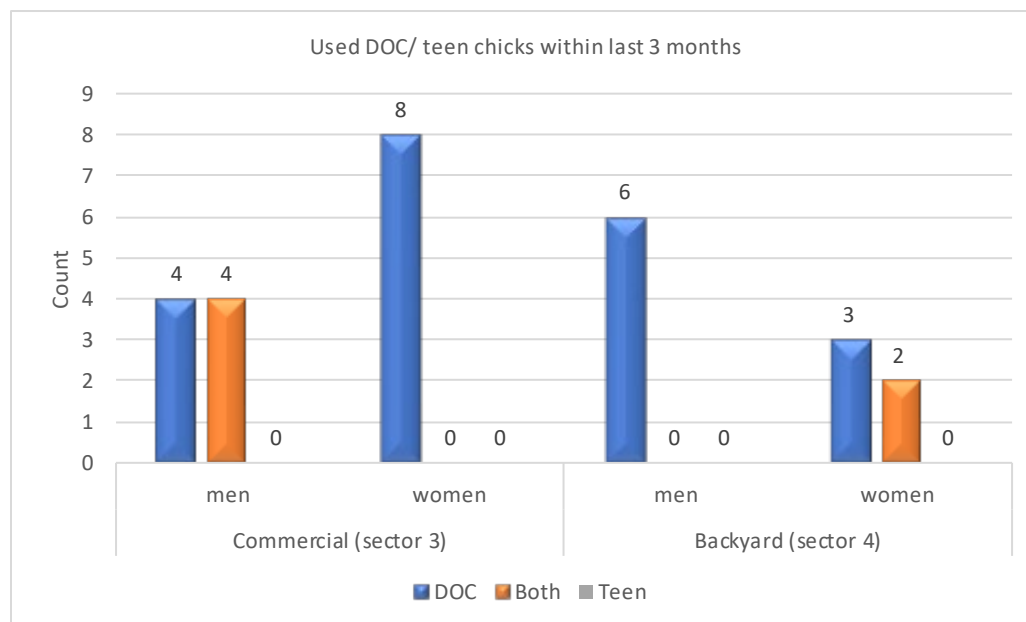


Figure 13: Purchase/use of DOCs and teen chicks, Zimbabwe

The largest flock sizes were reported by the “commercial keepers”, the sector 3 women, with a median of 1,750 chickens. The sector 3 men (the “youth”) followed, with a median flock size of 210 chickens, then the sector 4 women, with a median of 63 birds, and lastly, the “hobbyists” with a median of 50 chickens ([Table 6](#)).

Table 6: Flock size (# of chickens), Zimbabwe

	Sector 3 men	Sector 3 women	Sector 4 men	Sector 4 women
Mean	408	1,925	79	105
Median	210	1,750	50	63

In addition to the FGDs, five key informant interviews were conducted with a community leader/commercial chicken keeper (woman), veterinarian (man), hatchery representative (woman), district livestock specialist (man), and a young woman who keeps chickens commercial and founded a women’s association.

Reasons for keeping chickens

Women from sector 4 described keeping chickens as a source of income, to “boost my husband’s income,” and for nutritional benefits for the family. Sector 4 men, “the hobbyists” also focused on chickens as a source of income, with one young man in his early 30s describing keeping chickens as a supplement to his teacher’s salary. Chicken income was mentioned as helping to pay for school fees. Two men mentioned the benefits of eating chickens and eggs within the household, with a third adding that chicken meat “replaces unhealthy red meat.”

Women in sector 3 described keeping chickens for business and because of a passion, with multiple women expressing pride in their work. Sector 3 men described profits and income as the major motivator. A university educated man described starting the chicken business in 2020 at the beginning of the COVID-19 pandemic as alternative employment during the lockdown. One participant with 1,500 broilers explained the business generated income in USD, which is not legal currency in Zimbabwe, but is more stable than the Zimbabwean dollar (Muronzi, 2019). Another with 200 improved local chickens agreed the profits were worthwhile, saying, “chickens are a profitable business and I had knowledge, so I started the business.”

Workload and time allocation

Keeping chickens involves both routine tasks, such as feeding, watering, cleaning, and checking for health issues as well as management tasks, such as vaccinating, selling chickens or eggs, and restocking through purchase of new chicks. Restocking is discussed further in [Box 3: Access to day-old chicks \(DOCs\), Zimbabwe](#). Sector 4 women reported spending an hour or less per day on routine tasks such as watering, feeding, cleaning, and changing bedding. They did not report receiving help from others for these activities, with one woman explaining other household members “are not patient and not able to pay attention when cleaning the cages,” so she prefers to do the work herself. Sector 4 men described the same routine tasks, with the addition of checking the health status of the birds, especially chicks,

and isolating sick birds. They also mentioned the purchase of veterinary drugs, a topic not mentioned by the sector 4 women. The men described daily tasks taking 40 minutes to an hour with more involvement of family members, especially children.

Everyone (does daily work) including children so as to train them to provide for themselves. The girl will go on to get married, of course, but if at her house there is no fowl run, it means there will be challenges. Like for example, when there are no tomatoes at home, she can use the chicken business to secure food for the family. – Sector 4 man

A government extension officer in his mid-fifties described doing the morning chicken tasks while his wife prepares to go to work with involvement of his son on the weekends or school holidays. “My son will do all the activities, but I will be helping him here and there.” Another man did daily activities with his wife on the weekdays, but their boys do the tasks when they are home from school on the weekends; “we all work together as a family.” Most men described purchasing drugs themselves, with help from wives if they are busy. For the respondent who described wanting to instill in his children the ability to provide for themselves, the older children in the family were sent to buy drugs.

Sector 3 women all used hired employees for routine tasks such as cleaning, changing bedding, feeding and watering, and checking temperature, reporting spending 45 minutes to two hours per day. Both men and women were hired, with preferences for men because “they can work overnight” and because there is a lot of manual labor and preferences for women because they are “sensitive and pay attention to detail.” Sector 3 women described additional periodic tasks, such as slaughtering and monitoring DOCs, both of which required limited periods of increased daily time commitments. Employees were assisting with both. Management activities included buying drugs and vaccines and selling and marketing, which women described as doing themselves or with assistance from their husbands. One woman explained her husband purchases veterinary inputs because “he is a veterinary surgeon.” Marketing is discussed further in the [Decision-making and control of income](#) section.

Like sector 3 women, sector 3 men also relied on male and female employees for routine tasks, but despite having larger businesses, many continued involving family members, especially children, in routine tasks, similar to what was reported by sector 4 men. In contrast, sector 3 women did not mention children or other family members helping in routine work.

When we started the business, I was 95% responsible for activities done to take care of the chickens, my wife would do the 5% (cleaning and light work), however we have incorporated my two daughters for the feeding. We also have an adult male worker who now does the manual labor. – Sector 3 man

Sector 3 men described similar preferences for women employees for detail-oriented tasks such as washing feeders and men for manual labor. They also described periods of intense work, for example monitoring broilers and chicks during hot weather.

Decision-making and control of income

Closely related to understanding who is conducting management tasks is knowing who is making decisions in production. Here we consider who makes marketing decisions about buying and selling chickens and eggs and choosing which type of breed or chicken to keep. We also look at who controls income from the sale of chickens and eggs.

Sector 4 women reported varying involvement of family members when buying or selling chickens, from consulting a husband when selling chickens “because it is a family business,” to consulting household members, to a widow who “as the owner” does not consult anyone when selling her broilers. Similarly, three women made sole decisions about the type of chicken (broilers or layers) to keep while two consulted family members, a husband and daughters, respectively. Broilers were preferred for quick returns, but women agreed market dynamics often drove their decisions. One woman preferred broilers but kept a few layers so her children could eat eggs. A young married woman and a retired teacher who is widowed said she makes sole decisions about income from chicken and eggs as the chicken owner while another participant explained she makes decisions about income together with her husband. All but one of the women stated they owned the chickens.

Sector 4 men reported talking to their wives and in one case, getting guidance from the church pastor, a fellow chicken keeper, before making decisions about buying and selling. Choice of breed type was made based on market considerations such as profit, time to raise, and available space. In some cases, men chose themselves, like one man who chose “free range chickens” (likely referring to Sasso, an improved local breed) and broilers because they are cost effective. “My wife did not know about the free-range birds.” Another chose Sasso for being disease tolerant and requiring little feed, a decision made “mutually by the family.” One respondent’s wife made the choice for the household, preferring broiler for fast cash and quick returns. Most of the men made decisions about how and where to market chickens and eggs together with their wives. “It is dependent on the readiness of the market. I make these decisions with my wife because we equally do market research, so she might know some places to sell.” All six participants said they make decisions about income with their wives because “these are family businesses.” As a married man in his late thirties explained, “Usually I give it to my wife because she is the one who knows what is needed in the house.” It was widely agreed chickens belonged to the family.

Sector 3 women said as owners of the chicken businesses, they did not need to consult others when buying or selling chickens and eggs, made decisions about type of chickens to keep, and controlled the income from the business. A woman who worked as a bookkeeper in her late thirties described co-owning the business with her sons, but explained she makes the decisions about breed and how and where to market chickens. Despite this, multiple women described men have an advantage in accessing some markets, and two women relied on their husbands to gain access to customers. A married woman in her late 40’s with 1,000 broilers explained she markets birds with her husband because he has more opportunities to interact with the predominately male owners and managers of hotels, restaurants, and major food outlets purchasing chickens, especially during social gatherings such as at the bar when they

are watching football. Another woman asked her husband to market chicks for her while handling most other management tasks herself.

Sector 3 men did not report sharing any decisions about buying or selling chickens/ eggs with family members, but some described consulting with other farmers, agricultural officers, or doing their own market research to guide their choices. Similarly, they made decisions about breed and type of chicken themselves, sometimes after receiving guidance from others such as the agricultural officer or in one case, due to a donation from Fivet, a veterinary pharmacy, made to the co-operative. Preferred breeds included Hy-Line (layers) because of high productivity and low maintenance, Sasso because of disease resistance and low cost to feed, broilers because of quick returns in only 7-8 weeks and scarcity of DOC for other breeds, and local chickens because they are cost-effective. Interestingly, while the sector 3 women described men as having advantages in marketing chickens, the sector 3 men described engaging other family members to diversify their customer base. A 26-year-old broiler farmer explained his wife scouts for market, and he makes the final decision. Another man said he decides how to market collectively with his wife, and his two daughters identify customers at their school. Managing income from chicken keeping was a family affair for three participants, who made decisions with their wives, and for one family, with input from the daughters. Another man who keeps broilers and local chickens reported making decisions as the manager of the chicken business but added, “my wife makes decisions on the income from the second-hand clothing business she manages.”

Access to and control of resources

In this section, we asked respondents to identify what resources they need for chicken production. We also highlight where and how people purchase chickens and whether they have access to day-old chicks (DOCs). Challenges in accessing needed resources is discussed further in the [Goals and barriers](#) section.

Drugs for chickens was the most mentioned resource sector 4 women needed. They explained drugs and medicines were expensive and often needed by sickly DOCs. A young woman with 50 broilers said she lacks access to capital to grow her business and a middle-aged teacher with 40 layers and broilers described lacking information and skills for breeding chickens, which limited the growth of her chicken business. Women described using personal savings, income from selling crops (maize and lettuce), or in one case, a loan from a friend as startup capital for the business. Sector 4 men mentioned space, especially for free range birds, and capital as limiting factors. One young man with 50 layers said knowledge on keeping chickens was a limiting factor. The men used savings, pensions, and money received as a gift as initial start-up funds. One man who works as a teacher took a loan from Empower Bank to buy feed when he started the business.

We definitely want loans specific for poultry projects. – Sector 3 woman

Sector 3 women described a need for business loans. While there are banks offering them, they often required pay slips from customers applying for loans, which is difficult for self-employed farmers to provide. Two women highlighted the need for chicken abattoirs in Masvingo. Another thought of equipment needs. “In terms of equipment, I always think of a blast freezer because sometimes we have

electricity outages in Masvingo, and it's a challenge." Businesses were started using personal savings, with equipment, feed, and labor paid for through a combination of savings and profits.

Sector 4 men agreed more abattoirs were needed in the Masvingo area and identified infrastructural challenges including shortage of feed for broilers, fluctuations in feed prices, frequent power cuts affecting vaccine quality, and limited access to DOCs (see [Box 3](#).) A young, single man with 400 free range chickens explained he would need a blast freezer to justify keeping more birds. The man who started keeping chickens in response to the COVID-19 lockdown explained he still needs more knowledge, especially about how to vaccinate chicks. Most started the business with personal savings or income, with some receiving assistance from other sources, such as feeding trays provided by a local business to a poultry cooperative or subsidized prices for laying chicks from a poultry association.

Box 3: Access to day-old chicks (DOCs), Zimbabwe

Given the goal of the PREVENT project to improve hatchery capacity, this section focuses on where and how people purchase chickens and their capacity to handle DOCs.



(Image credit: ILRI/ Stefano Bianco)

Sector 4 women: *"Suppliers limit quantities through the pre-booking system."*

While women get DOCs from a variety of places, including Pro feeds, Feed mix, Gain, and Fivet, the majority of the discussions focused on supplier challenges. Quality and availability of DOCs dropped before the holidays, from September through December. Women reported buying 25-100 chicks per month when they are available. One respondent recently started getting DOCs from traditional hatchers and hatches her own. Purchase of chicks from suppliers is sometimes conditional on buying their feed first, and pre-booking systems reportedly favored people with personal connections. A government agricultural extension officer with 50 chickens described waiting two months, waiting in long lines on the day of collection, and sometimes not even getting chicks. She also expressed concern that farmers are sometimes sold reject DOCs, "especially when they die in large numbers."

Access to day-old chicks (continued)

Sector 4 women (continued)

“Two women explained they are not given proof the DOCs are vaccinated. Others described receiving visibly older chicks with white feathers marketed as DOCs. DOCs sometimes died during transport or shortly after arriving. “As a result of high temperatures and heat waves, by the time they buy the chicks from suppliers, they would already be strained and of poor quality.” While the women agreed challenges affect men and women, they noted men have an advantage by being able to queue for DOCs before the sun rises without worrying about safety.

Sector 4 men: *“Last November, the chicks I bought did not grow. I had to cook them all.”*

Echoing the challenges raised by the sector 4 women, the men described buying chicks wherever they were available because of supplier challenges. Due to high demand and low supply, DOCs were rationed, sometimes to less than 50 chicks per customer, and those available were sometimes of low quality. One participant described resorting to a less preferred supplier called Hamara in Buawayo and buying 100 chicks that all died during transit. A man with 75 local chickens related an amusing anecdote about ordering ducks from the hatchery, and receiving chickens instead, hence starting his venture into chicken keeping. He wondered if the prevalent loadshedding and power cuts forced hatcheries to get rid of chicks they can no longer support. Men shared concerns chicks were not vaccinated, even when sold as such. They agreed it was easier for them to queue earlier than women, but that women were sometimes given first preference for pre-booking feed.

Sector 3 women: *“Sometimes you don’t have a choice, even if you get the sickly ones, you just take them because that’s what’s there.”*

The sector 3 women described purchasing 1,000–4,000 chicks per month, sometimes more in December in anticipation of holiday sales, from multiple suppliers. Purchasing larger numbers of chicks did not shield them from the supplier challenges described by sector 4 counterparts; they also described short supply at times and sudden death of chicks, especially during transit and/ or in hot weather. Many described giving “stress packs” and expensive antibiotics to chicks in the first 5 days to avoid losses. A few respondents suspected men with social connections at the hatcheries could benefit from more access to DOCs.

Sector 3 men: *“We want more access to DOC because there is little supply compared to demand.”*

Men listed two suppliers of DOCs in Masvingo and one supplier out of town. The pre-booking system limited access to desired quantities of chicks, and suppliers focused on broiler chicks, posing challenges to those wanting to keep layers or other breeds. One participant resorted to expensive layers hatched using traditional methods, costing up to \$9.50 USD per bird. Supply challenges of DOCs were most acute before the December/ January holiday period. Health and management challenges included sudden death of chicks, shortages of broiler feed, and power shortages negatively affecting the vaccine cold chain.

Access to day-old chicks (continued)

Sector 3 men (continued)

Regarding any gender differences for poultry keepers, the overall sentiment was “as businesspeople, we face the same challenges,” with another joking “we will end up lying speaking on behalf of women who are not present here!”

Access to and source of information on chicken keeping

Women and men in sector 3 and sector 4 got information from friends and fellow farmers who were also keeping chickens. One sector 3 woman got information from her husband, a veterinary service provider. A sector 4 man explained it is easier to get advice from people who have already been in the business, however due to similarities of some diseases, “you might get misleading information.” Some men and women in both sectors agreed it is faster and easier to get information from experienced farmers, especially through phone calls, but they noted information received from friends could be misleading/biased. A sector 4 woman gave an unfortunate example. “I was once misled by a friend to cover chicks with plastic to prevent them from getting cold during winter. There is a lot I learned from friends that negatively affected my business.” A woman in sector 4 noted they also get information regarding chicken management from farmer groups.

Women and men in sector 3 reported attending workshops organized by feed companies for information on chicken management; however, they felt the information was limited as it focused primarily on feed. Women said they would love to have an information source where they can get information on varied topics. Information from feed producers/suppliers was perceived as more reliable than advice from friends and fellow farmers. A man elaborated, “On the issue of training, the shops selling feed have times and periods they allocate for training workshops on how to use their feed, for example, [hatchery name] gives Profeeds and FeedMix to chicks, so they call them for workshop session with farmers to educate on topics ranging from feeding to profits.”

Some men and women in sector 3 got information from the internet, which was readily available but perceived as costly because of the requirement to buy internet data. Men noted poor mobile network hinders them from accessing information. Men in sector 3 observed the internet is mainly useful for those who know how to use it but illiterate farmers would find it challenging. Accessing information through the internet is faster though some internet sources are not reliable; one man complained some of the solutions given are not universal and don’t apply to their local context.

Men in sector 3 received information about chicken keeping from extension officers/ agricultural officers; however, they noted this channel is limited since they can only access them once or twice a month. Some were given reading materials but commented reading articles or pamphlets written in English could pose a challenge to farmers.

Goals and barriers

Short-term goals

Women and men in sector 3 and sector 4 wanted to gradually expand their production by increasing the number of birds. Some women in sector 3 said increasing the number of birds, particularly layers, would enable them to supply eggs to processing companies and big hotels within the region. In sector 4, two women explained if they increased the number of chickens, they would be able to increase the number of eggs they are selling to their customers, who are mainly located in the village and local markets. A man in sector 3 aspired to increase the size of land used for chicken production. A man in sector 4 wished to expand his business and use the money to extend the size of his house. Two men in sector 4 said apart from increasing the number of birds, they also want to keep chickens of different breeds on their farms.

Long-term goals

In terms of long-term goals, some of men and women in sector 3 and sector 4 wanted to diversify their business by owning hatcheries. A man in sector 4 said, "In five to ten years, I want to be a service provider, own a hatchery, and supply DOC /teen chicks." A man in sector 3 said he wanted to produce feed to reduce production costs. Some women wanted to start chicken processing-outlets such as hotels. Sector 3 women spoke of engaging in value addition activities such as packing and even acquiring a freezer to preserve meat. A woman in sector 4 wished to buy a piece of land and expand her production, saying "I want to get a plot, so I have enough space to keep broilers and layers, and to also produce my own feed for the chickens."

Hindrances to achieving goals

Women in sector 3 found the lack of finances and high production costs the greatest hindrances to their vision of expanding production. They claimed keeping improved chicken breeds is capital intensive (high cost of feeds and other inputs), hence limiting their growth potential. Men in sector 3 explained lack of land limited them from expanding.

Training time preferences

Months of the year

All sector 4 women were comfortable attending training throughout the year, during any month, because they kept chickens throughout the whole year. However, men in sector 3 ruled out June and July (winter season), August-November (summer season and very hot), and December (holiday season and a busy month). Women in sector 3 voted for the training sessions to be held in January because it is a month to plan and prepare for the year. Some men in sector 3 noted weather in January is suitable, unlike in April, when it is too rainy.

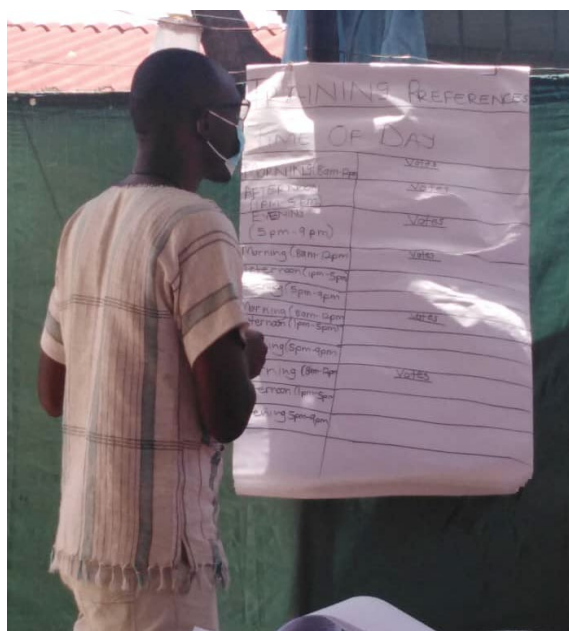
A man in sector 4 suggested training sessions be held in April because it is the right time to put in practice what they are being taught, for example it is harvesting time, so they could use crop residues to formulate chicken feed based on the skills they would have gained during the training. Two men in sector 4 said training sessions should not be held in December because it is a festival period. Men in

sector 3 preferred to the training sessions to be held between January and April because the weather is conducive and there are less festivities. In summary, the preferred months are January through April.

Days of the week

Four women in sector 4 preferred to be trained on Saturday because school-age children are at home during the weekends to help with household chores and looking after young children. Additionally, they go to order or collect DOCs during the week. Most men in sector 4 voted for Saturday as the preferred training day; a majority said they would be able to attend training sessions because they won't be going to work. However, three men in sector 3 and one woman in sector 4 voted for Wednesday since they termed weekends to be a time for resting and worship. Women in sector 3 largely preferred to be trained on Tuesday, Wednesday, and Thursday, as they all agreed and strongly emphasized they are busy on Mondays, the day to collect DOCs from suppliers. A woman in sector 3 said weekends are not suitable because they are understaffed, as most casual workers take a day off. In summary, the best day of the week varies by gender and sector.

Time of the day



Selecting preferred training times in the men's sector 4 FGD (photo credit: ILRI/Thelma Mpofu)

Men and women in sector 3 and sector 4 prefer to be trained in the morning since their minds are still fresh and eager to participate in the training session. A majority thought having the training in the morning would create time for them to engage in other farm-related activities and carry out household chores in the afternoon. Sector 4 women preferred morning training because children are in school; this gives them time to attend the training. However, a woman in sector 4 in Masvingo preferred to be trained in the afternoon because, in the morning, she would be at work and occupied with other chores. A man in sector 4 preferred afternoon sessions since he could feed his chicks in the morning and not worry about them during the afternoon. However, women and men in both sectors disliked afternoon sessions, explaining it will be hot and sunny in the afternoon and therefore difficult to concentrate. In summary, morning training is best for most.

Animal health services

In this section, we summarize preferences chicken keepers have about the gender of the agrovet or animal health care worker they work with and hear from animal health care workers about the services they provide in their communities.

As a woman with 40 chickens explained, “I have no preference as long as they are professional and free to address all my questions and needs,” a sentiment her fellow members of the sector 4 discussion group agreed with, although she then added she thinks women are usually more professional. Sector 4 men also agreed they have no preference, assuming as one participant explained, “they do their job, and I am assisted.” A 55-year-old man working as an agricultural extension officer also agreed but observed, “however, we have limitations, so we keep and respect cultural boundaries. This then means we do not go deep, unlike with someone of your same sex. In some instances, it is easier to open up to someone of your same sex.” Sector 3 women did not have a preference, “because it’s about an individual’s knowledge, skills, and expertise.” Sector 4 men were split, with three respondents preferring to work with women because “I do not face challenges,” they “pay attention to detail and are organized,” and “even the smallest problem, they pay attention to it.” Another three preferred men because “it is more comfortable and easier to interact with a person of the same gender,” “because I usually work with men,” and “as men, we are free to share information and ask questions without limits or boundaries.” The final respondent, a young man with 1,500 free-range chickens, concluded the discussion by saying, “I want to be assisted by anyone who is knowledgeable and skilled.”

Themes in animal health services brought up by key informants included vaccine cost and packaging limiting vaccination, cold chain, infrastructural constraints facing veterinarians, and need for farmer trainings. A community leader and farm owner with 1,500 chickens who employs local women in her neighborhood explained that for chicken keepers in the community, it is expensive to buy vaccines and drugs in small quantities.

All vaccines are packed in huge amounts which you can only use once, you cannot use them again. There are doses for 1,000 birds while you may have 100 or 150, so you are forced to buy something that caters for 1,000 birds for your 100 birds. You then discard the rest of the vaccine.

A veterinarian added on the importance of vaccinating, reminding while hatchery vaccination is helpful, it does not eliminate the need for subsequent vaccination. He highlighted fowl pox as another challenge, especially for smallholders. As a veterinarian, he described the following constraints he and his colleagues face when providing veterinary services for chicken keepers: lack of advanced diagnostics, costs in diagnosis, centralization of testing and research facilities, and farmers being unable to afford services because of their income levels.

I would say the challenge is not that the DOCs are not vaccinated, it is also the subsequent vaccinations. As you know, for broilers I would say there are two key vaccinations: Newcastle disease and infectious bronchitis. But you find because they are sold in vials of maybe a thousand doses, while the farmer is keeping 25 birds. It means if they buy, they will throw away the rest, so at times you encourage them not to vaccinate because it won’t make economic sense.

A hatchery owner with 40 years of experience in the poultry sector described hatchery vaccination as being of mutual benefit to the hatchery and farmers. “Improved capacity of vaccination will help reduce high mortality rates hence the customers will likely come back to buy more and more chicks from us.” A government Livestock Specialist focused less on vaccination, identifying key needs of the chicken keepers he works with as market access and need for improved skills and knowledge, especially for handling DOCs. “People are fed up with handouts, their major need right now is knowledge in the form of trainings.”

Poultry sector trends

Key informants described the current state of the poultry sector, including demographics of chicken keepers, need for abattoirs for slaughtering chickens on a larger scale, national trade policies, and feed production. They also reflected on what they think the future of the poultry sector in Zimbabwe will look like in ten years.

The farm owner/ community leader described mostly women participating in poultry raising currently, with low engagement of youth. A veterinarian agreed women dominate, but the scale is “very low.” He also saw few young people. “Maybe it is just like in other agricultural sectors; the participation of youth is low from my own observation.” He went on to describe the following anecdote, addressing topics which are further discussed in the [Norms and community perceptions](#) section.

If ever men realize there is a lot of money to be made, the risk is women will be pushed aside. I used to visit a lady in Chivi District who became subordinate to the husband who had not been participating in any business activities. On a positive note, I know about five successful women whose husbands actually say, “it is my wife’s business.”

In contrast, a district livestock specialist noticed more youth involved in the poultry sector, especially in urban and peri-urban areas. He also observed “When the number of chickens increases, the whole family gets more involved in the keeping of chickens.”

Multiple key informants (as well as chicken keepers themselves) mentioned inadequate abattoirs/ standardized slaughter facilities as a challenge to scaling up production. A commercial producer and founder of a women’s association explained.

We are failing to meet standards and numbers required by big shops/big markets. They want chickens coming through abattoirs, and unfortunately as small commercial businesses, we slaughter them at our farms.

The hatchery owner agrees, saying “Due to the lack of proper slaughtering facilities, it is difficult for producers to supply bigger markets.” A veterinarian was concerned about few big players monopolizing the production of broilers and feed but appreciates the government limiting the import of chicken from the Americas repackaged in South Africa, which has allowed smallholders to continue participating in the poultry sector.

What do you think the poultry sector will look like in your community in ten years?

The critical shortage of layers will result in shortage of eggs in 2-3 months. The government needs to curb the growing monopolization of the sector. Smallholder farmers will be crowded out.

– Veterinarian

Exponential growth and a double in size if pre-existing challenges are adequately dealt with. There are a lot of opportunities, but sadly, no finances are being put forward. – Hatchery owner

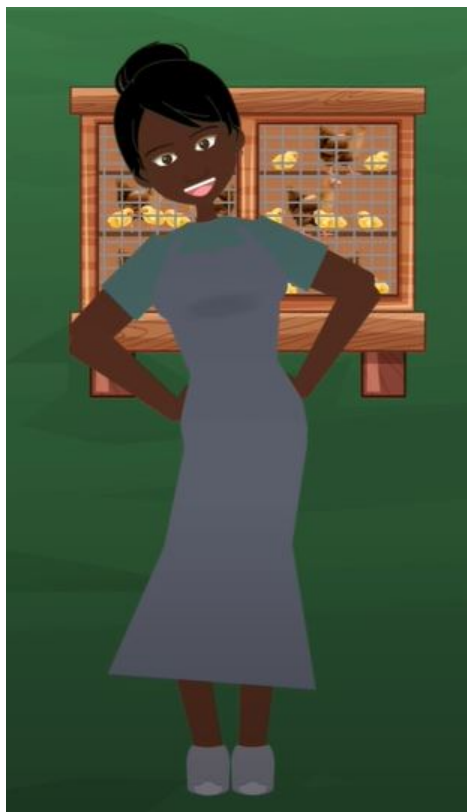
There is a huge shift and demand for poultry products and consumption in the communal and urban poultry sector, hence there will be an increase in production. As a result of climate change, farmers are also shifting to small stock production (poultry) as compared to large stock production.

– Government livestock specialist

The poultry sector will change for the better if the challenges we face have been addressed.

– Commercial chicken keeper and founder of women's association

Norms and community perceptions



A fictitious story about a chicken-keeper named Amina is a tool for conversations about social norms. (Image credit: ILRI/Stefano Bianco)

In this final activity, we asked people respond to a story about a woman in the community named Amina who is growing a successful business keeping chickens. One day, her husband asks to discuss the business with her. (See the [Gender Landscaping Guide](#) for the full prompt.) The purpose of this activity is to identify and describe a tipping point where a women's involvement in business, especially at a more commercial level, may shift from being viewed positively to being viewed negatively by a spouse, family members, or society at large. We examine how Amina is perceived by her husband, then her community, how her time use, and activities change, and ultimately how the chicken business may change Amina and her family's life in the coming year.

How is Amina perceived by her husband?

All focus groups discussed the possibility of Amina's husband perceiving her either positively or negatively as a result of her activities in the poultry business. Most of the sector 4 women discussed Amina as being a "highly respected figure in the family" because of increasing the family income, saying things like "the husband can also see she has a vision" and "she does not bother her husband money-wise; she can do things for herself, by herself." One participant cautioned the relationship might turn sour depending on how Amina is handling the money. "Is she transparent with the husband? If not, the

household will demand full disclosure, citing him as the father of the house who paid bride price for her. So, he might feel entitled to the money, and it is even worse if he is a drunkard. We do not know the tone he used.”

Sector 4 men were enthusiastic about the success of Amina’s business and discussed areas where her husband could contribute. “There’s no mention in the story of a point where Amina’s business takes a dwindling turn; it is forever growing, which excites me a lot. So, when the husband wants to talk to Amina about her business, she is pleased the husband wants to speak with her about her chicken business. There’s an element of knowledge capacitation the husband wants to offer to her so the business can grow to greater heights.” Others thought the husband could help her pursue it as “a company,” assist on finding customers, or improve packaging. Two participants discussed together a possibility for the husband to become highly involved, even to the extent of leaving other work.

(First participant) Another thought is that maybe the husband felt he should resign from where he was working to join forces with his wife in the booming chicken business.

(Second participant continues) ...so the management of the chicken business becomes of the high order.

One man suggested Amina might not welcome her husband’s contributions if the business was performing well, and he hadn’t previously been participating. Another said, “I think the husband felt a bit jealous about the wife gaining so much popularity.”

Sector 3 women said Amina’s husband may view her as either a “hard-working mom” or a “lover of money.” They discussed possible content of the upcoming conversation, including Amina’s husband wanting to spend more time with her, the suggestion she hire helpers or employees, her husband giving business advice, an offer to support her by contributing financially to the business, or “maybe he wanted the wife to get a loan, a suggestion which got a laugh from other participants. Others thought the husband may want to borrow money from Amina’s business or complain about the smell of the litter. A 32-year-old woman with 2,500 broilers identified with Amina’s story.

Practically speaking, I can relate to this. You start off small and then it overtakes you. You leave home at 6 am and go to the farm and start supplying. You have to pick up chicks, from there you go back to the farm. Practically speaking, he thought Amina needed help. I will give an example; chicken customers know no boundaries and the husband might be apprehensive about this.

Sector 3 men also had many ideas about how the conversation between Amina and her husband might go, ranging from “maybe the husband wanted to add more capital to the ever-well-performing business” to “he wanted to take all the money Amina had made.” Some felt Amina’s husband would respond positively, saying “Amina’s husband appreciates and recognizes Amina’s tenacity in business and her ability to generate income.” One man shared a personal story.

Maybe the husband learned a valuable lesson I learned some years ago, not to look down on your spouse. My wife failed Ordinary level in secondary school 15 years ago, but right now as I speak, she is a teacher. So, I think that's what the husband also learned with regards to the Amina issue.

How does the community view Amina?

Sector 4 women thought Amina was “highly respected in the community” and “created a good relationship with her neighbours, maybe she is now teaching them chicken rearing.” Sector 4 men mentioned Amina was viewed as “a role model, someone people look up to, but some might feel like she will take away their customers” and “a *real* woman who does not wait for the husband as the only provider for the family.” Another concluded how Amina was viewed by the community hinged almost entirely on her litter management, which “maybe was becoming a problem in the community since the business has grown.”

Sector 3 women did not add anything beyond how Amina was perceived by her husband. Sector 3 men largely thought the community would view Amina in a positive light, especially if they observed her overcoming challenges, but that she might also change friends over time or have less time for community meetings.

Industrious, successful in the eyes of the community and to the husband. I'm sure it's not surprising the detachment from the husband came with discouraging negative connotations, but she soldiered on against all adversities. It was for all to see in community how Amina managed to work through these challenges.

As one grows their business, the community is aware. Change of friends, people will start discouraging her by asking why she has changed friends, maybe ultimately it affects marriage and family life. She might be unable to find herself at community meetings because she will be preoccupied with her business. So, this might affect how she is perceived and appreciated. She might also be of help to the community if something arises as she is now someone who has money.

How have Amina's time use and activities changed?

Sector 4 women said Amina would need to expand her business through “increased activities and scaling the business,” but didn't discuss specifically what would be involved or the time needed. Sector 4 men considered her business management, including how she motivated employees to achieve success.

I think what elevated her might have been record keeping for monitoring and management purposes, following and tracing steps on where she went wrong this year, or what should she do, reflecting on what she was doing back then. It helps her polish her management step by step, checking the mistakes she once made, and how to overcome them.

The business management style was also contributing because if you can manage your employees, motivating them, it means they will put in an extra shift knowing they will be rewarded, and ultimately, she is the one who will be rewarded most.

Sector 3 women thought Amina might spend more time hiring employees, talking on the phone with customers, and possibly formulating her own feed. Sector 3 men thought Amina was spending time on “good management skills from book-keeping and profit and loss management,” but as mentioned above, may have less time for community meetings and obligations.

How will life change for Amina and her family?

Sector 4 women focused on the opportunities available to Amina and the steps needed to increase her flock size and business.

Amina needs to increase the number of employees in order to keep more birds.

She will ultimately become an employer and find people who help her from her area. She will venture into bigger markets and professional advertising.

There will be apparent improvement of standards of living for her and the family. I am inspired by Amina as she has shown she knows what she is doing through her passion. If she is currently keeping 50, she will soon be keeping 150.

Her children will get an opportunity to further their education through this business.

Sector 4 men worried family life might take a turn for the worst if the husband is jealous or if Amina becomes disrespectful.

I think the husband is jealous because of the blossoming business. There is little or no time for love, romance with her husband, and family time because she is now preoccupied by the chicken business.

The business might change Amina in the sense that she might start to disrespect her husband by stating he does not have anything hence he has no right to tell her anything, or she might even contemplate for a divorce in the process.

Sector 3 women thought the business could lead to more income, more opportunities, financial security, and a better life. Sector 3 men discussed the business changing Amina’s character for the worst, possibly leading to extra-marital affairs, the influence of the husband and his attitude, and the possibility Amina’s children could attend boarding school because of the extra income.

What is bad is Amina having to change her character as the business progresses. Money has a way of changing things negatively and positively. Maybe she will become bossy, bragging that she is the breadwinner. So that is another danger. Amina might start engaging in extra marital affairs with her financial well-off customers.

I think it is dependent on how they will manage their family business. But it is difficult to tell how her life will change as there are many factors involved.

It can be two-sided, if he (the husband) comes in as someone willing to learn, inject capital, and compliment the wife's efforts, it will obviously follow that next year will be better than what it is now.

Improved standard of living, good education as the mother will be able to afford taking her children to boarding school.

Study limitations and next steps

This study was designed as a landscaping activity to learn more about chicken keepers' activities, perspectives, and production challenges with the goal of identifying potential gendered impacts of the PREVENT project and informing recommendations for indicators to use in the ongoing project. As qualitative work with a limited number of participants taking place in only one to two sites per country, the findings, particularly the descriptive statistics of participant demographics, should not be considered generalizable to a larger population. Recurring themes across focus groups and geographies, such as challenges accessing credit, increasing reliance on employees as intensification increases, and presence of social norms impacting how an entrepreneurial woman may be perceived by her husband, family members, and community *are* likely to be relevant beyond the participants we worked with, and can inform work with chicken keepers or future research projects.

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Images are courtesy of the [‘Women in Business: Using local chicken breeds to empower African families’](#) video, created by the International Livestock Research Institute (ILRI) and animated by Stefano Bianco.

Appendix

Gender Landscaping Guide

The Gender Landscaping Guide describes methods used and includes research tools for the key informant interviews and focus group discussions.

Other supplemental data including participant demographics, audio recordings, and field notes are currently internal, being used by the ongoing PREVENT project, but some form of these materials will be made available at the end of the project in 2024.

PREVENT Project: Research Guide for Gender Landscaping

Designed by Zoë Campbell and Humphrey Jumba, International Livestock Research Institute, in collaboration with Katharine Tjasink and Lamyaa Al-Riyami, GALVmed.

Introduction

The PRomoting and Enabling Vaccination Efficiently, Now and Tomorrow (PREVENT) project aims to create an efficient sector of medium-sized African hatcheries applying hatchery vaccination and proactive marketing methods to initiate and increase vaccinated Day-Old Chick (DOC) sales to poultry Small Scale Livestock Producers (SSP's). It is acknowledged that gender is a broad and complex topic with significant historic, cultural, and geographic considerations. However, within this big and complex picture, the project will seek to bring a pragmatic level of understanding and positive intervention. One of the ways in which the project will do so is through a gender landscaping component, within which the project will build an early qualitative picture of the current situation on the ground, focusing on improved backyard, semi-intensive, and emergent commercial poultry producers.

Gender landscaping looked at the status of the small-scale poultry sector surrounding the project areas in terms of proportions of SSPs in each segment, household dynamics within different small-scale poultry producer segments (including current levels of women participation in management activities within each segment), and possible unintended consequences of the PREVENT project. The landscaping interview data were collected using semi-structured interviews (focus group discussions and key informant interviews) in three countries representing East, West and Southern Africa (Tanzania, Nigeria and Zimbabwe) during the initial stages of implementation. The results are being used to inform both future gender and M&E activities and the project/governance plan.

The International Livestock Research Institute (ILRI), working alongside the GALVmed Monitoring and Evaluation (M&E) function, will deliver the gender landscaping component of the PREVENT project.

Gender Landscaping Goals

- Describe existing patterns of labour and control of resources by men and women in the poultry sector and how these patterns could change with hatchery interventions
- Identify ways to engage women in hatchery and poultry sector interventions
- Design list of gender indicators to represent gender dimensions from Women's Empowerment in Livestock Index (WELI): workload and time allocation, decision-making on poultry production, access to and control of resources, control and use of income, access to and control over opportunities
- Assess potential gender-differentiated impacts of project

Gender Landscaping Activities

- Focus group discussions (FGDs) with poultry keepers
- Key informant interviews (KIIs) with veterinarians, hatchery employees, leaders of women's groups for agriculture, and others with specialized information about the poultry sector

Focus Group Discussions

Four focus group discussions (FGDs) will be conducted per site disaggregated by gender (women and men) and production system (see eligibility criteria, below). Each FGD will have a maximum of 8 participants.

Eligibility criteria

Eligible participants are consenting men and women (>18 years old) in the communities served by the hatchery intervention who can be classified as Sector 4 and Sector 3 producers as defined by the FAO based on the number of chickens they currently own/ manage or owned/ managed within the last three months (Figure 1). Sector 4 includes Traditional Backyard (up to 50 birds) and Improved Backyard (50-200 birds). Sector 3 includes Semi-intensive Producers (201-1,500 birds) and Emergent Commercial Producers (1,500 plus birds).

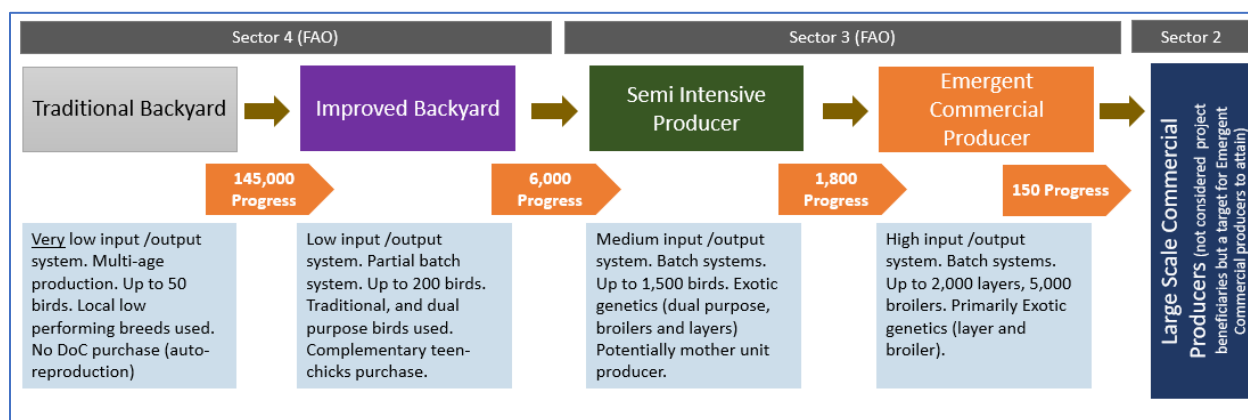


Figure 1: GALVmed diagram showing FAO poultry sector definitions versus PREVENT SSP progression targets

Each FGD will aim to have equal representation of the two sub-categories of producers within the sector, for example a FGD for Sector 4 will ideally have at least four participants representing Traditional Backyard keeping, as defined by having up to 50 chickens, and four participants representing Improved Backyard, as defined by having 50-200 birds (Table 1). Flock size will be used as a proxy for other criteria, such as the type of production system and access to improved breeds.

Table 1: Focus Group Discussion disaggregation by gender and production system

FGD #1	FGD #2	FGD #3	FGD #4
Women, Sector 4 4 people with 1-50 chickens 4 people with 51-200 chickens	Women, Sector 3 4 people with 201-1,500 chickens 4 people with 1,500+ chickens	Men, Sector 4 4 people with 1-50 chickens 4 people with 51-200 chickens	Men, Sector 4 4 people with 201-1,500 chickens 4 people with 1,500+ chickens

A summary of the FGD discussion structure is presented in the Table below (Table 2). The information that will be collected as part of the FGDs is summarized in Table 3.

Table 2: Focus Group Discussion organization by location

Country	Site	FGD 1	FGD 2	FGD 3	FGD 4	Target # of participants
Tanzania	Iringa	Sector 4 Women	Sector 3 Women	Sector 4 Men	Sector 3 Men	32
	Pwani	Sector 4 Women	Sector 3 Women	Sector 4 Men	Sector 3 Men	32
Nigeria	Ibadan	Sector 4 Women	Sector 3 Women	Sector 4 Men	Sector 3 Men	32
Zimbabwe	Masvingo	Sector 4 Women	Sector 3 Women	Sector 4 Men	Sector 3 Men	32
Total		32	32	32	32	128

Table 3: Participant Information to be collected in Focus Group Discussions

Participant information - FGD with chicken keepers

Date of meeting: _____ Site: _____

Facilitator: _____ Notetaker: _____

Type of chicken keepers (tick one): ☐ Sector 4 (Traditional and improved backyard) ☐ Sector 3 (Semi-intensive and emergent commercial)

Gender of chicken keeper (tick one): ☐ Women ☐ Men

Questions about access to chicks, vaccines, etc. refer to entire household/ business. E.g.: If another household member or employee purchased vaccines, mark 'yes'.

Participant ID	Age <35 35-60 60+	Education Level Primary Secondary Above	Marital status Widow Single Married	Head of household Y/N	Main occupation	Number of chickens owned	Production system Free range/ battery cage system/ deep litter	Type(s) of chicken kept Local Layer Broiler Improved	Used DOC/ teen chicks within last 3 months? DOC Teen Both	Bought vaccines in last 3 months? Y/N	Purchased poultry feed in last 1 month? Y/N
P1											
P2											
P3											
P4											
P5											
P6											
P7											
P8											

Notes: DOC is day-old chick, teen chick is defined as 1- 4 weeks, purchased feed is pre-formulated and packaged feed.

Focus Group Discussion Guide

This section provides a broad overview of the approach to be used in the FGDs, focusing on the types of questions that will be asked of FGD respondents.

Reasons for keeping chickens

- Why do you keep chickens? *Focus on benefits.*

Workload and time allocation (Routine tasks)

- What are the daily activities needed for your chickens? Who does it and why? About how much time is spent on each activity per day? *Probe for daily poultry rearing activities done by women (girls <18 yrs, adult women 18-60 yrs, older women 60+ yrs) and men (boys <18 yrs, adult men 18-60 yrs, older men 60+ yrs) and record in table below.*
- What about activities that are done periodically but not daily, such as buying chickens, buying veterinary inputs such as drugs or vaccines, selling and marketing chickens and eggs, administering drugs/vaccines, or business management activities?

Table 4: Example of workload and time allocation capture form

Activity	Person/ people responsible (Gender, age, family role)	Why does this person do it?	Time spent on task (List units e.g.: hours per day)	Notes
<i>Example: Cleaning</i>				
<i>Example: Feeding/ watering</i>				
<i>Example: Buying drugs/ vaccines</i>				

Decision-making on poultry production

Note gender and age group (child, adult, older) of responsible people.

- Which type or breed of chicken do you keep and why? Who decides which breed to keep?
- Who owns the chickens? Why?
- Who needs to be consulted when chickens are bought/ sold? Why? What about eggs?
- To whom do you sell the chickens? Eggs?
- How is money from the sale of chickens/ eggs used? How do you divide the money from the sale of chickens/ eggs between household members?
- How do you decide whether shared resources (land, time of household members, money, crops for feed) should be used for chicken keeping?
- *If relevant.* Who makes decisions about hiring employees? Who manages employees?

Access to and control of resources

- What additional resources are needed for poultry production? (e.g., credit, equipment, loans)
- How do you acquire what you need? What are you missing that you would need?
- How do you usually get your chickens (from whom, how far, how many, how often)? How do you pay for the chickens?
- Do you have access to day-old chicks (DOC) or “teen chicks” (1-4 weeks old)? Are there any challenges in working with them? If you do not have access, would you like to have access? Why or why not?
- Are any of these challenges different between men and women? In what ways?

Control and use of income

- Who makes decisions on the income from poultry?

Access to and control over opportunities

- Who makes decisions about how and where to market chickens/ eggs?
- Where do you get information about keeping chickens? What are the pros and cons of these information sources?

Table 5: Example of information sources capture form

Information source	Pros	Cons

- Would you prefer to work with a male or female agrovet or veterinarian? Or no preference? Why?
- Is there any difference between the services provided by men or women who work as agrovet/ community health workers/ veterinarians? In what way?

Training preferences

Interactive activity where people vote with a marker on large paper for their preferred time for training/ group meetings. Draw the templates beforehand. Discuss briefly and note any reasons given for very popular or very unpopular times.

Time of day

Morning (8 am-12 pm)	
Afternoon (1 pm-5 pm)	
Evening (5 pm-9 pm)	

Day of the week

Mon	Tues	Wed	Thur	Fri	Sat	Sun

Month of the year

Jan	
Feb	
Mar	
Apr	
May	
Jun	
Jul	
Aug	
Sep	
Oct	
Nov	
Dec	

Goals

Visualization activity: Close your eyes and think about your poultry activities. Where do you hope to be in one year's time? What will be the same and what will be different? Take a moment to set one goal for yourself that is achievable in the next one year. PAUSE. How about after five years? Where do you hope to be? Take a final moment and set a goal for yourself that is longer term, over the next five years. PAUSE.

- Share the short term and long-term goals with the group.
- To achieve your future short-term and long-term goals, what would need to change? What is hindering you from achieving? What would support you in achieving?

Norms and community perceptions

Vignette to read aloud:

Amina has always kept chickens, even when she was a girl. When she got married, she continued keeping chickens. In the last few years, she has started shifting from keeping chickens for the family use to keeping chickens as a business. Now, she has many customers who buy chickens and eggs from her, and she is spending more and more time caring for the chickens and interacting with customers. The income from these activities is more than the family could have imagined even one year ago. One evening, Amina's husband approaches her. "Amina", he says, "I need to talk to you about the chicken business."

What happens next?

Record the conversation without asking leading questions. Some prompts if discussion is slow could include:

- How is Amina perceived by her husband? What about by others in the community such as neighbors, relatives, her children?
- How have Amina's activities and time use changed over time? What about other family members?
- What types of activities would be acceptable for Amina versus more unusual? E.g., Traveling to meet customers, speaking with customers on the phone at night, vaccinating chickens, hiring employees?
- How do you think this business will change Amina's life over the coming year? Her family's life?

Thank the participants and answer any questions they may have.

Key Informant Interviews

Eligibility criteria

Eligible key informants are consenting adults (18 years and above) who work in the poultry sector or have specialized knowledge about the poultry sector in the communities targeted by the hatchery interventions. This could include veterinarians, animal health workers, hatchery employees, leaders of members of women's farmer groups, or businesspeople who buy and sell chickens.

Format

Key informant interviews are less structured than the focus group discussion. The questions in the guide are suggestions and can be modified based on the person's responses and their areas of knowledge. Interviewer can pick 4-6 most relevant questions to ask for each interview.

Key Informant Interview Guide

This section provides a broad overview of the approach to be used in the KIIs, focusing on the types of questions that will be asked of KII respondents.

General

- i. Tell us about your business with chicken producers. Who are your customers in general (gender, age, economic status, rural/urban, ethnic group etc.)? What do they need from you? How do you support them?
- ii. What resources exist in your community for chicken producers? (e.g.: Trainings, government services, private companies, hatcheries, women's groups, saving and loan groups, etc.)
- iii. What challenges do chicken producers in your community face? How do these differ between small scale producers and commercial producers?
- iv. What roles are men, women, and youth currently playing in the poultry sector? How do these roles change as poultry production intensifies?

Animal health professionals

- i. What skills and resources do your customers need to work with day-old chicks?
- ii. Who will benefit most from increased availability of vaccinated day-old chicks and teen chicks in the community? Why?
- iii. What constraints do you and your colleagues face when providing veterinary services for poultry? Are any of these constraints different for men versus women animal health care providers? How?
- iv. What would change if more chicks in your community were vaccinated at the hatchery?

Poultry sector

- i. What strategies would you suggest for keeping women involved in the poultry sector as intensification increases?
- ii. How do you think the poultry sector will look in your community in ten years compared to now? What will be the same? What might be different?
- iii. How do you think the current poultry management changes as producers shift to bigger flocks or hybrid/exotic breeds? Who is likely to have more work and who is likely to have more benefits? What else would change? Why?
- iv. (*Hatchery employees*) – Who are the customers of hatchery chicks and where are they located? Do you have any data about the percentage of your customers who are women? Does this change as intensification increases? Why?