

“Rabbit farming is easy”: Perspectives from rabbit farmers in Kabale, Uganda

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Abstract

In 2012, Kigezi Healthcare Foundation (KIHEFO) in southwest Uganda launched the Rabbit Farming Project to empower families and communities to overcome poverty and improve nutrition through small-scale rabbit farming. This qualitative study describes participant perspectives of rabbit farming

and the Rabbit Farming Project in Kabale, Uganda. Researchers conducted semi-structured interviews with 46 rabbit farmers. Themes that emerged included the ease of rabbit farming; nutrition, income, and agricultural benefits; housing and animal health and safety barriers; the commercial impact of COVID-19; KIHEFO support; and infrastructure, resources, and guidance recom-

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mendations. Rabbit farming was central to survival and participants described the ease of rabbit farming as a key factor even while not all were aware of the role of KIHEFO in facilitating regional rabbit farming. The COVID-19 pandemic negatively affected commercial farmers, while subsistence farmers thrived. We found that rabbit farming provides local and sustainable income-generation and nutritional benefits, but it requires resources to build community capacity. Evidence from this research can be applied to similar communities across the globe to promote food security, poverty relief, and empowerment for vulnerable communities through rabbit farming.

Keywords

rabbit farming, nutrition, empowerment, income generation, Uganda, food security, sustainable agriculture, COVID-19, pandemic

Background

Uganda is classified as a low-income country affected by widespread poverty with a fast-growing population (Bernstein & Wiesmann, 2019) of 45.9

million (World Food Programme, 2023). Despite some of the highest rates of poverty reduction in recent decades, 59.8% of people in Uganda lived in extreme poverty and serious undernourishment as of 2024 (Hasell et al., 2025), and Uganda remains among the poorest countries in the world (World Bank, n.d.-a). Finding ways to decrease poverty and promote food security is critical. The purpose of this study, conducted in Kabale, is to describe the perspectives of rabbit farmers in the Kigezi region of Uganda about rabbit farming as a form of accessible food production and community empowerment that addresses poverty and hunger.

Agriculture is vital to the Ugandan economy. Eighty-five percent of Ugandans live in rural communities that rely on agriculture for food and income while 24% of households work in subsistence farming (Uganda Bureau of Statistics, 2021). Leading causes of poverty in Uganda include limited availability of social safety net programs, lack of skilled labor due to high dependency on agricultural work, lack of agricultural infrastructure (e.g., storage and transportation), and reduced agricultural productivity due to inconsistent weather patterns and poor household health (Adenle, 2018;

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Conflicts of Interest Disclosure

The authors have declared that they have no competing or potential conflicts of interest. Although four research assistants and two co-authors are associated with or employed by Kigezi Healthcare Foundation (KIHEFO), the remaining researchers and co-authors are not associated or employed by the organization and offer balance to any conflict of interest. This is covered in the methods section of the paper, and we offer positionality statements at the end of this article to further clarify our relationship to the data.

Ethics Approval

Approvals were sought and received from the West Chester University of Pennsylvania institutional review board (IRB) and the Mbarara University Research and Ethics Committee/IRB prior to conducting recruitment and data collection activities.

Consent to Participate

Participants were screened for eligibility, and prior to participating, provided written and verbal consent.

Heifer International, 2021; Saridakis et al., 2021).

In the Kabale district located in the Kigezi region in southwest Uganda, many suffer from the direct impacts of poverty. In the Kigezi region, 49% are multidimensionally poor across diverse indicators (United Nations International Children's Emergency Fund, 2020) and the poverty level was reported at 27.7% around the time of this study (Economic Development Policy and Research Department, 2023). Poverty has a direct impact on access to nutritious foods and resources for households, food insecurity, vulnerability to disease, and work productivity levels such as agricultural production (Andersson & Gabrielson, 2012; Siddiqui et al., 2020). Uganda produces more food than what is required for the population, yet poverty still limits people's access to nutritious diets (World Food Programme, 2021).

Food insecurity is a serious problem in Uganda, and moderate and severe food insecurity indexes were reported at 48% and 11% around 2022 and during the time of data collection for this study (World Bank, n.d.-b). By 2025, Uganda's Global Hunger Index score reflected a continuing concern, scoring in the serious category at 20.2 (The Global Hunger Index, 2025). Diets in Uganda typically consist of relatively low diversity and low micronutrient-rich foods (Bernstein & Wiesmann, 2019), and researchers have identified widespread inadequate intake of vitamin A, vitamin B-12, iron, zinc, and calcium—micronutrients for which foods of animal origin are good sources (Harvey et al., 2010; Madhavan-Nambiar et al., 2015). Much of Uganda's food security depends on subsistence farming, and the Kigezi region experiences unpredictable temperatures and rainfall fluctuations that can lead to decreases in agricultural production, food security, nutrition, and household income (Economic Development Policy and Research Department, 2023; Tumushabe & Bariyo, 2019). The Ugandan government documented insufficient caloric or nutrient intake in the Kigezi region doubling from 26% of households in 2016/2017 to 54% in 2019/2020 and near the time of this study (Uganda Bureau of Statistics, 2021).

Farming can also impact community empowerment (Ndyomugenyi & Otiengino, 2013). For instance, the inclusion of both women and adoles-

cents in rabbit farming as an accessible form of food production and income is a gateway to community benefits in income and food security which in turn can increase empowerment (Oseni & Lukefahr, 2014). Diversity in farmers can be crucial to community productivity (Andersson & Gabrielson, 2012). While women in Uganda contribute significantly to agriculture, women also face lower employment rates (Uganda Bureau of Statistics, 2021). In Uganda, only 58% of women have achieved adequate empowerment scores in areas that include control over use of income, workload, access to credit, and decisions regarding credit (Sell & Minot, 2018). Having control over resources can be a catalyst for equitable empowerment that can in turn impact productivity, resource use, and household well-being, particularly for women and children (Akter et al., 2020; Sell & Minot, 2018).

An approach to reduce poverty, enhance food security, and increase empowerment in Uganda is rabbit farming (also known as cuniculture), the agricultural practice of breeding and raising rabbits for their meat, fur, wool, and other products. Other valuable products include rabbit urine used by farmers as a pesticide to repel insects and pests, and manure, rich in nutrients and nitrogen, used as soil fertilizer for crop growth (AgriTalk, 2025). Rabbit farming is sustainable and affordable for those living in poverty as rabbits can be raised on local feed, grow and reproduce quickly, adapt to many ecosystems unlike other livestock, and require a small space to grow and relatively low investment (Mutsami & Karl, 2020; Ndyomugenyi & Otiengino, 2013). In addition, rabbit meat is nutritious with more protein and less fat compared to chicken, cows, or goats (Ndyomugenyi & Otiengino, 2013). Other successful projects in the surrounding countries of Kenya, Sudan, and Tanzania, report rabbit farming as a sustainable source of nutrition and income for rural farmers (Lukefahr, 1998; Ndyomugenyi & Otiengino, 2013). Commercialization of rabbit farming can further promote the welfare of farmers and is associated with decreased multidimensional poverty (Gbegbelegbe et al., 2018; Saridakis et al., 2021), increased household income, increased employment opportunity, and an increase in food security and nutrition (Mutsami & Karl, 2020). A study in

Kenya found that when controlling for other factors, commercialization of rabbit farming can reduce the probability of poverty by 13% (Mutsami & Karl, 2020). Overall, projects that develop capacity in small-scale agriculture promote increased food security, collective action, and agricultural sustainability (Devaki et al., 2021; Mutsami & Karl, 2020; Ndyomugenyi & Otiengino, 2013).

In southwest Uganda, the Kigezi Healthcare Foundation (KIHFEFO), a non-profit organization dedicated to local community development, introduced the Rabbit Farming Project in 2012. The goal of the project is to empower families through small-scale rabbit farming to generate household income and decrease poverty while improving nutrition. Participants in the project receive three rabbits, one male and two females, and eventually give three rabbits to another family when their rabbits multiply to more than twenty, creating a revolving community fund. New breeds of rabbits are introduced by KIHFEFO to prevent inbreeding, and the first family to receive rabbits in each community is known as a host family or mini-breeding center. Since the project's inception, no studies have documented the experiences of participants. The objective of this research was to describe the perspectives of rabbit farmers and participants in the Rabbit Farming Project in Kabale, Uganda to fill in gaps in knowledge about rabbit farming as a source of community empowerment that promotes food security and poverty relief. This information can be used to improve rabbit farming in the Kigezi region and to scale the project to other impoverished regions that experience low food security in Uganda and globally.

Methods

Researchers used a qualitative descriptive research design with semi-structured interviews and thematic analysis (Bengtsson, 2016) of transcribed interview texts to understand participants' perspectives on rabbit farming and the Rabbit Farming Project. This study followed the Consolidated Criteria for Reporting Qualitative Research (Tong et al., 2007).

Setting, Sample, and Recruitment

The research project was conducted in Kabale, a

rural and low-income area in Uganda's southwestern subregion of Kigezi and the site of the KIHFEFO Rabbit Farming Project. The predominant local language in Kabale is Rukiga. Following Palinkas et al. (2015), we used two complimentary sampling strategies: purposeful random sampling and convenience sampling. For purposeful random sampling, we first identified participants based on predefined criteria and then randomly selected from a list of KIHFEFO-registered rabbit farmers. Eligibility criteria included Kabale residents, having at least five years of experience in rabbit farming, and being 18 years or older. To complement this approach and enhance participant recruitment, convenience sampling was also used to recruit additional participants from accessible locations within Kabale, including clinics, churches, community centers, and households.

Purposeful random sampling was used to increase credibility of findings by drawing in participants directly involved in the Rabbit Farming Project, while convenience sampling enabled the inclusion of accessible rabbit farmers who may not have participated in the KIHFEFO project but met the study criteria (Palinkas et al., 2015).

The final sample size was determined using data saturation, continuing recruitment and analysis until no new themes emerged from the coded transcripts, consistent with prior qualitative studies of similar populations (Cherwon et al., 2020; Di Martino, 2018). This iterative process resulted in a total of 46 participants, a sample size that aligns with established norms for in-depth interview-based qualitative research (Palinkas et al., 2015).

Participants were recruited by four trained KIHFEFO research assistants (two female and two male) who are natives of Uganda, fluent in Rukiga and English, and trained in qualitative research methodology. The familiarity of the research assistants with the community increased trust in research relationships and allowed for a participatory mode of research and verification of findings (Creswell & Creswell, 2018). Researchers screened participants for eligibility and obtained their verbal and written consent prior to participating. All participants received an 18,565 Ugandan shillings (USD \$5) gift card incentive for participation.

Data Collection

Researchers collected data from participants through 60-minute face-to-face interviews conducted at locations conducive for the participants between January – June 2022. A semi-structured interview guide with open-ended questions and probes and a consent form were developed by researchers in English and professionally translated to Rukiga, and interviews were conducted in Rukiga. Questions were informed by earlier research about rabbit farming in East Africa (Johnson et al., 2024). Interviews included questions about why the participant started rabbit farming, benefits, barriers encountered, the role of KIHFEFO in their rabbit farming, and recommendations to improve rabbit farming. Further questions asked about rabbit farming history and perspectives, rabbit farming roles, rabbit use, and the impact of the COVID-19 pandemic on rabbit farming. After providing written and verbal consent, participants completed a brief facilitator-administered socio-demographic survey before each interview. Interviews were audio-recorded, transcribed verbatim, and translated to English.

Data Analysis

The transcribed texts were thematically analyzed by three trained data coders, one with expertise and previous experience in coding, between April – December 2022 using NVivo 12 qualitative data analysis software. Researchers used open coding to characterize themes related to interview questions followed by pattern coding to merge similar themes (Miles, Huberman & Saldaña, 2014). A codebook was developed and analysts refined the initial emergent codes until saturation was reached. Coders met bi-weekly to discuss the analysis process and refine the codebook, and criteria from the checklist of methods to establish intercoder reliability for qualitative research were followed (Cofie et al., 2022).

Diverse methods were used to establish trustworthiness and integrity in the research methods. For trustworthiness, all authors provide a positionality statement and reflected on their relationship to the material, and quotes from participants were used that represented the themes (Bengtsson, 2016; Creswell & Creswell, 2018). Analyst triangulation

involved three analysts in coding who returned to the text and met to discuss coding frequently, and peer debriefing of the coding process and codebook was conducted by researchers who did not run analysis (Cofie et al., 2022; Creswell & Creswell, 2018; Miles, Huberman & Saldaña, 2014). To address any potential bias by researchers employed by KIHFEFO, multiple researchers outside of the organization planned, wrote, and reviewed the project and coded the data. Data source triangulation for perspectives from people with diverse backgrounds and participants and non-participants of the Rabbit Farming Project were used for more comprehensive findings and to ensure rigor in the results (Noble & Smith, 2015). To address transferability and applicability, researchers engaged the “authentic narrative” form of thick description using block and line quotes that gives voice to the experiences, perspectives, motivations, and intentions of participants (Younas et al., 2023).

Ethical Considerations

Approval was received from the West Chester University of Pennsylvania Institutional Review Board (IRB) and the Mbarara University Research and Ethics Committee/IRB before recruitment and data collection. The risks of participating in this study were minimal and further minimized by providing a consent form at a sixth grade reading level in both English and Rukiga and emphasizing that participation was voluntary and confidential.

Results

The average age of the participants was 40.8 years and 74% identified as male. Subsistence agricultural farming was reported as the main source of income for 52% of participants, 87% reported selling their rabbits, and 93% reported rabbit consumption. The participants earned a yearly average income of 349,000 Ugandan Shillings (USD \$95.98), equivalent to the salary of a primary school teacher at the time (Table A).

Themes

Themes that emerged from the semi-structured interviews included: the ease of rabbit farming; nutrition, income, and agriculture benefits; housing

and animal health and safety barriers; COVID-19 commercial impact; KIHEFO support and infrastructure, resources and guidance recommendations.

Ease of Rabbit Farming

Most participants described the ease of rabbit farming in terms of raising, feeding, eating, and selling. A participant stated, “Rabbit farming is easy” (47 years, male) and another explained, “Rabbits are manageable in terms of feeding and eating. That’s how I can compare them. If you get a visitor, it is very easy to slaughter a rabbit [compared to] a goat” (26 years, male). One participant revealed how “rabbits are not hard to maintain and do not require a lot of labor” (32 years, male), while another described, “Even when you have a problem it is very easy to sell [rabbits] and sort your issue like that” (36 years, male).

Comparing rabbit farming to other types of livestock farming, a participant explained, “Feeding rabbits is much easier compared to feeding goats since rabbits are stationary at home but for goats, someone must go grazing with them in an open space. It is very tiresome chasing the goats” (60 years, male). Another shared: “I think rabbit keeping is better than the other projects because rabbits produce a lot and after selling you can get money quickly. Also, it requires less land compared to others” (67 years, male). Rabbit feed could be obtained locally “from the neighborhood” (30 years, female) and was more accessible to people with different abilities because,

They do not run to distant places like other animals. Therefore, if someone is somehow disabled, he or she can simply move on a walking stick to the nearby plantation or garden and gather some weeds for the rabbits to feed on (30 years, female).

Nutrition, Income, and Agricultural Benefits

Participants shared that rabbits were a source of income and nutrition, and rabbit farming a source of empowerment central to their survival and lifestyle. This empowerment was important to women with one participant stating, “It also helps women not to be so dependent on men’s money all the time” (50

years, female). Diverse other benefits were identified by participants such as reliable access to food and income, nutritional value, fertilizer and pesticide production for other crops, the reproduction rate of rabbits, and not “traveling to buy” meat if you have a visitor (50 years, female).

Animal Health and Safety and Housing Barriers

Participants also identified animal health and safety as well as housing barriers in raising rabbits. Animal health barriers included premature death of rabbits, diseases leading to death or affecting their household income, and lack of training in rearing rabbits. One participant indicated “the biggest challenge is getting sickly all the time because they are attacked by diseases so much, yet we have no medicine” (40 years, male). This was expressed frequently related to local breeds that were perceived to be less resistant to local diseases. One respondent shared how a more resilient breed would increase interest in rabbit farming,

Like now we have local breeds, if they give us a better breed that is resistant to diseases, it can motivate others to start. Because if there’s a new crop, for example in the village, by the end of the season you will find everyone has it. So that’s how it is. There’s need for a new breed (40 years, female).

Participants also noted safety as a concern and that exposure of rabbits to the vagaries of nature due to poor housing, loss to predators such as dogs, and theft were problems. The need for proper housing of rabbits for rabbit growth and health was critical. But availability and affordability of materials to construct rabbit housing, and training for proper construction were identified by participants as barriers. Theft of rabbits by other members of the community revealed the depth of poverty and hunger, especially during the COVID-19 pandemic when food availability worsened, further highlighting the need for accessible food production to promote food security. Better housing, more training to promote the health and safety of rabbits and introducing more resilient breeds of rabbits were viewed by the farmers as important.

COVID-19 Commercial Impact

Most of the rabbit farmers mentioned minimal effects from the COVID-19 pandemic as they had added support from children and family members.

I was not all that affected because by then I just had very few which I would not wish to sell. And even the few that I had were properly taken care of by my children who had halted schooling due to the lockdown as a result of the pandemic (45 years, female).

Many subsistence rabbit farmers experienced a positive impact from COVID-19 with increased time for other agricultural activities and one participant shared that, “we had time for our animals” (59 years, male).

Although few in number, commercial rabbit farmers experienced a significant burden during COVID-19 when restrictions limited their access to markets and income. Travel restrictions were limiting and one farmer stated, “The corona period affected me so much because I could not travel easily to Kabale town to sell [my rabbits] because of the various roadblocks and curfews” (27 years, female). Another participant complained about income loss, “I could not move since the President had banned cars from moving freely. I [experienced] great losses because the rabbits were eating nonstop without yielding any money” (57 years, male). Some rabbit farmers pivoted to sell other rabbit by-products instead, “Well COVID-19 affected us so much because the restaurants we were selling the rabbits to were closed so we were only selling manure” (47 years, male).

KIHEFO Support, Infrastructure, Resources, and Guidance

As a community organization, KIHEFO initiated rabbit farming across Kabale. Although only 17% of participants were introduced to rabbit farming by KIHEFO, many of those participants described how KIHEFO provided infrastructure, community support, material and physical resources, and training and education important to success. Others were unaware of the organization but were interested in KIHEFO’s various resources and offered recommendations to improve rabbit farming.

Respondents familiar with KIHEFO mentioned how the organization gave support in the form of training, setting up accessible banking infrastructure, other resources, and building community infrastructure to increase capacity and promote success. To start, KIHEFO supplied families in need with rabbits and instructed them to share one male and two females from the offspring they raised. KIHEFO provided education by sharing “booklets with information about rabbit farming” (26 years, male) to promote success. One farmer stated, “KIHEFO trains us if we are not taking very good care of the rabbits” (52 years, male) and offers advice for best outcomes. Because farmers can be important sources of information and social support for each other, KIHEFO organized gathering places for farmers:

Yes, it also arranges some meetings with farmers in which they are taught to care and raise rabbits. We, for instance, are local rabbit farmers who in most cases rear rabbits locally but they [KIHEFO] train us on how to raise better breeds which can earn us more money compared to the local breeds (32 years, male).

KIHEFO also constructed accessible financial infrastructure integrated into the project. One participant described how, “They opened a bank for us, and we are able to save and borrow money” (32 years, male). This support was important to facilitate the use of rabbit farming to assist community members in building wealth, alleviating poverty, and helping when members experienced difficult circumstances. The bank came in the form of a community-supported SACCO or Savings and Credit Cooperative Organization. As a cooperative, the bank offered more than monetary exchange or products and according to one participant, “when farmers need money, they just take live rabbits there and they are given money. They also deposit the money on the farmers’ account which helps them to save” (32 years, male). Farmers with a savings account with the SACCO could also get an insured loan when they needed it.

The opportunity to save money with a reliable bank was important. One participant stated, “KIHEFO also started for us a saving scheme”

giving out “passbooks” for members (67 years, male).

All participants offered advice about how to further help rabbit farmers in the community. This included better breeds and markets, training and education, and technical support and advocacy for the farmers. One farmer familiar with KIHFEFO stated the need for, “better breeds compared to what we have here, only local ones. The breed they give us is big” (67 years, male). Finding optimal breeds for commercial purposes and for feeding the family was emphasized, along with technical support in finding feed to maintain the health and growth of rabbits. One participant wanted, “better breeds that grow big in size” and “male rabbits so that they multiply quickly” for sale and home consumption, and said, “We also require feed options apart from grass. We only give grass because that’s what we have” (50 years, female). Some saw the value in having larger breeds to sell at the market but pointed out a need for a market that will pay a higher price to better benefit from those breeds, “Ours, even a big one, weighs 4- kilograms and the price can’t go beyond 12,000. So, we need market.” (39 years, male).

Recommendations highlighted by most participants included training and materials to build better housing, education and access to medicine, and knowledge on feeds. According to one participant, resources such as iron sheets and wire mesh for housing and medication could “improve on the quality of their rabbits” making them more marketable (29 years, female).

Many participants also recommended trainings from KIHFEFO on the benefits and best practices in rabbit farming with one participant stating how this “can encourage them to start and keep on, instead of starting on their own which can limit the results” (67 years, male).

Beyond this, participants envisioned KIHFEFO playing a continuing role in advocacy for rabbit farming. Many perceived KIHFEFO as critical to rabbit farmer survival in the community: “They should be active and support farmers, visit them and advise on how to improve” (49 years, male). Participants saw how organizations like KIHFEFO could help rabbit farmers to improve their skill in farming and “continue sensitizing people as well as

providing technical support to improve rabbit farming outcomes” (45 years, female). These recommendations for more infrastructure, resources, and guidance connect clearly to the benefits and barriers described in the collective narratives of farmer participants.

Discussion

This research documents perspectives of rabbit farmers in Kabale, Uganda, and that rabbit farming was central to participants’ survival and lifestyle as a source of income and nutrition. Rabbit farming involved families, and although only 25% were women farmers, rabbit farming was perceived as empowering, promoting income independence as highlighted by one female. Most participants described the accessibility of rabbit farming: raising, feeding, eating, and selling rabbits was easy. There were several benefits of rabbit farming including rabbits reproducing quickly, nutrition, income, and fertilizer and pesticide production. But several barriers were also described including premature death of rabbits, theft, diseases, and lack of proper housing, resources, and training.

Participants familiar with KIHFEFO described KIHFEFO as a resource for community infrastructure and support in rabbit farming. This included material and physical resources, training, and education important to success. Considering KIHFEFO’s model of requesting that participants give away three rabbits to other families, it is not surprising that some participants were not familiar with the organization as the original provider of rabbits which speaks to the potential success of the shared rabbit model. A future study mapping the Rabbit Farming Project in the Kigezi region will provide more details on the reach and influence of the project.

The local community work of KIHFEFO with the rabbit project is particularly important in the support of sustainable agriculture that addresses global hunger and poverty. Data from this research highlight how the variety of interventions that accompanied rabbit farming addressed the contingencies of poverty and food insecurity. Infrastructure, such as the community-supported SACCO bank established by KIHFEFO, addresses Target 1.4 of the United Nations Sustainable Develop-

ment Goals (SDGs) to eradicate poverty by promoting equitable access to economic resources such as microfinancing (UN SDGs, 2015a). For subsistence farmers, having access to a bank that accepts farm products such as rabbits in exchange for money can make a difference in alleviating poverty (Dushime et al., 2022; Moyo & Gasva, 2022). It works in tandem with SDG Target 2.3 for zero hunger by supporting small-scale, traditional and marginalized farmers including women, family farmers and Indigenous People, “through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities” (UN SDGs, 2015b). Small-scale, low-input agriculture that is accessible to people with low income, such as rabbit farming, also shows potential in addressing global poverty in the face of climate change (Mutsami & Karl, 2020; Oseni & Lukefar, 2014; Sarkar et al., 2020). As highlighted by participants, the accessibility of low-input rabbit farming is also in the ease in which rabbits are cultivated. Microfinancing, start-up funding for rabbit farmers, along with guidance in the farming process, create an ecological approach to addressing poverty and food security that builds infrastructure, capacity, and stable agricultural production and income to sustain community well-being (Devereux, 2016).

The nutrition benefits of rabbit farming are well documented, and consumption of rabbit meat can help improve health and well-being and reduce disease risk (Dalle Zotte & Szendro, 2011). The nutritional benefits of rabbit farming were evidenced in this research project in comments by rabbit farmers about the reliability of nutrition and income.

Still, farmers experienced various barriers that made successful farming difficult. Barriers to rabbit farming described by participants highlight a need for additional support and resources particularly in rabbit disease prevention and rabbit housing, to ensure the survival and successful rearing of rabbits. Other projects in Uganda and beyond show that establishing Community Animal Health Workers can support farmer success toward this end (Bugeza et al., 2017; Van Troos et al., 2018).

Subsistence rabbit farmers in this research study remained productive during the COVID-19

pandemic as they had additional support from their families to manage their rabbit farming activities. Commercial rabbit farmers faced challenges due to the lock-down procedures which hindered travel to markets to sell their rabbit meat. A study conducted in the Philippines on rabbit breeders and meat producers amidst COVID-19 found that the production of rabbits was also successful as families were home and could tend to the farm (Abarcar, 2022). The study also found that rabbit farming was helpful during the COVID-19 pandemic as it allowed farmers and their children to overcome stress, providing them with a healthy coping mechanism (Abarcar, 2022).

Conclusion

Evidence from this study demonstrates that rabbit farming can contribute to community empowerment to address poverty and food security. From the perspectives of rabbit farmers in Kabale, Uganda, rabbit farming was a sustainable source of nutrition and income, and empowered farmers and their families to support themselves, even during the COVID-19 pandemic. Community-based organizations like KIHFO offer potential in promoting rabbit farming projects that build agricultural infrastructure and promote community empowerment while addressing poverty and food security. The benefits of raising rabbits instead of traditional livestock (e.g., goats, chickens), consumption of rabbit meat for its nutritional value, the additional income generated allowing children (particularly female) to attend school, and the ensuing long-term impact on empowerment of women are some of the areas that are ripe for future research. The nutrition, income, accessibility, and empowerment benefits of rabbit farming suggest scaling up the project in Kabale or introduction of this community-rooted practice in other similar global communities could have a positive impact on food security and poverty-relief.

Limitations of this study include that the sample was from a specific region in Uganda while other areas may present diverse contexts not experienced by our participants. Although generalizability may be somewhat limited, the results have transferability and applicability to other studies of communities with similar characteristics

and needs and can inform general research about rabbit farming to relieve poverty and promote community empowerment and food security across the globe.



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Positionality Statements

Chiwoneso B. Tinago: I am a professor of public health who leads initiatives to address structural and environmental determinants of global health using community-based participatory approaches. I identify as a Black Shona woman with roots in Southern Africa. I was introduced to rabbit farming through KIHFO, traveling to Uganda to learn more. My identity and insights from these visits informed my contributions to this work.

Geoffrey Anguyo: My interaction with rabbit farmers for over 10 years might have influenced my position on this study. Co-authors in this study do not have any experience with rabbit farmers. Their perspective is adequate to override my position.

Madison Scalleat: I am a public health professional with a background in community health and school administration. I identify as a working-class, Caucasian American, non-Person of Color (POC). My work with underserved communities and individuals who experience food insecurity influenced my perspective in this work.

Naya Weeks: I am a public health professional with a background in community health. As a mixed-race African American and Puerto Rican woman, I have lived in underserved communities with limited access to nutritious foods. This shaped my perspective in this work.

Kamugisha Arnold: I am an African man raised in a rural community who has witnessed the struggles of small-scale farmers with low income. My training in public health and program management provided me with a lens to analyze systemic challenges. In this study, as data collection coordinator I was an insider who understands the rural context,

yet an outsider to rabbit farming. I continuously reflected on how my background helped build rapport with participants, while my training guided the methodology, ensuring authentic and rigorously structured results.

Gopal Sankaran: I am an Asian male from India and a professor of public health. My training as an MD (board certified in integrated maternal and child health care), public health practitioner (with a maternal and child health focus), and experience with communities in low- and middle-income countries (LMICs) have sensitized me to global inequities. I continue to work toward making our world a just place for all.

Kimberly E. Johnson: I am an associate professor of nutrition and social scientist. I identify as a European American, non-POC with lower socioeconomic roots and have experienced low food security. This influenced my contribution to this work.

Zeinab Baba: I am an associate professor of public health sciences with training in epidemiology. I identify as a first-generation American of African descent, a woman of color, and a Muslim. I have experienced discrimination related to my gender, race, and religion. These influenced my desire to address inequities.

Patricia Davidson: Davidson is a nutrition professor identifying with the Iberian Diaspora and as a non-POC and second-generation American. Familial experience of educational, social, and professional discrimination shaped her commitment to health-care equity, advocating for vulnerable populations in nutrition and diabetes care.

Whitney Katirai: I am a professor of public health sciences with a background in health behavior and the social determinants of health. I identify as a European American and a non-POC. My experiences in international and rural communities shaped my approach to this work.

Author Contribution Roles

GA, CBT, and GS conceptualized the research idea. CBT, AK and GA coordinated recruitment,

project training, and data collection. CBT, GA, MS, NW, KJ, ZB, PD, and WK developed data collection tools. CBT, MS, and NW conducted data analysis. GS, KJ, PD, and WK conducted peer debrief-

ing. ZB analyzed sociodemographic data. All authors contributed to the drafting of the manuscript and share responsibility for the final version of the work submitted and published.

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Appendix

Table A. Sociodemographic Characteristics of Rabbit Farmers (N = 46)

Question	N (%) / Mean (SD)
Age (mean $\pm$ sd)	40.8 $\pm$ 13.0
Adults living in household (mean $\pm$ sd)	2.7 $\pm$ 1.5
Children (under 18) living in household (mean $\pm$ sd)	2.1 $\pm$ 1.6
Income from rabbit farming (in shillings) (mean $\pm$ sd)	349,000 $\pm$ 545,640
How long have you been rabbit farming (in months)? (mean $\pm$ sd)	60.5 $\pm$ 61.7
How many rabbits have you sold in the past 12 months? (mean $\pm$ sd)	39.2 $\pm$ 73.3
How many rabbits do you currently own? (mean $\pm$ sd)	20.1 $\pm$ 14.4
Gender	
Male	34 (74%)
Female	12 (26%)
Marital status	
Never married	5 (11%)
Married monogamous	36 (78%)
Marries polygamous	1 (2%)
Divorced or separated	3 (7%)
Widowed	1 (2%)
Education	
None	7 (15%)
Primary (Grade 1-7)	21 (46%)
High school (Year 1-4)	15 (33%)
High school (Year 5-6)	2 (4%)
Some College/University	1 (2%)
Main source of income	
Dependent on partner and/or family	1 (2%)
Formally employed	2 (4%)
Subsistence agricultural farmer	24 (52%)
Subsistence livestock farmer	2 (4%)
Rabbit Farmer	16 (35%)
Other	1 (2%)
Who introduced you to rabbit farming?	
KIHEFO	8 (17%)
Family	12 (26%)
Friend	18 (39%)
Other	8 (17%)
Do you sell rabbits that you farm?	
Yes	40 (87%)
No	6 (13%)
Do you eat rabbit meat?	
Yes	43 (93%)
No	3 (7%)