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INITIATIVE ON
Diversification in East
and Southern Africa



INITIATIVE ON
Gender Equality

CGIAR Initiative on Diversification in East and Southern Africa and CGIAR Initiative on Gender Equality: Stakeholder Consultation Workshop



31 January 2023, ILRI Campus, Addis Ababa, Ethiopia

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Executive Summary

Agriculture is central for economic growth, reducing poverty, and ensuring food security in East and Southern Africa. In Ethiopia alone, agriculture contributes to 36% of the GDP and employs more than two-thirds of the population. Ethiopian women are important stakeholders in the agribusiness value chain constituting more than 60% of agricultural labour force. Despite their contribution, women face unique challenges such as poor access to resources and farm inputs, credit, technologies, markets and poor decision-making power. Moreover, the high domestic and care responsibilities of women add to their workload and limit the time available for agribusiness. These barriers hamper women's capacity for productive agriculture, which in turn impedes the country's agriculture potential. There is a gender gap in productivity of land between female- and male-managed farms of the same size is 24 percent. Women earn 18.4% less than men from agriculture.

Like gender inequality in agriculture, youth unemployment is a critical challenge in realising economic growth and poverty reduction in many developing countries. Despite the high potential of agriculture in absorbing rural youth, those engaged in the sector experience challenges similar to those experienced by women: limited access to land, farm inputs, technologies, lack of information and credit. In Ethiopia, rural youths face severe constraints in accessing farm land, water and finances, which is said to discourage them from pursuing agriculture as a livelihood strategy.

Gender inequality and multiple dimensions of youth and social exclusion perpetuate and contribute to poverty and food insecurity, which is exacerbated also by the impact of climate change. To achieve the core goals of sustainable development in low and middle-income countries, it is imperative for agricultural policy, research and interventions to be more inclusive, so that the needs and priorities of women and youth are more intentionally addressed.

To map existing challenges that limit the participation of women and youth, and the ways in which these barriers are being addressed in an on-going program "Veggies for People and Planet" of the World Vegetable Center, a stakeholder consultation workshop was conducted by the CGIAR Initiatives on Diversification in East and Southern Africa (Ukama Ustawi) and Gender Equality on 31 January 2023 at the International Livestock Research Institute (ILRI), Addis Ababa, Ethiopia. The workshop also aimed to investigate existing opportunities and recommend possible integrated solutions for more equitable and inclusive value chain development. The specific objectives of the workshop were as follows:

1. Identifying major challenges in agricultural value chains with respect to gender equality and social inclusion
2. Identify socio-technical innovation bundles that can build the resilience and empower farmers across the vegetable value chain
3. Mapping possible opportunities for women and youth participation in agricultural value chains and
4. Networking with key public, private and civil society stakeholders, and providing an opportunity for experience sharing by women and youth agri-entrepreneurs.

In Ethiopia some policy reforms such as family law, land policy and institutional changes were made to improve women's access to land through joint titling. To assist the integration of youths in agriculture some limited funds were provided. In the same manner, access to free farm land is guaranteed by law to all residents including youths. The World Vegetable Center (World Veg) has been

promoting women and youth within the vegetable value chain in partnership with the Stichting Nederlandse Vrijwilligers (SNV), focusing on capacity building, providing farm inputs and creating market linkages. The other interesting thing is that the interest of youths in taking part in agriculture is increasing than ever before. We are now seeing some youths who see modern agriculture based on Information Communication Technology (ICT) as an opportunity to harness their innovations and willingness to experiment within new farming approaches. In general, from the project implementation activities in Ethiopia, one can see some enabling environments for increasing women and youth's participation that can be maximized and used if well targeted to achieve agricultural growth and achieve food security.

In practice more equitable and inclusive agricultural value chain development is still a long way to be achieved. Firstly, there is a need for better coordinated policies and interventions and a better engagements between different stakeholder (national to local levels, private and public sectors) interventions. Secondly, there is a need to conduct grounded research within the vegetable value chains and identify socio-technical bundling opportunities. Thirdly, it is important to engage within a feminist political ecology perspective in order to move towards a Gender Transformative Approach. The workshop participants felt that improved coordination is fundamental to ensuring more sustainable and inclusive outcomes across the agricultural value chain.

Introduction

In Ethiopia, agriculture employs 85% of the population, 70% of the export earnings, 75% of the raw materials for industries¹ and accounts for 36% of the GDP as of 2020². Vegetable production is an important component of agriculture in the country with a production system ranging from homestead gardening, and smallholder to commercial farming³. On average the vegetable production consist of 1% of the national GDP⁴ and employs 5.7 million smallholder farmers cultivating over an estimated 0.44 million hectares of land^{5,6}. The country exported 0.22 million tonnes of vegetables and earned USD 438 million in one financial year. Despite its contribution, agriculture including vegetable production as an economic activity is constrained by various challenges including climate change, low yield, traditional farming system, poor finance, lack of market information, and poor infrastructure and limited extension services among others. As a result, most of the production remains subsistence which is inadequate to feed the growing population.

Women and youths are key actors in agricultural commodity value chain⁷. Women are responsible for producing more than half of the world food⁸. However, most of the time women agriculturalists do not have access to and control over productive resources and associated benefits due to low production and productivity, skewed gender relations to access land, lack of improved seeds, inputs, market information, and credit and storage facilities and, a changing climate that comes with insufficient and irregular rainfall⁹. Whilst some of the outlined challenges also apply to men, they are more pronounced for female farmers. These challenges are not only affecting women but also the agricultural production in turn contributing to growth of poverty and food insecurity.

Youth unemployment is another critical challenge in the rural area of the developing world. Although, agriculture including vegetable production has a great potential to provide employment for the growing young generation¹⁰ a lot of factors are hindering their active participation. These include poor access to farming land, lack of finance and other inputs for agri-business. Therefore, for reducing youth unemployment through improving their engagement in agriculture we need to address these gendered barriers. This is possible by developing inclusive agricultural value chain development.

This stakeholder workshop was conducted to identify major challenges and opportunities in the agricultural value chain with regard to gender equality and social inclusion. The workshop brought together youths and women agricultural producers, researchers, people working in different government organizations, donors and NGOs. In the selection of the participants, we considered the

¹ A Review of Ethiopian Agriculture: Roles, Policy and Small-scale Farming Systems

² <https://www.statista.com/statistics/455149/share-of-economic-sectors-in-the-gdp-in-ethiopia>

³ Tadesse B. and Bekele K. 2022. Scope of vegetable and root crops value chain in Ethiopia. *Journal of agriculture and food research*, 10.

⁴ <https://research.wur.nl/en/publications/scoping-study-on-fruits-and-vegetables-results-from-ethiopia-an-a>

⁵ Deribe and Mintesno (2016). Review on Contribution of Fruits and Vegetables on Food Security in Ethiopia. *Journal of Biology, Agriculture and Healthcare*

⁶ [Cochrane and Bekele, 2018](#) Average crop yield (2001–2017) in Ethiopia:Trends at national, regional and zonal levels

⁷ African Development Bank Group. 2015. Empowering African Women: An Agenda for Action Africa Gender Equality Index 2015. Gender and Social Development Monitoring Division Quality Assurance and Results Department, African Development Bank, Abidjan.gender.afdb.org

⁸ <https://www.fao.org/3/x0198e/x0198e02.htm>

⁹ Aregu, L., Puskur, R., Remard, G. and Hoekstra D. 2011. Empowering women through value chain development: Good practices and lessons from IPMS experiences. IPMS (Improving Productivity and Market Success for Ethiopian farmers) gender report. Nairobi, Kenya: ILRI.

¹⁰ SNV (2019) Gender and Youth Empowerment in Horticulture Market.

gender and age balance as much as possible, particularly in the selection of farmers. This aimed at ensuring a more inclusive stakeholder consultation process.

From the discussion, the main challenges limiting participation in the agricultural value chain with regard to gender equality and social inclusion were identified as poor access to land, lack of appropriate farm technologies, limited access to improved seeds, limited market information, restrictive social norms and the time poverty for women. Thus, our agricultural research, policy and interventions need to address these problems to improve the participation of women and youth in agribusiness and contribute to the development of inclusive vegetable value chains. Despite the challenges mentioned, the participants also revealed various opportunities like policy initiatives towards women empowerment and inclusive development, growing interest of women and youth in agriculture than before, NGOs, Information Communication Technologies (ICT) application in agriculture and Donors working on the area and the availability of local agricultural input dealers as prospects in improving the participation of women and youth in vegetable value chains.

Part I Opening remarks and keynote Address

The facilitator of the workshop welcomed all the participants and invited them for a short self-introduction (their name, organization they work and their responsibility). From the self-introduction, we came to know that the participants were women and youth farmers, government employees (Ministry of Agriculture, Addis Ababa City Administration, Ethiopian agricultural research centre, Agricultural Transformation Institute (ATI), Nifas Silk Lafto urban agriculture office, Wolmera, Woliso and Ejere woredas of agriculture offices), NGO (SNV), donor (global affairs Canada), World Vegetable Center (WorldVeg) and CGIAR centers (International Water Management Institute (IWMI), International Rice Research Institute (IRRI), Alliance Bioversity-CIAT (ABC), International Center for Agricultural Research in the Dry Areas (ICARDA) and International Livestock Research Institute (ILRI). Most of the participants in one way or another are working on agricultural value chain development with regard to gender equality and social inclusion. Annex 1 shows a list of the in person and the virtual participants.



Dr Everisto Mapedza introducing the workshop program

After the short introduction of the participants the facilitator asked Dr Amare Haile Hailelassie, Principal Scientist at IWMI to make opening remarks. Dr Amare thanked all the participants for coming and conveyed that IWMI is happy to host the workshop at the ILRI-Campus. He also gave a brief overview on IWMI's research and engagement in improving access to water, food and sustainable land management for people in Africa and Asia. Finally, he concluded his remarks by wishing all participants a fruitful day.

Objectives of the Workshop

The aim of the workshop was to identify the systematic barriers, available opportunities and areas for intervention in agricultural value chain with regard to gender equality and social inclusion.

Specifically, the workshop objectives were:

1. Identifying major challenges in agricultural value chains with respect to gender equality and social inclusion
2. Identify socio-technical innovation bundles that can build the resilience of and empower farmers across the vegetable value chain
3. Mapping possible opportunities for women and youth participation in agricultural value chains and
4. Networking with key public, private and civil society stakeholders, and providing an opportunity for experience-sharing by women and youth agri-entrepreneurs.

Keynote I: Overview of Ukama Ustawi (UU) Initiative

Dr Inga Jacobs-Mata the Regional Representative, IWMI, Southern Africa gave a virtual presentation on the overview of the UU project, one of CGIAR regional initiatives which covers Eastern and Southern Africa Region.

The initiative focuses on the maize mixed system under changing climate in the region. It works on scaling up technologies in a more inclusive and coordinated manner to help One CGIAR to achieve its goal of creating sustainable food systems and sufficiently feeding the population through diversification of maize as a mixed farming and understanding challenges through consultation workshops like this one keeping gender and social inclusion at the heart of the initiative (See Annex 2).

Keynote II: Overview on UU Work package 5

The second keynote speaker was Dr Deepa Joshi from **Work package 5**, one of the UU work packages titled **Engage and Empower**. WP5 focuses on how to address the structural inequality between different social groups particularly on women and youths. She stated the structural barriers of women and youths in agriculture need to be identified, and addressed to bring transformational change. Finally, she noted that, women and youths are different. Thus, we need to better understand the needs and priorities of women and youths (See Annex 3).

Keynote speaker III: Overview on Gender Equality

Dr Ranjitha Puskur of CGIAR's Gender Equality Initiative, co-hosting the workshop was the third keynote speaker of the day. She virtually presented ideas on harnessing gender and social equality for resilience in agri-food system. The initiative aims to address the deeply entrenched gender inequalities in food, water and land systems that limit the potential of women to be empowered and build social, economic and technological resilience to climate change. It works on the four dimensions of inequality such as agency, resource access, social norms and policy. Dr. Puskur particularly presented Work Package 2 of Gender Equality: EMPOWER: Bundled innovations for women's empowerment) (See Annex 4).

Keynote speaker IV: Overview on Veggies 4 planet and people

The fourth keynote speaker was Dr. Ralph Roothaert, Principal Investigator for the project Veggies 4 Planet and People. He gave his presentation on the achieved socio-economic benefits of the project for women and youths undertaken by WorldVeg in Kenya and Ethiopia in partnership with Gender Equality and UU initiatives.

The aim of this project is enabling vegetable business development in East Africa to create more jobs, better human and environmental health. This project engages national and local authorities, research organisations, NGOs in Ethiopia with (Stichting Nederlandse Vrijwilligers) SNV, vegetable producers and entrepreneurs with the aim of creating job opportunities and increasing income for women and youths. He noted that some farmers from the project intervention areas participated in the workshop.

The project works on

- Vegetable Business Networks (VBN) (group of people working around vegetable business champions who engage in collective action to access information, credit, inputs) - this is both an approach as well as a target in the project.
- Regenerative technologies in a context of circular agriculture (soil, water, integrated pest management which are part of the food system) to build a resilient food system.

Finally, he presented the work done so far by **Veggies 4 planet and people** in both countries. He highlighted that 200 networks have been organized with 5000 members and 160 business coaches. Activities on, promoting organic market is being conducted, the promotion of the adoption of regenerative technologies and a lot of sales were made. The project created job for about 3000 people in both countries, mainly for women and youth.

The enabling factors that contributed for the success of the project include market availability nearby, positive group dynamics, commitment of women, lead farmers and business coaches and the high interest of farmers in regenerative technologies. The youths are also fast adopters of technologies and women have benefited through engaging in vegetable production.



Dr Ralph Roothaert Presenting on Veggies 4 People and Planet

Part II. Experiences from Ethiopia

Overview on Ethiopian Women Network for Gender Equality in Agriculture (ENGEA)

Ms Selamawit Firdisa, from Agricultural Transformation Institute (ATI), gave a short presentation on Ethiopian Network for Gender Equality in Agriculture where she serves as a one of the board of directors. The Ethiopian Network for Gender Equality in Agriculture is a network of partners that work on gender equality in the agriculture sector. It was established in the year 2015 by 200 members from government organizations, development partners, NGOs, consultants, researchers and experts working on gender and agriculture. The Ministry of Agriculture and Ministry of Women and Social Affairs directorate leads the network with ATI and UN Women as co-chairs. It focuses on learning and sharing to build knowledge and increase efficiency and coordination in program and policy implementation. In the network, the members share experiences, and bring together available efforts toward ensuring gender equality in agriculture. In addition, network organizes national and international workshops and field trips for experience sharing on gender and agriculture.



Ms Selamawit Firdisa presenting during the workshop with participants listening intently

Experiences from the ground: Farmers experience sharing

1. *John* is a young male farmer from Welmera district who shared his lived experiences as follows. Similar to many children, during his childhood, he had a dream to be a medical doctor – which he thought would help him move out of agriculture - his family's livelihood.

When he reached his teenage years and could not succeed in his education, he started to explore other livelihood options. One day, he met an SNV staff in Welmera district who was working for Veggies 4 Planet and People program specifically targeting the improvement of youth's participation in vegetable production. He was included in a project as a beneficiary and was trained on regenerative agriculture and preparation of organic fertilizer. That is when he decided to rent his family's land, treat and use it for improved production with the skills that he had been trained. He said, '*I changed the dream of treating humans to treating the soil*'. Based on the training he received Wendwsen started to prepare organic compost and applying it on the land and started producing different types of vegetables. He even started selling organic fertilizer he produced.

Currently he is producing different types of crops and vegetables using organic inputs. His agricultural products are sold at Addis Ababa market and also distributed to restaurants. He is doing well and seen as a role model among the youths in his community. He prepares and uses entrepreneurial skills for his agricultural operation. Some of the youths in his neighbourhood has already started emulating him. However, the road to agri-business is not smooth particularly for youths who have no direct right

over land. In addition, other challenges such as lack of awareness of organic products among the society, the low price for organic products, lack of organic seed, diseases and pests, lack of finance and poor market linkage are the pressing problems that need serious attention.

Nevertheless, to overcome these challenges, the organic farmers are organised into cooperatives (networks). In their network, they have collective savings, time for learning from each other, discussions on how to promote their products using social media, multiply organic seeds on their respective farms and distribute among other members. From the training he received, all his farm activities are pre-planned and guided by well-prepared business plan.

2. A *woman* from the same district shares her experience. She is also one of the beneficiaries of Veggies 4 Planet and People Project. She is a married woman engaged in farming. She received training on regenerative agriculture, preparation of organic fertilizer and on networking to improve agricultural production.

Although she is interested in applying her new knowledge in her agricultural production, things were not as easy as she thought it would be. Her husband was not interested and did not want to invest in the new agricultural practice she had learnt. Nevertheless, she did not lose hope; rather she used her own small personal savings to start producing organic fertilizer on a small plot and sold it for 13,000 Ethiopian Birr which she felt was a lot to achieve for her. She also engaged in vegetable production and expanded her farming business. This helps her to improve her and her family's living condition. Her husband has also started encouraging and giving all the necessary support after he realized the benefits from her new business. However, she still continues to face challenges like water shortage, low availability of improved organic seeds disease and pest infestation of crops, lack of premium price for organic products, lack of consumer awareness on organic products. Thus, for improving participation of women and youths in agri-business these challenges need to be addressed.

3. The third farmer for the experience sharing was *Mary*. She is a young female farmer from another SNV project area-Walliso Woreda and a beneficiary of the Veggies for the Planet and People Project. Desta is one of the youths who received training on regenerative agriculture and vegetable business network development from SNV. Afterwards, the project offered to distribute verm-worms used to prepare compost as inputs to its beneficiaries. However, almost all the trainees were afraid and refused to accept the worm. Later on, after a long discussion Desta and her friends accepted the worms and started using them to prepare compost on their land which was further used to grow vegetables. Today she is producing different types of organic vegetables for the market. She is making good money from selling both vegetables and compost.

All the farmers in the two districts mentioned that there are initiatives from government and nongovernmental organizations to improve the participation of women and youths in agricultural activities now than it was ever before. However, some of the critical challenges such as lack of land ownership, water shortage, diseases and pests, poor access to finance, lack of access to improved seeds particularly for vegetables, poor market access are hindering the participation. Thus, addressing these issues will not only increase the number of women and youths in agriculture but also most likely would increase their production and productivity and in turn contribute to ensuring food security and reducing poverty.

Part III Challenges & opportunities in agricultural/ vegetable/ value chain with respect to GESI

After the farmers' experience sharing, all the participants were divided into four groups: (1) Farmer group (2) Government group (3) NGOs and Donors (4) Research group. Each group was given the same points of discussion which later on was presented by a representative of the group (See Table 1).

The points to be discussed in the groups were to identify the following:-

- (1) Major challenges women and youth face in the vegetable value chain,
- (2) Opportunities for improving their participation,
- (3) Possible Areas of intervention and
- (4) Key stakeholders to ensure gender equality and social inclusion in the vegetable value chain.
- 5) Possible elements of socio-technical innovation bundles that can enhance resilience and empowerment of men and women farmers in the vegetable value chain

The results from the group discussions revealed that the vegetable value chain has different challenges with respect to gender equality and social inclusion. This included social, economic, policy and institutional challenges. Despite the challenges, there are also different prospects for building inclusive vegetable value chain development. Table 1 summarizes the discussions held by all groups.

Table 1 Group discussion on major challenges and opportunities

Group discussions	Points of discussion in groups and their responses			
	Challenges in participating women and youth	Available opportunities	Areas need changes to improve participation	Key Actors identified
Government Group	<ul style="list-style-type: none"> ● Lack of improved seed ● Market problem & poor linkage, ● Pest & diseases ● Women work burden ● Lack of knowledge & skill- youths ● Women who manage small businesses lose control to men when the business grows and becomes profitable ● cultural norms- patriarchy - negative stereotypes that cause power and workload imbalance. ● Lack of interest in agriculture ● Education policy gaps ● Lack of access to credit ● Migration 	<ul style="list-style-type: none"> ● Government focus ● Organised self-help groups ● Interest of donors ● NGOs, ● Government initiative to empower women and youth ● Gender transformative Approaches at all levels 	<ul style="list-style-type: none"> ● Enough resource allocation and Capacity building ● Media promotion ● Making Vegetable policy strategies inclusive ● Increase market access ● Gender transformative approaches in agriculture ● Gender-sensitive credit modalities should be in place ● Increase market orientation ● Empower women /organize them in group 	<ul style="list-style-type: none"> ● Horticulture department ● Higher management unit ● Gender department ● Communication department ● Youth and labour department ● Policy-makers ● Networks: e.g. Ethiopia Network for Gender Equality in Agriculture, ● Cooperatives, Union, ● Universities, NGOs, Research Organisations
Farmer Group	<ul style="list-style-type: none"> ● Diseases & pests ● Water shortage ● Lack of improved seed ● Lack of access to land ● Lack of interest in farming amongst youths ● Lack of access to finance/credit ● Climate change ● Market problem ● Lack of soil fertilizer ● Lack of information 	<ul style="list-style-type: none"> ● Solar pump availability ● Extension services ● NGOs interest to work with women & youth ● Favourable policy towards agriculture ● Local agro-dealers availability ● training on compost preparation 	<ul style="list-style-type: none"> ● Policy towards financing agriculture ● Land policy ● Technology promotion ● Capacity building ● Improve quality seed availability ● Creating networks of all actors working on gender ● Agriculture and social inclusion 	<ul style="list-style-type: none"> ● Ministry of women affairs ● Ministry of Agriculture ● Ministry of water, labour ● Farmers (youth, women) ● NGOs, ● Researchers, ● Investors, ● Agro dealers

NGOs & Donors	<ul style="list-style-type: none"> ● Shortage of seeds & organic fertilizers ● Knowledge & skill gap in production of seed preparation, nursery management ● Poor market access ● Poor infrastructure ● Lack of access to finance ● Poor institutional attention initiatives in empowering women ● Work burden of women ● Lack of attention by researcher on local vegetable varieties ● Gender power dynamic 	<ul style="list-style-type: none"> ● Political willingness e.g. Land certification ● Suitable Agro ecology to grow vegetables ● Demand for vegetables ● Willingness and commitment of women & youth ● Self-help groups Capacity building ● Target for inclusive development initiatives in empowering women 	<ul style="list-style-type: none"> ● Policy change/revision, Land tenure policy ● Access to finance without collateral ● Gender friendly technologies ● Input access ● Engage private actors ● Create linkage to consumer association ● Improve infrastructure (transportation, storage facility) ● Formalise brokers at local level-create accountability ● Experience sharing ● Capacity building 	<ul style="list-style-type: none"> ● Relevant government sector offices (at ministries and local level) including agriculture, cooperatives, women and social affairs and others ● Research organisations ● NGOs ● Donors ● Financial Institutions ● Community based organizations ● Men and Women farmers ● Traders
Research groups	<ul style="list-style-type: none"> ● Resource access & information gap ● Gender norms ● Unequal gender relations ● Institutional barriers & policies, governance ● Low women participation ● Low decision-making power 	<ul style="list-style-type: none"> ● Initiatives in empowering women ● Improve access to resources, ● Collection action ● Diversification & intensification – to explore different and more profitable crops using similar size of land, for instance. 	<ul style="list-style-type: none"> ● Target women and youth intensification and diversification ● Participate women and youth in leadership ● Work on enabling environment, policy and institution towards women and youth in agriculture, ● Continuous gender analysis and gendered information systems for inclusion 	<ul style="list-style-type: none"> ● NGOs ● Farmers (youths and women) ● Farmer coops, unions ● Different government offices ● Private sectors ● Trade organisations

Despite the initiatives from government, NGOs and different international organizations for active participation of women and youths, there are still various barriers such as poor access to land, training or capacity building, farm inputs (seeds & fertilizers), credit, market access and communities' attitude toward them. In addition, the high workload of women resulting from domestic and care activities limits their time available for agricultural activities. Similarly, some youths have low interest in agriculture as their engagement options are limited. It is hard to generalise that youth have low interest in agriculture. For example, in areas where water, land and finance are available, young men and women consider growing high value crops using irrigation as a lucrative business activity. To overcome such challenges faced by youths, we need coordinated efforts from all stakeholders working on gender, youth and agriculture from international, national and local levels.

Some of the highlighted Solutions

Government centered/focus: Through formulating supportive policies, and designing and implementing women and youth inclusive interventions such as organising them in cooperatives and providing them with land, linking them with financial institutions, and providing them with opportunities for capacity development on proposal development, technical training, financial management and life skill.

Access to Land: Also, provision of land for women and youth groups organised in cooperatives that want to engage in agri-business. As land becomes scarce, in densely populated rural areas, government encourage young men and women to organise themselves into cooperatives, to enhance their engagement in agri-business. Government support these cooperatives through provision of land, opportunities for capacity development, in some cases even seed money is provided.

Access to Finance: In addition to collateral, high interest rate, lack of tailored financial services for diverse social groups, short loan period, and small loan size are also issues of concern.

Empower women and youths: Particularly focusing on capacity development such as technical trainings and in some cases through provision of seed money.

Lack of Knowledge: In addition, lack of knowledge on the concepts of gender, gender analysis, and gender mainstreaming among those implementing project/programs if addressed, could offer a solution.

Gender Transformative Approaches: We can consider changing it to gender responsive approaches. GTA is not a common practice across all levels. Rather, it is practiced only by few institutions that have commitment to addressing gender issues and allocating sufficient resources.

Solar Pumps: Although solar pump is available and is being promoted by the government, affordability is an issue, particularly among women and youth from resource poor households.

Sex disaggregated Data: In addition, limited availability of gendered data, information, and research are also issues. Establishing and strengthening gender related information management system is also important.

Part IV. Introducing Integrated (bundled) Solutions

Farmers in developing world are confined with complex and diverse problems that cannot be solved by a single intervention or solution. This is becoming more complex with increases in climate change. Thus, there is a need to combine or integrate different solutions to overcome the complex agricultural problems. On the workshop, Dr Everisto Mapedza gave an overview on integrated technologies or bundled solutions as combining socio-technical innovations to address diverse challenges in the agricultural value chain for inclusive development. The rationale behind the issue of integrated or bundled solutions is that there are various problems hindering women and youth participation in the agricultural value chain which we cannot address these with any single solution. Therefore, we need a proper plan to design bundled solutions for which we need to have a clear understanding of the kind of technologies that are available and the social innovations that can be integrated to ensure gender equality and social inclusion. The bundled solutions must take into account the fact that to remain relevant technologies need to have an understanding of the social context in which it would be put to use. This therefore calls for socially grounded and demanded solutions in a bottom-up approach. This seeks to address the top-down agricultural innovation and technological development that has been in place largely without having any understanding of the local contexts.

The participants in the workshop discussed the key elements that need to be bundled together and how to make context specific responsive solutions in their own groups. The groups came up with the following suggestions:

Farmer group: This group suggested two kinds of socio-technical bundling based on the circumstances of the farmer. For those who own land, the group recommends irrigation, organic fertilizer, improved seeds, training and market information as a package.

For those with no land the bundle should include credit, irrigation facility, training, seeds and market information. The group recommends for ensuring the participation of women, it is important to have quotas for women and youth and encourage them to become leaders in the networks.

Research group: This group presented the key research elements to be considered in socio-technical bundling. These research elements included the understanding and organizing of an equitable and inclusive technology. Such technology should integrate the gender disaggregated farmers' needs, priorities and experiences in technology design, implementation and evolution. The research methodology should be through community participation, collecting information on consumer needs, inclusiveness, finance and market information. In order to ensure women's participation, the research also needs to have women model farmers in technology identification, selection, dissemination and evaluation.

Government group: In this group the key elements identified in socio-technical bundling include the commitment of governments, private institutions, NGOs, financial institutions, and involvement of community leaders and farmers (including women and youth farmers)

NGO group: The key elements involved in the socio-technical bundling includes awareness creation to address gender norms, access to market, women friendly financial support, technical training, women friendly technologies. To ensure equity and inclusion in the technology integration, establish a GESI

taskforce, undertake baseline survey, gender analysis and collect sex, age and disability disaggregated data in reporting and evaluation.

Part V. Implications for Future Work

One of the emerging areas from the stakeholder consultation was to conduct a policy into practice research activity. Whilst Ethiopia has a number of progressive gender policies, these are not being put into practice. It was therefore proposed that the UU/Gender EQUALITY Team needs to collaborate through Ministry of Agriculture and Ministry of Women and Social Affairs directorate, Agricultural Transformation Institute (ATI) and UN Women within the framework of the Ethiopian Network for Gender Equality in Agriculture. The collaboration will focus on translating policies into practice in an applied manner based on examples drawn from the WorldVeg project which is empowering women and youths in the vegetable value chain. The next activity, which is based on the ground research on socio-technical bundling solutions for the vegetable market will provide evidence to be used to engage within the Ethiopian Network for Gender Equality in Agriculture. Collaboration will also be made with UUs WP4 which is on Governance and is planning policy engagements in Ethiopia.

1. *Transforming gender policies in agriculture into practice*: Ethiopia's Ministry of Agriculture is committed to ensuring gender equality in agriculture. There are seven agriculture policies that speak directly to gender equality and a donor-consortium supported- Agricultural Transformation Institute (ATI) was established to facilitate the transformation of policy into practice. However, there are key barriers to change – which include the political challenges to land ownership, lack of capacity and finances across institutions, and deeply patriarchal value systems that hold back women. On demand by the MoA and in partnership with ATI and the CGIAR Initiative, Gender Equality, we will do a situational analysis of entry points to transformative change and co-design and implement the Ethiopian Government's gender strategy in an ongoing pilot on inclusive *vegetable value chains* (also more generally?) through collaboration with the WorldVeg Center.
2. *Documenting Gendered (socio-technical) Bundling Options in Climate Smart Agriculture Innovations* – CSA solutions tend to be overtly technical. Focusing on small holder productive agriculture (vegetable value chain work with Gender Equality and WorldVeg), we will undertake quantitative and qualitative studies to document how the technical need to be bundled with social innovations and outreach that address key barriers experienced by marginalized women in transitioning from high-risk, high-burden subsistence farming to inclusive CSA innovations.
3. Outlining a Feminist Approach to Agri-enterprise Public and private sector interventions increasingly focus on women in agri-business. However, a majority of these interventions fail to recognize and address the plurality of challenges faced by marginalized women. A feminist approach to agri-enterprise will include attention to the following issues:
 - the increasing demand and need (male outmigration, climate impacts) for women's engagement in productive agriculture in the face of persisting gendered domestic care work, the lack of agency and voice amongst marginalized women

- the inattention to women's lack of assets, resources, the masculinity of agrarian institutional set ups, as well as to institutional structures, cultures, norms, practices, values, and biases that are inherently patriarchal from the household to highest levels of policy and practice
 - agri-business *innovations and interventions that overlook lived experiences, and data on the gendered dimensions of water scarcity and stress*
 - the lack of attention to gendered inequalities across agri-value chains
4. Some of the participants were exchanging addresses for further talk and collaboration on how to work together which is also the other objective of the workshop.

Part VI. Conclusion and closing remarks

At the end, the work participants were asked to reflect on take-home messages. Accordingly, three people took initiatives and reflected that the workshop was interesting and useful for their work. The workshop had given them an opportunity to share their experiences, learn more from each other and form connections with people working in different organizations. This was also one of the objectives of the workshop connecting stakeholders working on the field. Some of the participants were exchanging contact details and ideas on how to collaborate and work together in future. They all thanked the organizers and the hosting institution for arranging the workshop and hoping for the continuity of collaboration in improving equality and inclusiveness in agricultural development.

Finally, Dr Everisto Mapedza thanked all the participants for their active participation and time and looking forward to further collaboration in the future. With this the workshop officially closed at 5:00 pm.

Appendix I Keynote Speaker-Overview of Ukama Ustawi

Dr Inga Jacobs-Mata (Regional Representative, IWMI, Southern Africa) was gave a virtual presentation on the overview of the UU. As per her presentation UU is one of CGIAR regional initiatives which covers the Eastern and Southern Africa Region. The word Ukama Ustawi is bilingual. Ukama is from Shona Language spoken widely in Southern Africa meaning relatedness and Ustawi is a Swahili word spoken in the East Africa region meaning prosperity.



Figure 2 presentation on Ukama Ustawi

She noted that the initiative focuses on the diversification of the current maize mixed system in East and Southern Africa. In her presentation she indicated the main challenges in the region are climate change, mainly droughts, floods, and malnutrition. ONE CGIAR has been working in the region for a long period of time and there is no shortage of technology and innovations to address these problems. However, she stated that there is a gap on how to scale up the available technologies in a more coordinated and inclusive manner. Thus, UU works on scaling up technologies in a more inclusive and coordinated manner to help One CGIAR to achieve its goal of creating sustainable food systems and sufficiently feeding the population.

Dr Inga Jacobs-Mata further illustrated that, the UU initiative focuses on the transition of maize as mono cropping to a mixed farming (growing maize with other crops, including livestock), and understanding the knowledge gap in consultation with important stakeholders, hosting similar workshops to the one held in Addis Ababa. She indicated that the output from this workshop will be used as input in designing more inclusive development that addresses the marginalised groups like women and youths.

She continued to present five big regional interventions, based on work packages, to address agri-food systems development challenges in ESA. These are:

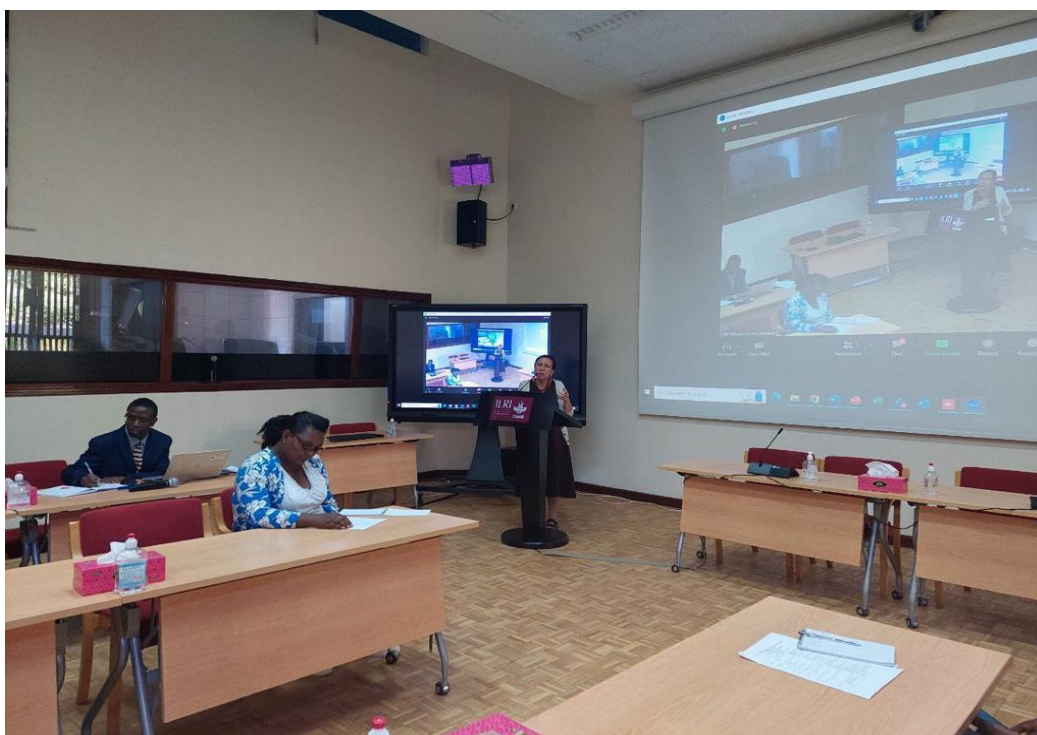
1. Diversification of maize mixed systems for nutrition and resilience through mechanization, irrigation and improved varieties
2. Bundled agricultural risk management through advisory services
3. Value chain support & inclusive agribusiness acceleration
4. Policy hub established that facilitates diversification and knowledge sharing for policy development
5. Scaling hub: science of scaling & practice of scaling

Lastly, she concluded her presentation by stating that gender and social inclusion as key cross-cutting issues in all work packages. We work to achieve gender-responsive technologies, gender scaling hubs, develop women and youth owned agribusiness enterprises, and address the systemic barriers hindering women and youths entry and benefiting from the agricultural value chains.

Appendix II Keynote Speaker- Overview on Work Package

Dr. Deepa Joshi presented an overview of **Work package 5**, Engage and Empower. She noted that WP5 is one of the work packages of UU aimed at providing important support for the rest of other work packages to ensure that they are reaching out to the marginalized groups particularly women and youths. In particular, WP5 focuses on how to address the root causes of inequality rather than treating the symptoms. Providing insight on how to include the needs and priorities of the end users in technology design through:

1. Targeted support to women and youths,
2. Capacity building-mentorship program and peer education



Dr Deepa Joshi presenting on UU WP5 3

She further indicated that there is a paradox in Africa, which says women who contribute a large labour force in agriculture make them to be known as agri-entrepreneurs and on the other hand, it is well known that agriculture is the sector that keeps women in poverty and food insecurity. Thus, aligning such paradoxes is the pre-request to end poverty and hunger which is one of the goals of sustainable development.

She added that the majority of the African population is young, and the young do not seem interested in agriculture. However, agriculture is still one of the sectors providing employment to the growing population. Therefore, the aim is to understand the challenges hindering gender equality and social inclusion in the agricultural value chain. She also mentioned some of the challenges women and youths face in agriculture as:

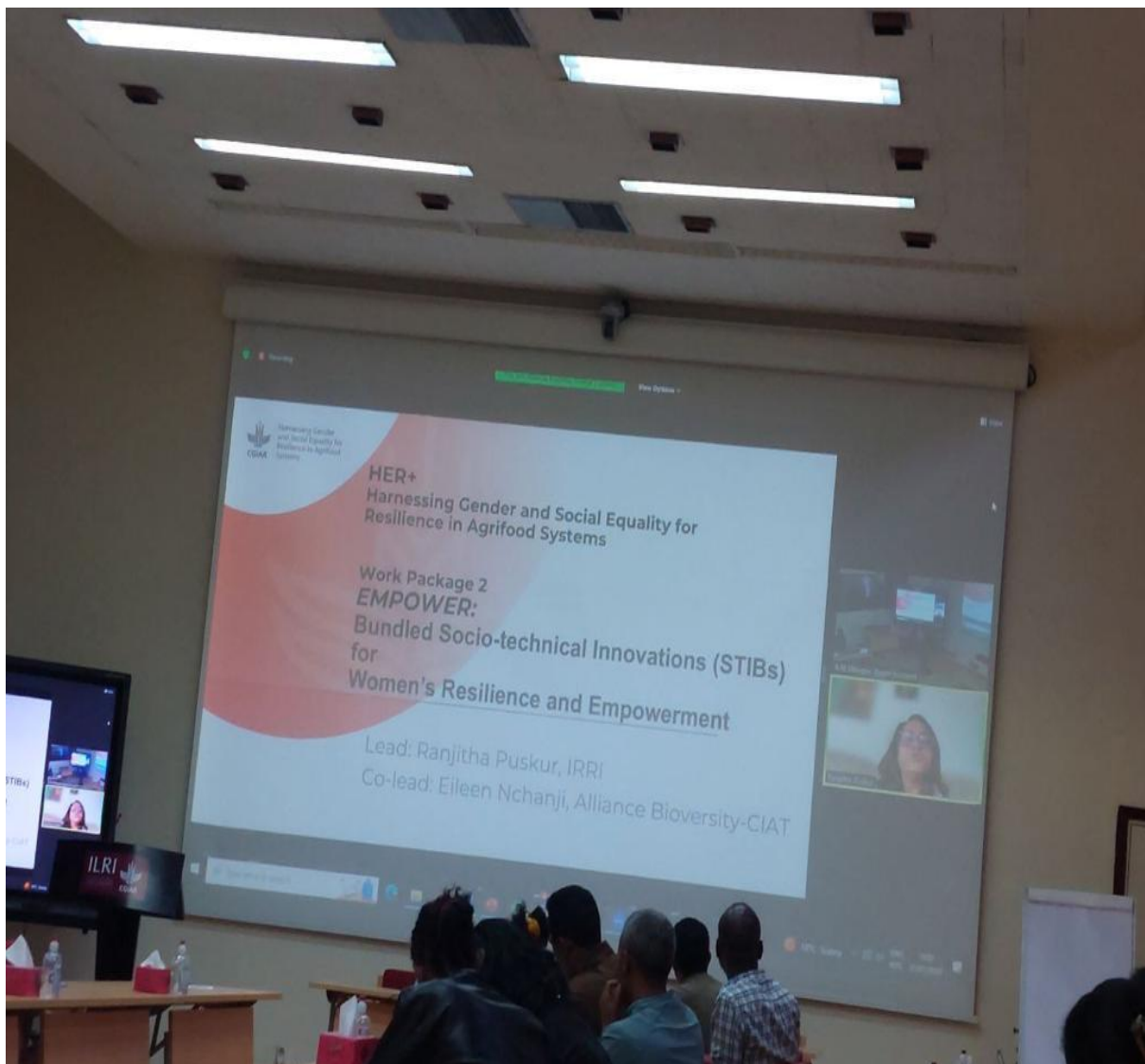
1. Lack of access to resources, land, livestock, credit and technologies
2. The social norms which discourage women and youths to take initiatives

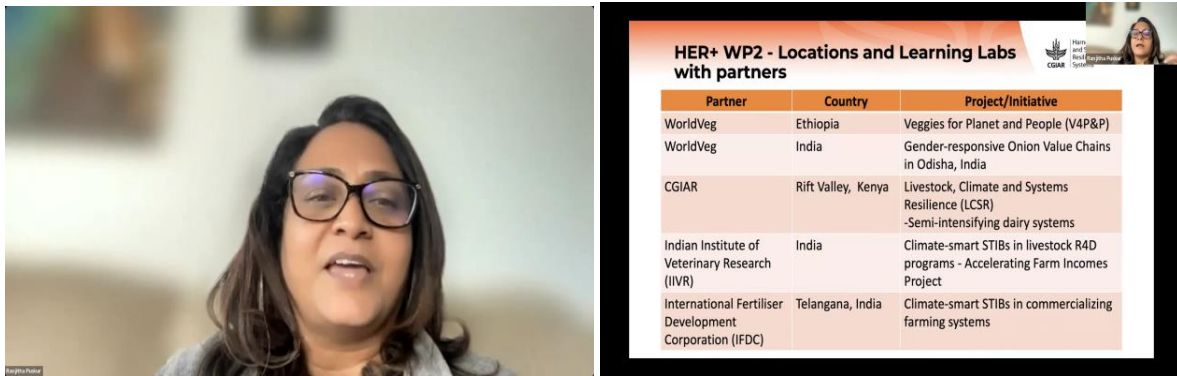
3. Institutions (from home to public) are resistant to change and there is big domestic responsibility hindering women from going outside and working on more productive activities.

Finally, she noted that, both women and youths are not homogeneous groups as we usually think, but are rather different. Thus, we need to understand well the different needs and priorities of the different women and youths.

Appendix III. Keynote Speaker -Overview on HER +

Dr Ranjitha Puskur presented virtually an overview of the Gender Equality which is another CGIAR initiative on harnessing gender and social equality for resilience in agri-food systems. She stated that the initiative is aimed at addressing global challenges in food, water and land systems with the rationale that there is deep entrenched gender inequality in agriculture limiting the potential of women to build social, economic and technological resilience to climate change.





Dr Ranjitha Puskur presenting on the Gender Equality Initiative

She further addressed the main dimensions of inequality in agriculture that must receive serious attention in agricultural policy, research and development interventions to build a sustainable food system. She listed the inequality dimensions as follows:

- Women agency: their ability to define goals, make decisions that matter to them, their participation in economic and public life
- Women’s lack of access and control over resources (works on ways to address)
- Social norms that discriminate based on gender
- Policies and governance that fail to include and benefit women

In her presentation, Ranjitha explained that Gender Equality initiative has four Work Packages. Each of the WPs is responsible for addressing one dimension of inequality stated above. She noted that ‘Empower’: bundling socio-technical innovations for women’s resilience and empowerment is one of these work packages.

Dr Ranjitha Puskur further noted that there are a number of agricultural technologies and innovations readily available for improving the agricultural value chains. However, studies show that women have low access to such technologies and innovations. To make technologies accessible to women and other marginalised groups, we need to combine the technologies with appropriate policy, institutions, market linkages and, social innovations. While experience over the years has highlighted the need for this and several projects and programs do this, we do not do it systematically. There is a no guidance on how to bundle social technical innovations to enhance the efficiency and efficacy of research and development efforts.

For this, she stated that it is important to identify in a systematic way the combinations of technologies and innovations that are need to be bundled. A good understanding of the context and data is needed to identify possible packages of effective socio-technical solutions for empowering women and other marginalised groups.

Finally, Dr Ranjitha Puskur noted that gender equality is complex and stems from deep rooted social and gender norms and attitudes and transforming these demands significant changes. If we do not comprehend and address the key issues contributing to low productivity, our interventions/research may not bear fruits we seek. Gender Equality initiative, in particular Empower, is working with WorldVeg in Ethiopia and India on vegetable value chains in which women’s engagement is significant and these crops are also very vulnerable to climate change. Empower is also focusing on livestock, which is another commodity in which women play a key role, in India and Kenya.