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our mission

To build and implement innovative pro-poor market & business model that catalyze solution for smallholder commercialization and competitiveness in value network for household economic growth and communite empowerment in Africa and beyond.

KALRO

Kenya Agricultural & Livestock Research Organization

our vision

Excellence in agricultural and livestock research towards transformed livelihoods

our mission

To conduct agricultural research through application of science, technology and innovation to catalyse sustainable growth and development in agriculture and livestock Product Value Chains

GENDER AND YOUTH STRATEGY FOR THE MARKET DRIVEN AGRI-MECHANIZATION SOLUTIONS FOR SMALL WOMEN FARMERS AND YOUTH ENTREPRENEURS IN KENYA

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INTRODUCTION

In an agricultural sector like that of Kenya, gender inequalities exist in all areas of value chains, from production to processing and disposal. Gender-based patterns of behaviour condition men's and women's roles, the distribution of resources and benefits derived from income generating activities in the chain, and the efficiency and competitiveness of value chains in the global market (Gashaw, 2018; Peterman *et al.,* 2010). These gender inequalities impact negatively on families and the larger economy. The Food and Agriculture Organisation (FAO) identifies gender as one of the major factors holding back agricultural productivity and perpetuating poverty and hunger in many regions, particularly in Sub-Saharan Africa (FAO, 2010). In fact, lower access to productive inputs such as land and capital for women is one of the root causes of the productivity gap between men and women, both in the farm and non-farm sectors (World Bank, 2012). Besides, evidence suggests that women tend to lose income and control as a product moves from the farm to the market (Gurung, 2006).Women farmers may find it hard to maintain a profitable market niche. Men may take over production and marketing—even of traditional "women's crops"—when it becomes financially lucrative to do so. Women-owned businesses face many more constraints and receive far fewer services and less support than those owned by men (Seifu, 2013; Bardasi and Getahun, 2008; Ellis *et al.,* 2006; World Bank, 2007a, 2007b). These disadvantages reduce women's effectiveness as actors in value chains and reduce overall market effectiveness (Manfre, *et al.* 2013).

According to World Bank (2014), women in developing countries produce 80% of household food and play a key role in household food and nutrition security (Meinzen-Dick *et al.,* 2011). Women and youth can thus be considered "the farmers of tomorrow," as men increasingly seek paid work away from the farm. Evidence shows that enabling women to have equal access to inputs, services, and land improves yields. Female farmers often pay greater attention to crop quality than men. It is estimated that women's increased access to productive resources would raise agricultural production by up to 4% and could reduce the number of hungry people by 100-150 million worldwide (FAO, 2011; Kingiri, 2010). Young people also represent an opportunity for value chains. If their lack of access to land, knowledge, and skills and to the benefits gained through their work is addressed, they represent an ideal catalyst for change, given their propensity and willingness to adopt new ideas, concepts, and technology (HIVOS, 2014).

Thus, the 2007 World Bank Kenya report titled 'Gender and Economic Growth: Unleashing the Power of Women', argues that "eliminating gender based inequalities in education and agricultural inputs could result in a one off increase of as much as 4.3% of GDP growth followed by sustained year on year increase of 2.0 - 3.5%. Further, the World Bank's 2012 Gender Equality and Development Report reveals that female headed households are poorer than those headed by men; a higher percentage of men (79%) engage in off-farm activities compared to women (66%) and earn twice as much as women from these activities; households where the primary farmer is a man have about 32% higher income from crops compared to households where the primary farmer is a woman and 70.9% higher income overall compared to a female household head (Republic of Kenya, 2011; NALEP, 2009). To get to this level of growth, the sector has to address various constraints including gender inequalities and the issue of agri-mechanization. The gender

inequalities are intersectional and are visible among people of different age and socio-economic categories. For instance, the Youth Fact Book 2010 indicates that "most young people are likely to be employed in the agricultural sector" with slightly more males (41%) than females (39%) being employed in the sector. However, youth involvement in agriculture is constrained by cultural patterns that bestow ownership and control of agricultural resources in adults, mainly male parents. The inequalities across gender, age and socio-economic axes are largely caused and perpetuated by patriarchal cultures and systems. On farm tools and implements, **f**emale farmers own fewer tools than men and are therefore likely to have lower yields. A study of the smallholder irrigation project in Mount Kenya Region established that farm implements are heavily controlled by men despite women's heavy role in farm work (Bymolt & Zaal, 2015).

Because agriculture in developing countries relies heavily on physical labour, it has been argued that agri-mechanization can reduce labour constraints, and contribute to higher yields and levels of food security (Mrema, *et al.,* 2008; Sims & Kienzle 2006). However, the adoption of agricultural technology is mediated by the complex interplay of technical, institutional and socio-economic factors (Ragasa, 2012). Gender matters for the adoption of farm power mechanization (Badstue, 2013; FAO, 2011, 2013) because women and men have different roles in farming and unequal access to and control over resources (Pritchard, 2012; NomPumelelo *et al.* 2009; Doss, 2001; and Doss & Morris 2001). Women and men perform different agricultural operations and have different roles. In agriculture research these roles are often treated as discrete functions, functions that can be improved through technology infusion. When women's functions are the subject of new technologies, it is seen as having incorporated a gender dimension (Quisumbing & Pandolfelli, 2010). Whereas increasing productivity in agriculture depends on having appropriate technologies it is also dependent on how these technologies are adapted by farmers in the their farming practices. A key element of farming practice is the organization of labour or production relations. The roles of women and men in agriculture is thus not just a simple and functional division of tasks because labour also has a social meaning.

Gender roles in agriculture are not only about separate functions but also about connections in a social order. The roles of women in agriculture, as well as the social relations in farming, service supply and marketing systems that mediate women's access to resources in general, and agricultural innovations in particular, have often gone unrecognized in the design and delivery of technologies to farmers (World bank & IFPRI, 2010; Croppenstedt *et al.,* 2013; Meinzen-Dick *et al.* 2011). Yet, agricultural interventions have gender responsive impacts and new technologies frequently change the labour division as well as the distribution of benefits within households (Meinzen-Dick *et al.* 2011; World bank/FAO/IFAD, 2009). With its potential to increase labour efficiency and effectiveness, agri-mechanization directly affects patterns of labour allocations in households, which in turn have direct implications for the well-being of individual household members (Doss 2001: 2076). Since farm power mechanization directly relates to agricultural labour and is affected by, and affects access to and control over resources, and benefits, a gender analysis in this study is key to ensuring that gender dimensions are addressed as an integral part of agri-mechanization interventions and research for development work. Women's labour burden is the focus of much research sparked by the concern to address women's 'drudgery'. New

agricultural technology – including mechanized equipment - is often considered to be labor saving. However, Misiko *et al.* (2013) identified labour peaks and women's drudgery, and observed a low level of agri- mechanization of women's labour. This could point to a demand for small-scale farm power mechanization. The efforts of identifying gender-responsive market-driven agri-mechanization solutions for smallholder women farmers and youth entrepreneurs in Kenya" activities also require the vision and mission to be gender-responsive. The vision and mission of the aforesaid project that the implementing team has adopted are as follows:

Vision

The implementing team (KALRO & FCI) envisions an agriculture sector in the four study sites that is fundamentally transformed, with men and especially women farmers, youth entrepreneurs and persons with disability (PWD) (persons with a physical, sensory, mental or other impairment, including any visual, hearing, learning or physical incapability, which impacts adversely on social, economic or environmental participation) having equal access to and control of market-driven gender-responsive agri-mechanization solutions and opportunities, exercising their rights and potentials to sustain their livelihoods.

Mission

The four County Governments where the project is being implemented will create a conducive environment for the transformation and commercialisation of the market-driven gender-responsive agri-mechanization solutions and opportunities, responding to the practical and strategic needs of men and especially women farmers, youth entrepreneurs and PWD ensuring that all these benefit equally from the identified and prioritized solutions and opportunities in the study sites.

Key Concepts

In this strategy and the project, **gender-responsive** refers to outcomes that reflect an understanding of gender roles and inequalities and which make an effort to encourage equal participation in agricultural development activities and equal and fair distribution of benefits from therein. It will be on those agri-mechanization solutions and opportunities that do not increase work drudgery of the different gender categories but rather increase productivity, incomes and overall intra-household members' livelihoods. This is because structural changes in rural economies, combined with the emergence of new technologies, are likely to further intensify female marginalization. The project will systematically consider and address the disadvantaged rural gender categories and utilise gender-responsive technologies driven by gender specific technology demands and needs. It will go beyond the numbers to be achieved by ensuring that desired sustained change occurs in the lives of the beneficiaries. To achieve this, the implementation of the project will be considered in light of the theory of change (TOC) of how addressing gender concerns of the project's four objectives will lead to desired gender outcomes. This is because, though smallholder agriculture has so much potential to meet the food needs of millions of people especially in developing countries. However, this is currently not exploited, partially because the roles and responsibilities of women, men and youth, their access to and control of various resources, and their participation in making informed agricultural decisions is not well understood. This project will apply TOC which is both a process and product (Vogel, 2012). TOC in this project will be a dialogue-based

process intended to generate a 'description of a sequence of events that is expected to lead to a particular desired outcome, the gender mainstreaming in the four selected value chains (Davies, 2012) to ensure that the outcomes are mapped as depicted in Figure 1.

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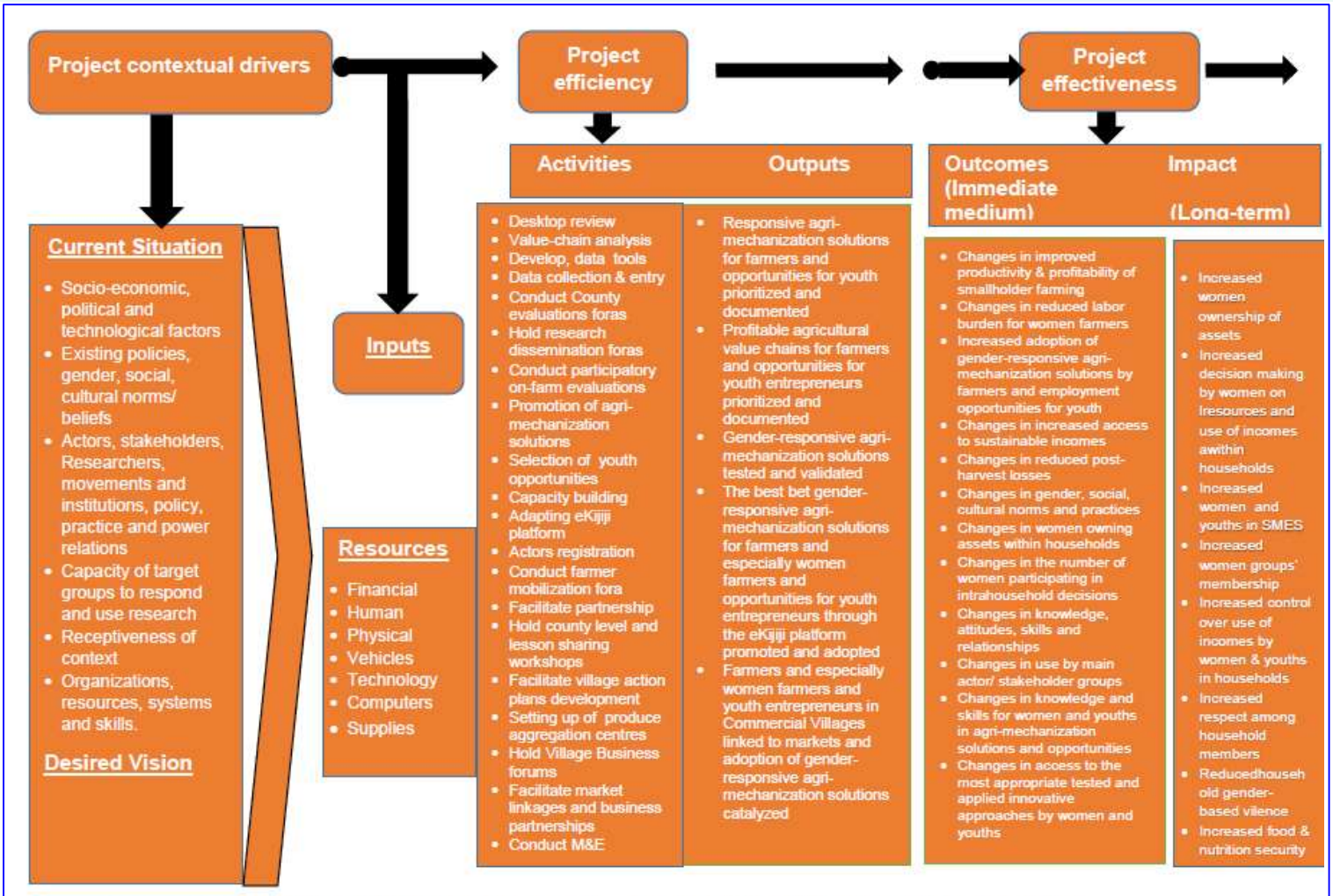

Figure 1: TOC-Description of a sequence of events expected to lead to the projects' desirable outcomes

In trying to achieve and monitor the outcomes of the project, a customized Gender Action Learning for Sustainability (GALS) and Pro-WEAI tool will be used. GALs is a community-led empowerment methodology (developed by Linda Mayoux) based on underlying principles of social and gender justice, inclusion and mutual respect to promote women's human rights including equality in ownership and decision-making. GALS focuses on visioning and implementing changes in gender inequalities in resources and power. Pro-WEAI tool (Figure 2) is a new survey-based index for measuring empowerment, agency, and inclusion of women in the agriculture sector. It is composed of 12 indicators of women's empowerment in agriculture: *autonomy in income, self-efficacy, attitudes about domestic violence, input in productive decisions, ownership of land and other assets, access to and decisions on credit, control over use of income, work balance, visiting important locations, group membership, membership in influential groups, and respect among household members.* These indicators are organized into three domains: *intrinsic agency* (power within), *instrumental agency* (power to), and *collective agency* (power with). These are the indicators that this Gender Strategy will monitor and evaluate over the lifespan of the project.

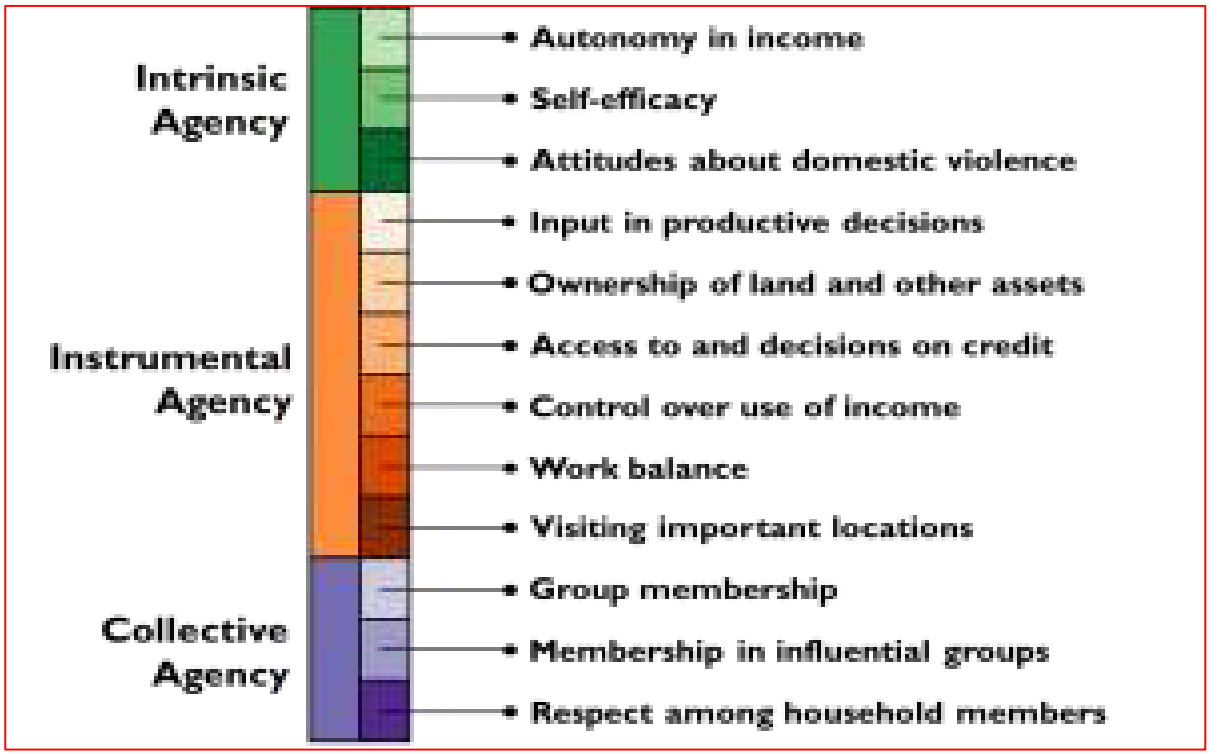

Figure 2: Domains and indicators of the pro-WEAI

The information on these indicators will be captured first in the field surveys to collect sex-disaggregated data and in more detail during the conduction of four focus group discussions (FGDs, i.e. men-only, women-only, youth-only and a mixed-one, each having 12 randomly selected discussants) in each of the study sites by the gender expert.

The Youth and Persons with Disability (PWD)

In Kenya youth account for 35% of the population with over 1,000,000 entering the labour market annually (GoK, 2014). The reports state that youths offer a dynamic work force that is innovative, have a high uptake of technological knowhow and ability to take on significant levels of risk (GoK, 2017). In 2011, a total of 520,000 new jobs were created in Kenya, of which 74,000 (14.3%) were in formal sector jobs. Considering the number of new labour market entrants some 300,000 young people are left behind every year. The youth unemployment challenge is therefore primarily a challenge of economic growth and job creation in Kenya, which may be linked to low productivity and income. The Kenya Youth Agribusiness Strategy 2017-2021, identified 11 Strategic Objectives, with the relevant ones for this study being to; transform the mind set and perceptions of the youth towards agribusiness; equip youth with appropriate agribusiness skills, knowledge and information; enhance access to affordable and youth friendly financial services for agri-entrepreneurship, engage youth in research, development and utilization of innovative agricultural technologies, amongst others (GOK, 2017).

The world over is concerned with creating a conducing environment for PWD. For example, European Union has developed- European Disability Strategy 2010 – 2020, which outlines "how the EU and national governments can empower people with disabilities so that they can enjoy their rights". Its main actions are aimed at fostering accessibility, participation into the community and cooperation among member states in the field of disability. In Kenya, there exists the National Disability Plan of Action – 2004, which aims to improve and promote participation, equality and empowerment of people with disabilities. It proposes to draft a disability policy aiming at achieving overall integration of persons with disabilities into the national development process without any discrimination. Given this back ground the importance of PWD in the commercial villages needs to be taken on board so that they can be involvement in the project and share in its benefits.

Project Strategies to attract and retain Youth and PWD in the Agriculture sector

The project through the gender Strategy will apply several strategies to attract and retain youths and PWD in the agricultural sector. These strategies will include but not limited to:

1. Link youth and PWD to financial organizations to get soft loans so that they may come up with innovative proposals in agriculture or micro-franchising;
2. Build youth and PWD skills on Information and Communication Technology (ICT) because ICT can be used to educate and train those unable to attend higher education institutions but it can be used as a tool to help young people spread knowledge, build networks, and find employment and create an enabling business environment.
3. Linking social media to agriculture can attract youth to access appropriate technologies to be a route into agriculture
4. Use of Media: Success stories of the innovative young farmers/agripreneurs including those youth who have successfully launched agri-ventures/agri-entrepreneurship in different parts of the country may be highlighted through radio, TV and newspapers to motivate other young farmers. The community radio too can play vital role in encouraging and making young farmers aware about the possibilities in agricultural sector.
5. Sensitize youth and PWD to venture into different career options such as value addition, provision of auxiliary services and all other areas in the broader value chain.

6. Create agribusiness opportunities, provide markets and facilities and support that young people need to perform and benefit from agriculture.
7. Attract the youth and PWD as labour market entrants into fast growing agricultural industries.
8. Encourage, especially educated youth to return to rural areas as a key entry point for new agribusiness and resulting employment creation
9. Use developmental approach by engaging rural youth and PWD in productive and profitable agriculture, including crops, livestock, and fisheries.
10. Providing opportunities to rural youth and PWD by promoting innovative agricultural enterprise and agribusiness
11. Train the rural youth and PWD to raise agribusiness skill levels and economic opportunities so that they may be encouraged, and supported to undertake innovative farming and associated ventures like agri-tourism to supplement income.
12. Form Youth Clubs: Farm youth may be mobilized as Farm Youth Clubs (FYCs) in the Commercial Villages so that they serve as platforms for rural youth to discuss issues related to farming, farm enterprises and skill development. Inter-county and inter-sub-county youth exchanges may also be organized by these FYCs to share experiences on best practices and learning.

Gender Strategic Framework
Project strategy goal by 2022
The goal of this gender strategy is "gender equality" in the project activities to contribute to improved food and nutrition security, youth employment, and increased incomes.

Overall objective of the gender and strategy
Contribute to achieving the project outcomes by ensuring that KALRO & FCI effectively respond to the practical needs and strategic gender issues of men and especially women farmers, youths and PWD, within the study sites for the selected value chains. The PWD are those with benchmark disabilities having at least 40% of any of the above disability. The project outcomes include:

1. Increased employment opportunities for the youth;
2. Improved incomes by farmers;
3. Improved productivity in the Commercial Villages;
4. Reduced post-harvest losses; and
5. Increased productivity of the targeted value chains

Strategic Objectives

To improve gender equality in the participating households in this project within the study sites and redress the existing disparities, the strategy will be oriented around three objectives:

Objective 1: To institutionalize gender equality in the project's objective 1*: "To identify, prioritize and document gender responsive agri-mechanization solutions and agri-value chains for farmers and especially women farmers and opportunities for youth entrepreneurs*". To institutionalize gender, the KALRO & FCI will ensure gender issues are observed in:

- Selecting the 50 stakeholders including scientists from KALRO, FCI and universities; public and private sectors and donor community that will participate in the inception and launch workshop;
- Developing data tools for selecting agri-mechanization solutions;
- Developing tools for value chain analysis
- Collecting of sex-disaggregated data from the four study sites, from households, Commercial villages and agri-mechanization vendors/agro-dealers outlets;
- Collecting of sex-disaggregated data from the four study sites and markets on prioritization of value chains
- Identifying key informants for conducting personalized interviews and focus group discussions in the counties and market;
- Developing and a gender-responsive M&E Strategy
- Developing gender responsive Dissemination and Communication Strategy
- Developing/updating tools (manuals, guidelines or toolkits) on how to mainstream gender by extension personnel in the counties where the project is being implemented

This will be guided "Gender Specialist" in KALRO who will lead the process to develop a baseline by conducting four focused group discussions in each of the study counties (female-only; male-only; youth-only and mixed gender) and establish and disseminate gender sensitive indicators, develop plans, provide tools and expertise (gender analysis, gender sensitive planning and programming, gender disaggregation) and coordination.

Objective 2: To develop capacities of the implementing team and beneficiaries in the project to enable gender mainstreaming to achieve objective 2: "*To test and validate the prioritized gender responsive agri-mechanization solutions for women farmers and youth entrepreneurs".*

The KALRO & FCI Project Implementing Team will be sensitized/trained to be gender sensitive so that they have the capacity to achieve output 2 that involves "*Gender responsive agri-mechanization solutions being tested and validated for the selected value chains.* This output will be sub-divided into two main components; including agri-mechanization solutions for women farmers and opportunities for youth entrepreneurs being evaluated and recommended for promotion and adoption through the Commercial Villages using the EKijiji Platform, which will include:

- At least two gender responsive agri-mechanization solutions on selected labour intensive operations per value chain are acquired and tested
- At least 24 farmers for on-farm evaluation of gender responsive agri-mechanization solutions (12 - female headed household, 6 - male headed, and 4-youth (2-females 2-males) headed household and PWD- 2) are identified.

- Capacity building and skills development to nurture youth on gender-responsive agri-mechanization solutions opportunities and management

Objective 3: To enhance the gender responsiveness in delivery of market-driven agri-mechanization solutions and opportunities. This will contribute to achieving the objective 3 of the project: "*To promote the best bet gender responsive agri-mechanization solutions for enhanced adoption by farmers and especially women farmers and opportunities for youth entrepreneurs in commercial villages through the eKijiji platform".*

The KALRO & FCI will raise awareness in the implementing counties so that men, women farmers and youth entrepreneurs, and PWD have knowledge about their rights and also channels of addressing problems. Different media channels will be used to disseminate required information about available financial services for supporting prioritized market-driven gender-responsive agri-mechanization solutions and opportunities for the selected agricultural value chains. KALRO & FCI will focus on a number of activities to promote gender equality, that will lead to:

- 40 youth entrepreneurs registered into the eKijiji platform as distributors of gender responsive agri-mechanization services to women farmers
- 1200 women farmers, 900 male farmers, 300 youth and 20 PWD mobilized to utilize the gender-responsive agri-mechanization solutions
- Eight gender-responsive modules developed as digital contents
- Eight modules digitized into the eKijiji platform and being utilized by women farmers, male farmers and youth in Commercial Villages
- Training of youth entrepreneurs and women on prioritized gender-responsive agri-mechanization solutions by developing e-training materials and holding village level training meetings for women and youth
- Holding of first gender inclusive partnership forums with distributors and vendors in target counties
- Facilitating implementation of the gender-responsive agri-mechanization solutions (for both crops and livestock value chains), ensuring that these solutions are gender sensitive and that women and men farmers have equal access to available agri-mechanization solutions.
- Promoting use of innovative approaches such as farmer field schools (FFS), to ensure that men, women farmers and youth entrepreneurs, and PWD participate equally in trainings and technology development processes.

Objective 4: To promote equal participation in decision making processes for increased benefits. This will contribute to achieving the objective 4 of the Project: **"***To link farmers and especially women farmers and other members of commercial villages to markets to catalyse purchase of adoption of gender responsive agri-mechanization solutions through additional income".*

Given the endemic gender disparities in the agriculture sector in Kenya and the resultant high incidences of poverty amongst women, youths and PWD, a first step is to ensure that women-headed households (farmers), youth entrepreneurs and PWD are represented in the governance structures of project within the study sites. This is critical because women are farmers, workers and entrepreneurs, almost everywhere in Kenya, yet, they face more severe constraints than men in accessing productive resources, markets and services. This "gender gap" hinders their

productivity and reduces their contribution to the agriculture sector and to the achievement of broader economic and social development goals. Youth involvement in agriculture is constrained by cultural patterns that bestow ownership and control of agricultural resources to adults, mainly male parents. Yet, Sustainable Development Goals (SDGs). SDG1 "End poverty in all its forms everywhere"; and SDG2. "End hunger, achieve food security and improved nutrition and promote sustainable agriculture", and SDG5 "Achieve gender equality and empower all women and girls" recognize that agriculture must promote gender equality and empower women to win the fight against hunger and extreme poverty, which is also in line with one of the Big Four Agenda. To ensure that women participate actively in decision making processes of the governance structures, the project will facilitate confidence building of women through trainings in leadership, group dynamics, team work, negotiation and conflict resolution within the participating Commercial Villages. However, men will be engaged in all processes to ensure all the groups are equal partners in development within the study sites. This will result into:

- Developing 20 commercial villages action plans on gender responsive agri-mechanization solutions
- Training and engaging of 100 youth (45-male, 45-female and 10-PWD)
- Developing and utilizing of gender responsive training materials in commercial villages
- Stakeholders participating in initial trade fairs to promote gender responsive agri-mechanization solutions
- Facilitating of business partnership negotiation between women farmers and buyers
- Dissemination of agri-mechanization innovations to at least 1000 farmers
- Carrying out of farmer field days
- Attending of agricultural shows
- Identification of 100 youth for capacity building
- Collecting and analysing of sex-disaggregated data on the objective outcomes
- Participating of at least 20 women farmers, researchers (private and public institutions), agri-mechanization vendors and companies/SMEs in the end of project symposium

Strategy Outcomes

The anticipated outcomes of the gender and youth strategy will be:

- Changes in gender responsive project Strategy and Institutions
- Changes in increased gender parity at household, project and institutional levels in the study sites.
- Changes in increased implementing team (KALRO & FCI) capacity to mainstream gender in the project
- Changes in equitable access to and control of agricultural sector resources, opportunities and benefits for the beneficiaries, men and especially female farmers, youth entrepreneurs and PWD.
- Changes in improved productivity & profitability of smallholder farming
- Changes in reduced labor burden for women farmers
- Changes in increased adoption of gender-responsive agri-mechanization solutions by farmers and employment opportunities for youth
- Changes in increased access to sustainable incomes
- Changes in reduced post-harvest losses

Table 1: Key Project and Strategy Outcome Indicators

Project Outcomes	Strategy outcomes	Indicators
• Improved productivity & profitability of smallholder farming	• Gender responsive Project strategy and institutions	• Percentage availability of gender and age disaggregated data • Percentage of research and demand-driven agri-mechanization solutions that are gender responsive • Proportion of reporting indicators that are gender sensitive • Number of profitable agricultural value chains prioritized in selected counties • Number of Agri-mechanization solutions for women farmers prioritized in selected Counties • Number of opportunities for youth entrepreneurs in selected Counties
• Reduced labour burden for women farmers	• Increased gender parity at household, project and institutional levels in the study sites.	• Number of households reporting gender disparities over time • Number of trials • Number of youths • Number of women **Impact Indicators** • % reduction labour • % increase in productivity • % increase in profitability
• Increased adoption of agri-mechanization solutions by farmers and employment opportunities for youth & PWD	• Increased implementing team (KALRO & FCI) & stakeholders' capacity to mainstream gender in the project	• Proportion of male and female farmers, youth entrepreneurs and PWD accessing project resources and benefits in the study sites • Competency levels of members of the implementing team and extension staff on gender mainstreaming • Number of youth entrepreneurs • Number of women farmers • Number of youth enterprises • Number of equipment vendors • Number of stakeholders **Impact Indicators** • % reduction in labour • % increase in productivity • % reduction in transaction costs
• Increased access to sustainable incomes &	• Equitable access to and control of agricultural sector resources, opportunities and	• Amount of new Incomes • Number of women farmers • Number of youth • % increase in profitability **Impact Indicators**

• Reduced post-harvest losses	benefits for the beneficiaries, men and especially female farmers, youth entrepreneurs and PWD	• % increase in household incomes • % reduction in transaction costs • % reduction in post-harvest losses

Table 2: Logical framework for the gender strategy

OVERALL OBJECTIVES	
County Development objective Agricultural The goal of this gender strategy is "gender equality" in the project activities to contribute to improved food and nutrition security, youth employment, and increased incomes.	**Main Targets** • At least 2% increase in the output for the selected value chains • Reduced incidences of poverty among women headed households • Income gap between women and men farmers reduced • Increased opportunities for the youth entrepreneurs
Overall objective of the Gender strategy Contribute to achieving the project outcomes by ensuring that KALRO & FCI effectively respond to the practical needs and strategic gender issues of men and especially women farmers, youths and PWD within the study sites for the selected value chains.	**Main Targets** • Project programming in the selected value chains in the study sites addresses key gender inequalities • 4000 farmers; women (2000) and male (1500) farmers; youth entrepreneurs (480) and PWD (20) • Gender sensitive indicators included as part of accountability in the M&E system • Sex-disaggregated data collected and analysed to assist in decision making and reporting
SPECIFIC OBJECTIVES TO BE ACHIEVED BY 2022	
Objective 1: To institutionalize gender equality in the project within the study sites	
Result/Outcome: Gender responsive project strategy and institutions for increased gender parity at household, project and institutional levels in the study sites.	

Indicators	**Means/Sources of Verification**	**Important assumptions**
• Number of women and men farmers participating in the project	• FCI & KALRO project work plans and documents	• Political, social and economic stability prevails
• Number of youth entrepreneurs		• Timely availability of budgeted resources

• Number of persons with disability (PWD)	• Project M & E systems • Implementing team job descriptions • Project Organization Chart • Gender Project Budget • Gender Project Action Plan • No. of FGDs & KIIs conducted	• Appropriate knowledge and technology delivery mechanisms operational
• Amount of resources allocated for gender mainstreaming activities		• KALRO's (DG) & FCI's (CEO) and project managers take ownership of gender strategy and ensure implementation
• Procedures (budgeting, work plans, guidelines, manuals, tools, M & E systems) in place		• Willingness of the stakeholders to adopt demand –driven gender-responsive agri-mechanization solutions
• Number of activities with gender targets and sex-disaggregated monitoring systems		• M & E systems exist for the project and there is capacity to integrate gender
Objective 2: To develop capacities of the implementing team in the project to enable gender mainstreaming		
Result/Outcome: Increased implementing team (KALRO & FCI) capacity to mainstream gender in the project.		
Indicators	**Means/Sources of Verification**	**Important assumptions**
• Number of training materials in gender sensitiveness and gender analysis	• Gender Capacity Building Plan • Training activities reports and evaluations • Training materials • Participants attendance lists • Group photos	• Commitment by KALRO, FCI and County governments, implementing teams and extension staff levels • Adequate financial resources to implement the gender capacity building plan
• Number of implementing team and extension and support staff involved in the project having gender knowledge and skills to promote and mainstream gender in project		
Objective 3: To enhance the gender responsiveness in delivery of market-driven agri-mechanization solutions and opportunities		
Result/Outcome: Equitable access to and control of agricultural sector resources, opportunities and benefits for the beneficiaries, men and especially female farmers, youth entrepreneurs and PWD.		
Indicators	**Means/Sources of Verification**	**Important assumptions**
• % of women and men in the project easily accessing extension	• Gender mainstreaming progress reports	• Data collection systems are strengthened to collect, analyse and report sex disaggregated data

services, inputs, training, and markets	• Poverty assessments reports • Financial and audit procedures & reports • Meeting reports • Project quarterly, biennial and annual reports • M & E reports	• Decentralized entities participating in the project have capacities for gender responsive delivery • Commercial Villages and Financial institutions participating in the project are committed to deliver better gender-responsive financial services • Agri-mechanization firms or dealers are committed to deliver better gender-responsive solutions
• % of men and women accessing agri-mechanization solutions both for practical needs and gender interests		
• % of men and women farmers entrepreneurs accessing loans and micro-credit		
• % of youth entrepreneurs accessing opportunities		
Objective 4: To promote equal participation in decision making processes for increased benefits.		
Result/Outcome: Improved decision making, support and accountability for gender mainstreaming in the project by the stakeholders		
Indicators	**Means/Sources of Verification**	**Important assumptions**
• Percentage of women farmers involved in decision making at household , community and commercial villages	• Project and county extension and project focal persons quarterly and annual reports • Gender strategy M & E reports	• Commitment by organizational and project leadership to consider gender equality in decision making processes an important component of socio-economic development • Effective implementation of the 2/3 gender rule requirement in Kenya
• Percentage of youth entrepreneurs involved in decision making at all levels		
• Level of influence by women farmers in decision making processes		
• Level of influence by youth entrepreneurs in decision making processes		
• Level of influence by women farmers in decision making processes		

Table 3: Proposed action plan for the gender strategy

Objective 1: To institutionalize gender equality in the project within the study sites				
Result/Outcome: Gender responsive project strategy and institutions for increased gender parity at household, project and institutional levels in the study sites.				
Outputs	**Activities**	**Leading Institution**	**Time frame**	**Budget**
1.1 KALRO & FCI have integrated gender in policies, processes, guidelines and procedures	• Develop and implement gender-responsive M & E system • Develop and implement gender-responsive planning & budgeting • Conduct four FGDs & KIIs in each county	KALRO & FCI Project gender specialist	1st six months 1st nine months	
1.2 KALRO, FCI and county extension staff have operationalized gender in the project and activities	• Launch the gender strategy • Develop and complete gender targets for the project • Collect and analyse sex-disaggregated data • Mainstreaming gender targets in the project	KALRO & FCI Project gender specialist	1st to 3rd month 3rd to 12th month 3rd to 12th month 3rd to 24th month	
Objective 2: To develop capacities of the implementing team in the project to enable gender mainstreaming				
Result/Outcome: Increased implementing team (KALRO & FCI) capacity to mainstream gender in the project.				
Outputs	**Activities**	**Leading Institution**	**Time frame**	**Budget**
1.1 The project implementing team and county extension staff have the	• Conduct training needs assessment • Develop gender related training materials	KALRO & FCI	3rd - 6th month 3rd - 9th month	

knowledge and capacity to plan, budget, monitor and evaluate gender issues in the project operations	• Planning and execution of training process • Perform M &E (follow up on effective use of knowledge and skills from training)	Project gender specialists and trainers	5th - 18th month 18th - 24th month	
Objective 3: To enhance the gender responsiveness in delivery of market-driven agri-mechanization solutions and opportunities				
Result/Outcome: Equitable access to and control of agricultural sector resources, opportunities and benefits for the beneficiaries, men and especially female farmers, youth entrepreneurs and PWD.				
Outputs	**Activities**	**Leading Institution**	**Time frame**	**Budget**
3.1 KALRO & FCI Management have provided a conducive environment to the implementing team to ensure equal access to and control of the project resources	• Gaps assessment • Update rules and processes for improving gender equality • Information and implementation of corrective measures • Conducting M&E (follow-up on effective improvement of access to and control of project resources)	KALRO & FCI Project gender specialists & county extension staff	3rd - 6th month 7th - 9th month 10th - 24th month 12th - 24th month	
3.2 Men and women farmers and entrepreneurs are better informed and aware of existing agriculture services	• Developing information and awareness campaign and key messages • Evaluation of campaign and better knowledge by the beneficiaries	KALRO & FCI Project gender specialists & county extension staff	3rd - 18th month 12th - 24th month	
3.3 Youth entrepreneurs	• Developing information and		3rd - 18th month	

are better informed and aware of existing agriculture services or opportunities	awareness campaign and key messages • Evaluation of campaign and better knowledge by the beneficiaries	KALRO & FCI Project gender specialists & county extension staff	12th - 24th month	
Objective 4: To promote equal participation in decision making processes				
Result/Outcome: Improved decision making, support and accountability for gender mainstreaming in the project by the stakeholders for increased benefits				
Outputs	**Activities**	**Leading Institution**	**Time frame**	**Budget**
4.1 Strengthened knowledge and skills of women farmers to participate in debates and decision-making at household, commercial villages and community levels	• Train women and men farmers in soft skills that include leadership, interpersonal communication, conflict resolution • Train KALRO & FCI implementing team in gender sensitivity and leadership skills • Conduct M & E (follow-up on effective use of skills)	KALRO & FCI Project gender specialists and trainers	6 – 24th month 6 -24th month 24–30th month	
4.2 Men and women farmers in households and Commercial villages have knowledge and understanding of dialogue and decision-making practices on	• Survey of best practices • Awareness campaign • Disseminate the findings of the project • Conducting M & E (follow-up on effective decision-making)	KALRO & FCI Project gender specialists and extension staff	3rd - 9th month 9th - 24th month 18 - 30th month	

farm production and marketing				

Monitoring and evaluation

The purpose of monitoring and evaluation will be to track the progress of implementation of the strategy and the results thereof. Monitoring will also aim to account for any changes or impacts resulting from implementation of the plan. Specifically, the objectives of monitoring include:

- To ensure operations proceed as planned and to detect any changes in situations that might call for adjustments in the plan
- To ensure that the implementation benefits the targeted beneficiaries timeously.
- To monitor the outcomes and results of Gender strategy implementation
- To track the changes or impacts, positive or negative that are emerging from implementing this plan

To achieve these objectives monitoring will be done at two levels, objective/output level and activity level.

Monitoring of objective/output level of the Strategy:
It is important to monitor the level of delivery of the outcomes from implementing the set activities; and to continuously track the extent to which each objective/output will be achieved. Monitoring achievement of objectives will be done on a quarterly or half annual basis. KALRO & FCI will look at each objective and report on whether or not the objective has been met, is likely or not likely to be met, and what changes need to be done to the set activities to ensure that the objectives/outputs will be achieved. To monitor objectives/outputs a set of indicators have been developed. Regular participatory review meetings, preferably quarterly, will be conducted to review progress of implementation and any adjustments to the plans will be effected through this process.

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