

# Gender Equality and Youth Inclusion in Agriculture: findings from CABI gender research



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## Executive Summary

Gender research commissioned by CABI, highlights 10 key focus areas where CABI projects and programmes are able to have the greatest impact in the strategic goal to **reduce inequality through better opportunities for rural women and youth**. The findings convey a narrative of persistent gender and age inequalities, spanning lack of access to agricultural resources, to struggles for recognition and decision-making opportunities. The potential contributions of women and youth are undermined by disparities that hamper the collective productivity and sustainability of agricultural practices. Thus, the current landscape beckons an approach that ensures inclusive involvement that goes beyond tokenism towards substantive and transformative change.

CABI research offers valuable insights and clearly defined entry points to build a more inclusive, locally driven, impactful and sustainable terrain. An environment where women and youth are active in their own development, must be crafted to ensure a more localised, engaged, responsive, and ultimately effective mobilisation. Empowering men and women with the autonomy to identify and articulate their capacity needs, ensuring that CABI interventions and goals align with the expressed demands of local communities is essential. The inclusion of women and youth through equal resource access is not just a matter of fairness; it's an essential strategy for sustainable agricultural development and smart investment in agriculture's most valuable asset – its people. It is critical that their perspectives shape the agricultural account. In essence, the full spectrum of agricultural development cannot be realised without the inclusion and empowerment of women and youth.

## Introduction and Background

This document is a consolidation of recent gender research commissioned by CABI. The purpose here is to gather data from the research to present a concise representation of findings and recommendations for the regions that CABI serves. While gender considerations are increasingly mainstreamed across CABI, there are vital, preliminary, and targeted steps that can be taken to deliver more localised, inclusive, and sustainable approaches to CABI services. As is now widely recognised amongst development economists,<sup>1</sup> investing in the futures of women and youth is smart investment offering the promise of improved growth and prosperity across the agriculture sectors. Investing in women and youth is smart economics.

Gender research conducted by CABI,<sup>2</sup> show that despite the odds, women and youth farmers are actively seeking to enhance their agricultural skills. For example, the focus on improved crop practices indicates a pragmatic approach by women, prioritising the most impactful knowledge that can lead to tangible improvements in productivity and livelihoods. Research shows a marked optimism demonstrating collective aspiration among farming communities, to evolve traditional agricultural practices into a future-ready enterprise by integrating modern,

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<sup>1</sup> <https://www.imf.org/external/pubs/ft/fandd/2012/03/pdf/revenga.pdf>  
<https://www.unescwa.org/sd-glossary/smart-economics#:~:text=Term%3A,efficiently%20in%20women%20and%20girls>

<sup>2</sup> *Gender and Rural Advisory Services Assessment in Pakistan* (2022); *Gender and Rural Advisory Services Assessment in Pakistan Validation Workshop Report* (2023); *Gender Analysis and Action Plan for the PlantwisePlus Programme* (2023); *Gender Sensitive Analysis of Women Farmers of Nepal: issues of Access to Agro-dealers* (2023); *Baseline Report Economic Empowerment of Women in Agriculture in Ghana and Kenya* (2024); *Baseline Report Gender and digital advisory tools assessment in Ghana* (2024); *Gender and Digital Advisory Services Assessment in Bangladesh Final Report* (2024) *Baseline Report Study on Economic Empowerment of Women in Agriculture Bangladesh* (2024) *Baseline Report Study on Economic Empowerment of Women in Agriculture Pakistan*

technologically advanced, and sustainable methods, thereby creating an engaging and viable platform for women and youth in agriculture.

Women, alongside their male counterparts, perform multiple agricultural roles. These roles range from direct engagement in fieldwork to managing horticulture and livestock care. In regions where agriculture is a cornerstone of the economy, women's involvement is both pivotal and multifaceted. Representing up to 65% of the labour force, women's contributions are not merely supportive but are often central to household agricultural operations.<sup>3</sup> This is particularly significant in regions where agriculture accounts for around 1/4 of the national GDP. The central financial roles women play in the agricultural economy highlight the need for initiatives that recognise and enhance women's economic participation in agriculture. This financial interdependence also emphasises that women's earnings are not merely supplementary but, in many cases, are essential for the well-being of rural households.

However, and as is well documented, the contribution of women and young people to the sector is widely unacknowledged, under reported and under invested. The contributions of women and youth are often invisible across agricultural sectors, resulting in missed opportunities for agricultural development. Institutional bias among agriculture service providers, limiting social norms, household power relations, lack of control over financial resources, poor access to finance, lack of land and asset ownership, and unpaid care responsibilities resulting in time poverty, are commonly reported obstacles. These obstacles restrict equal access to, participation in, and benefit from agricultural initiatives. Efforts to empower women and youth in agriculture are sporadic and often non-specific. This calls for an integrated approach that includes policy revision, entrepreneurship, capacity strengthening, networking, promoting women and youth in decision making roles, and designing inclusive digital initiatives, tailored to women and young people's unique needs.

Women's participation in agriculture is considerable but limited in scope.<sup>4</sup> As labourers performing sorting, cleaning, processing, and packaging tasks, they are integral to the value chain. Restricted access to land ownership and control is a significant barrier, confining many women and youth farmers to subordinate roles on others' farms rather than enabling them to own or manage their operations. Constraints such as a lack of specific skills, limited credit options, technological gaps, and lower education levels further inhibit women and youth from advancing to higher-value agricultural activities and moving beyond traditional labourer roles. The enduring influence of historic norms and traditional gender roles often relegate women to labour-intensive tasks such as planting, weeding, and harvesting. Cultural and societal norms, coupled with restricted market access, impede their advancement into trade and decision-making roles.

Faced with these obstacles, specific attention to creating enabling environments through intentionally designing programmes that seek to address limitations and bias in agricultural sector is required. This can be achieved through developing inclusive planning and implementation of environments and initiatives that seek to shift the social and organisational norms that exclude certain groups at the benefit of a few. Simultaneously, strengthening

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<sup>3</sup> While financial reliance on agricultural activities across countries varies, reports affirm that women farmers contribute more than 40% to their family income, underlining the central role of women's agricultural production in sustaining households.

<sup>4</sup> The persistent gender productivity gap in agriculture, globally, shows that farms managed by women farmers produce less per hectare of land compared to farms managed by men.

women and youth capacity and providing support for women and youth to succeed on an equal basis to older male farmers is critical to ensure the requisite acknowledgment of the central contribution that women and youth bring to the sector. In essence, the full spectrum of agricultural development cannot be realised without the equitable inclusion and empowerment of women and youth. Addressing this imbalance is not only a matter of fairness but also a strategic imperative for sustainable agricultural growth and community resilience. It is crucial to pivot towards programmes that not only require women and youth participation but also amplify their influence, ensuring their perspectives shape the agricultural narrative.

CABI is well placed to address the myriad of obstacles preventing women and youth equal access to, participation in, and benefit from agricultural investments. Gender research commissioned by CABI provides key insights into the needs of women and youth farmers and agricultural service providers, including government and non-government organisations. These insights affirm that women and youth play important and significant roles across agriculture sectors and signify important entry points to enhance CABI, and Plantwise Plus impact pathways – plant preparedness, pesticide risk reduction and farmer advisor services. Investing in women and youth farmers, farming networks, inclusive digital technologies, information sharing and communication, capacity strengthening and leadership as well as policy reform are critical. These areas of intervention must be peppered across agricultural initiatives to ensure coherent inclusion mainstreaming within planning, communication, implementation and reporting across services provided.

### **Gender and age considerations in plant health management**

CABI recognises that interventions in plant health management informed by a gender analysis help to better delineate gender roles in crop production and pest management, the preferences of men, women and youth, and their access to resources. Analysis shows that gender roles influence farmers knowledge and practice of pest management as well as uptake of recommended pest management and control solutions. Gender analysis at the early stage of planning interventions supports strategies to address gender-based barriers in order to enhance sustainable adoption. Understanding the specific contexts in which farmers operate, allows for more nuanced and effective program design, ultimately enhancing economic empowerment within the agricultural sector, through increasing uptake of new technologies.

Data shows that adoption of agricultural technologies for the sustainable management of pest threats is generally low among women farmers. Studies affirm that women farmers are more likely to be highly impacted by crop pests because of limited access to information, labour, and finance to use various pest control methods. Challenges faced in accessing finance services, underscore the need for addressing socio-economic obstacles to elevate women's status within the agricultural sector. To address these challenges, it is crucial to implement affordable pest control methods. Generating evidence of the impacts of pests and conducting social impact assessments to inform the prioritisation process of the key threats for intervention, as well as the development of awareness and communication campaigns on management and control, are critical to advance uptake of new technologies. Furthermore, a glaring gap in the awareness and adoption of agricultural technologies and practices, exemplified by only a fraction of women being informed or utilising such tools, exacerbates operational inefficiencies. These compounded issues not only affect decision-making autonomy but also leave women under-equipped in dealing with plant health and pest management, with a majority lacking knowledge in advanced agricultural practices that could enhance their yield and ease their workload. Interventions are needed that consider existing

gender and age relations. Strategies are required to address barriers faced by women to enhance the sustainable adoption of recommended solutions and reduce economic loss.

Limited access to information, distance to input markets, limited access to finance and intra-household power relations affect adoption of low-risk pest control products by women and youth farmers. Trainings on proper use of pesticides also overlook women farmers, assuming they do not handle pesticides, even though they are exposed in different ways. To truly bridge the technological divide, there must be a concerted effort to democratise access to these technologies and foster an environment where rural women and youth are not only informed, but also empowered to make decisions and implement advanced agricultural practices. This entails developing tailored outreach and education initiatives, accessible technology deployment strategies, and supportive policies that recognise and address the unique challenges faced by women and youth in agriculture. Adoption of low-risk pest products by women farmers will increase, if women are intentionally targeted in technology training, linked to input suppliers and sources of finance, and if interventions aimed at shifting household and community level gender power relationships are implemented. Only then can we ensure that the benefits of agricultural advancements are equitably distributed, leading to a more inclusive and productive agricultural sector.

The multiplicity of roles that women and youth fulfil in agriculture, not only underscores their adaptability and resilience but also indicate the potential for enhanced economic empowerment through targeted support, in skill development, access to resources, and equitable participation in commercial ventures. By fostering an environment where women and youth perspectives and skills are integrated into the decision-making process, agricultural households can benefit from a more diverse and comprehensive approach to farm management. Through understanding these patterns, stakeholders can design effective support systems that recognise the full range of agricultural labour to include women and youth, ensuring that their work is not only visible but is appropriately rewarded, and thereby enhancing their economic empowerment and the overall productivity of the sector.

The overall picture remains one where gender and age inequalities persists in access to agricultural resources and decision-making. These disparities not only undermine the potential contributions of women and youth but also affects the broader agricultural sector's efficiency. Bridging this gap requires systemic changes, including equitable resource distribution policies, gender-sensitive extension services, and increased support for women and youth. The agricultural sector can harness the full potential of its workforce through promoting inclusive growth to enhance food security. The current picture underscores the urgency for targeted interventions that address these gaps, such as providing more equitable land rights, creating gender-sensitive financial products, investing in women and youth-focused agricultural extension services, and developing training programs that are accessible to women and youth. Addressing existing inequality, provides an opportunity to enhance the productivity of all farmers as well as to achieve broader economic development goals. The empowerment of women and youth through equal resource access is not just a matter of fairness; it's an essential strategy for sustainable agricultural development and smart investment in agriculture's most valuable asset – its people.

CABI is well placed to initiate collaborations to ensure that cutting-edge agricultural technologies are not just accessible but also affordable for women and young people. Through

building bridges between agri-tech enterprises, governmental bodies, and non-profit organisations, technology and resources can be targeted towards women and youth farmers. CABI can create and support community councils with a mandate to steer technology integration into farming practices, such as the Gender Technical Working Groups currently supported by CABI in Pakistan. These councils or technical working groups can amplify the voices of young people and women to ensure that the technologies adopted meet the unique needs of farmers while ultimately empowering the farming community as a whole.

Historically and across various contexts, the ownership and control over crucial agricultural resources such as land and livestock have predominantly favoured older men. This disparity extends to agricultural practices, where farms managed by women are typically smaller and utilise less advanced inputs—such as high-grade fertilisers, superior seeds, and modern machinery—that are linked to higher productivity and profitability. Gender and youth disparity in asset ownership within the agricultural sector underscore the critical importance of ensuring that women and youth have comprehensive rights to land as a means to enhance their agency and to improve agricultural productivity. Addressing these disparities contributes to more inclusive and sustainable agricultural development that benefits entire communities.

CABI gender analysis directs programme planners and experts to ten significant areas where change can occur to ensure more inclusive, equitable and impactful implementation and results. These areas are 1) communication and information sharing; 2) extension advisory services; 3) digital advisory services; 4) farmers cooperatives; 5) youth employment; 6) financial innovations; 7) leadership decision making; 8) livelihood diversification and nutrition; 9) policy reform; and 10) addressing social norms. These areas should be viewed as interconnected and symbiotic with information and communication cutting across all.

### **1) Information and Communication**

Communication and information sharing are critical for sustainable development. Lack of access to information, capital and labour, affect the ability of asset poor farmers' – of which women constitute the majority – to adopt food safety standards. As men and women access information on agriculture differently, communication campaigns on pest management must adopt a gender responsive approach to understand gender-based barriers to adoption. A gender transformative approach to behaviour change interventions is required to address these barriers. To increase women and youth access to information, to meet food safety standards and to comply with regulations and licencing requirements, communication channels need to be intentional and inclusive. It is imperative that women and youth are directly targeted in all trainings, messaging, awareness and behaviour change campaigns.

Identifying locally driven and culturally appropriate communication channels accessible to men and women and tailoring communication messages to men, women and youth will help to bridge the existing knowledge gap. Traditional means of conveying messages such as drama, songs, drawings, symbols, dancing, and proverbs can be used to convey messages to women and youth farmers in ways that are contextually relevant. Intentional and resolute actions are required to bridge the accessibility gap. Such initiatives should reinforce the important roles of women and youth in the agricultural sector, to align with sustainable farming practices as well as the contextual realities. It is imperative to expand outreach efforts, raise awareness, and improve the delivery of extension services to meaningfully empower women and youth farmers. Publishing and promoting success stories and elevating role models in agriculture

helps to inspire women and youth and drive community change. Sharing these stories widely, reinforces the importance of women and youth contributions and acts as a challenge to societal and industry misconceptions.

Communication intermediaries such as extension advisors require training in order to recognise how gender, age, and social status adversely impact the effective participation of community members in the communication process and how information needs to be purposely tailored to men, women, and youth. This discussion is not only about equity and rights but also about leveraging the full capacity of all members of society to enhance productivity, sustainability, and resilience in the face of a rapidly changing agricultural climate.

The way in which data is collected, monitored, evaluated and communicated is critical to the assessment of programme performance and reach. Monitoring and impact assessment provides the tools for evaluation of the strengths and weaknesses of a programme and for designing an impactful trajectory. Data collection, monitoring and evaluation mechanisms are required to assess the influence of these initiatives on all stakeholders impacted by a programme. For this reason, it is required that sex and age disaggregated data collection and evaluation mechanisms are built into programme design. Failure to collect sex and age disaggregated data at best relegates women and youth as invisible and at worst occludes them from programme access, opportunities, and benefits, thus perpetuating inequalities and social exclusion. Monitoring and evaluation tools designed through partnership with and input from local communities ensure inclusion, relevance, accuracy and expanded reach.

## **2) Extension Advisory Services**

Women and youth are underserved by extension advisory services, and gender and age differences require careful analysis and planning of these. For instance, it is well known that the timing of the service provision can be easily planned to provide advice to all farmers acknowledging other commitments.<sup>5</sup> Gender trainings for extension staff and increasing the number of female extension staff are basic measures that contribute to closing the gap created through a gender-blind extension service sector. Closing this gap also requires that recruitment strategies are revised to ensure active engagement of female extension workers and the provision of robust support mechanisms that encourage their presence and performance in the field. Implementing integrated training programmes that bridge the gap between technical knowledge and market dynamics, empowering women extension staff to deliver comprehensive advice, facilitating enterprise training for extension staff (particularly women and youth) and equipping them with entrepreneurial skills so that they can mentor farmers towards profitable farm-based enterprises, will enrich the agricultural value chain.

Through collaboration with nationally based agriculture extension departments, women and youth-focused agricultural extension services can be designed and implemented to offer equitable access to agricultural inputs, machinery, training, and technologies, thereby fostering a locally driven and inclusive environment for farmers to thrive. Collaborating with advisory extension departments to develop inclusive strategies for agriculture service providers, training agriculture extension staff to use more inclusive service delivery approaches and shifting restrictive social norms to improve women's access to services is a

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<sup>5</sup> In addition, in some cases men must grant women permission to attend or decide whether women attend extension sessions.

key initial step. Providing commercially viable advice to women and youth farmers to encourage and retain their interest in the sector is a step that should follow.

Advisory Extension Services are a vital entry point to encourage men and women extension workers to collaborate on training sessions and serve as role models for community interactions. Such joint efforts can demonstrate the benefits of inclusive practices, collaboration, shared knowledge, and equal representation in agricultural decision-making, positively influencing community norms. Trainings provide the ideal platform to encourage men in championing women and youth empowerment in agriculture. Moreover, engaging men as allies in gender transformative approaches helps to expand the reach and impact of these initiatives. Including male extension workers to convey the benefits of women's active participation, through conducting gender sensitisation programs, and engaging men as partners in support of equitable opportunities for women, assists to elevate women as agricultural experts. Women *are* agricultural experts and should be recognised as such.

### 3) Digital Advisory

ICT-based rural advisory services are increasingly available to farmers, as a result of improved innovations and increased access to mobile technology. The integration of technology in agriculture through mobile applications offers a transformative potential for enhancing productivity and access to information. However, research shows that women farmers' use of digital advisory services remains limited in low- and middle-income countries. Institutional bias amongst advisory service providers, and lack of access to digital devices and internet are some of the key challenges they face. While digital advisory can help overcome barriers, including mobility and time constraints, the gender divide in digital knowledge remains. The underutilisation of digital technology is also attributed to limited digital literacy and understanding of how agriculture apps can directly assist in enhancing income generation, the lack of control over smartphones, and the influence of cultural norms restricting technology use, especially among women.

Digital disparities underscore the necessity for targeted interventions to provide rural women with the opportunities, tools and information required to access and benefit from digital agriculture services. By prioritising digital inclusion, a more equitable adoption of innovative agricultural practices can be planned, leading to increased productivity and empowerment for women farmers. To fully realise the benefits of digital tools in narrowing the information and services gap for rural women, concerted efforts must be made to overcome barriers to digital access. This includes not only enhancing connectivity but also addressing broader social and infrastructural challenges, thereby equipping women farmers with the tools to thrive in a modern agricultural economy through ensuring they not only access but also effectively utilise tools to enhance agricultural productivity and work efficiency. The evidence is clear: when women are provided with the right resources, the yield—and impact—can be extraordinary.

Adopting a participatory, inclusive design approach while developing digital agricultural tools and services is critical to enable women's equal access to services. This means adopting an approach where the content of the information shared, and the format of communication is relevant, accessible, and tailored to the needs of women farmers. Some strategies have focused on improving women's access to digital devices, for example, by giving women's groups mobile phones or radio cassette players, to listen to local radio shows in a group and discuss the messages. However, further interventions are necessary to build upon this foundation and ensure that more female farmers can benefit from the economic opportunities that online platforms offer.



The conversation around digital inclusion for women farmers cannot be had without addressing disparities brought about by gender blind developments. The need for tailored strategies to combat systemic gender disparities is clear. Technology, in the form of app-based systems and drones, can revolutionise access to vital resources such as livestock vaccines. Cultivating digital and educational empowerment through digital inclusivity means that mobile applications offering market insights, weather forecasts, and veterinary services, can be equally accessed by men and women farmers. The readiness and eagerness among women to integrate mobile technology into their farming operations, presents opportunities for scaling the use of mobile applications for enhancing agricultural productivity, market access, and financial literacy.

#### **4) Farmers Cooperatives**

Farmers cooperatives are important podiums for the provision of technical and financial support to farmers. Organising in collectives enables farmers to access capital, information, technology, networks, and markets. However, a gender and age-blind approach in the formation and operation of cooperatives can exclude women and youth. The marginalisation of women and youth in community agricultural groups significantly undermines their potential and dilutes their voice in a sector where they are key contributors. Despite their extensive involvement in agriculture, women and youth often find themselves on the peripheries of influence, with their insights and expertise untapped and undervalued. Disparities in meaningful engagement not only affects individual capabilities but also impairs the collective progress, innovation, sustainability and reach of these collectives.

In many countries, women-only cooperatives are proven to bridge the resource and access gaps that hinder the ability of women farmers to reap the benefits of their labour.<sup>6</sup> The formation of common interest groups is not merely about economic gains; it is about fostering a supportive network that amplifies the voices of women and youth, providing platforms to advocate for their rights and needs, as well as to access the vital information and resources required to survive and prosper in the agriculture sector. These groups are a testament to the strength that lies in unity—providing women and young farmers opportunities to overcome systemic barriers, influence agricultural policies, and assert their role as key drivers of agricultural development. By supporting community groups, a foundation for women and youth to access shared resources and markets ultimately leads to a more resilient, sustainable, and equitable agricultural sector. Excluding women and youth from these cooperatives has wide ranging implications for the growth, effectiveness, and sustainability of the sector.

The affiliation with farmer groups can significantly increase the likelihood of women and youth control over agricultural production, underscoring the transformative power of community support and shared knowledge. This approach does more than just empower women and youth – it catalyses a ripple effect of benefits across the agricultural sector, paving the way for a more equitable, sustainable, and prosperous farming community. For instance, studies indicate that farming cooperatives support increased uptake of new and improved technologies and that introducing new technologies through women’s collectives, significantly increases uptake, thereby having benefits for the agriculture community as a whole.

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<sup>6</sup> The global experience unequivocally affirms that when women come together, their collective power can catalyse sustainable change, both on and off the farm. The same is inevitably the case for youth.

Farmers cooperatives can be empowering for women and youth, if intentional actions are taken to ensure equal access, opportunity and benefit. For women and youth farmers to truly profit from group participation, their empowerment must be bolstered through intentional strategies that promote their leadership, equitable participation in decision-making, access to information, and recognition of their valuable contributions in shaping the agricultural and social landscapes.<sup>7</sup> Providing the space for participatory training and learning, a collective approach emphasises the mutual advantage of cooperation. They also open opportunities to deliver trainings to cooperative leaders on gender and inclusion, raising awareness of cooperative members on the value add of inclusion. These actions enhance the effectiveness of the cooperatives themselves.

This situation beckons a critical analysis of group structures and functions to ensure that inclusive involvement goes beyond tokenism to substantive and transformative engagement. Empowering community agricultural groups with the autonomy to identify and articulate their capacity needs, ensuring that trainings provided align with expressed demands is essential. Injecting interventions for institutional strengthening is also key to ensuring groups are structured to last. This enduring framework is essential for transforming groups into potent enterprises and supportive systems that recognise and address the multifaceted roles of women and youth in agriculture. An environment where women and youth are active in their own development, ensures a more localised, engaged, responsive, and effective mobilisation, reflected in solutions that resonate with their specific circumstances – thereby, a more meaningful and impactful process.

Strengthening women and youth agricultural networks through establishing agricultural groups to provide shared labour, enhance bargaining power, and collective action, and supporting groups with access to information, tools and platforms for market insights and agricultural education, will help overcome mobility barriers and enable better management of responsibilities. Establishing dynamic leadership and networking platforms that amplify women and youth can influence a sector aimed at cultivating skilled leaders who can sustain, develop, and expand the groups' reach to underserved farmers. By forging networks that command fair prices and by establishing potent selling channels, these collectives will not only navigate, but also shape market forces, carving out a space where women and youth agricultural output is valued and rewarded. For collectives to serve the needs and interests of women and youth they will need to revise membership criteria. Alternatively, establishing women and youth only collectives, can support meaningful representation. Engaging collectives as entry points for behavioural change initiatives and technology adoption is an innovative and impactful way forward to shift social norms and increase technology adoption.

## 5) Youth Engagement

The future of agriculture hinges on the active participation of the younger generation, yet there is an undeniable divide as rural youth are often occluded from meaningful engagement and gravitate towards alternative urban promises. For youth in agricultural sectors the seasonality of farm work, coupled with its often unpredictable and low productivity, drives their interest towards more reliable and lucrative employment in the industrial and service sectors. Youth are increasingly opting for government or private sector jobs over the uncertainties associated with agricultural livelihoods. On the one hand, this occupational diversification embodies

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<sup>7</sup> Strengthening women's roles within these groups could amplify their collective voice, translating into a more pronounced influence on community decisions and actions.

benefits including increased and more stable income sources, access to benefits often associated with non-agricultural employment, and a reduction in the physical demands placed on individuals. Conversely, this trend leads to a range of disadvantages. Notably, the pursuit of non-agricultural occupations can impose time constraints on agricultural activities, potentially leading to a decline in labour availability for farming. Further, there is the obvious risk of eroding traditional agricultural knowledge and intergenerational transfer of knowledge, through a general neglect of the agricultural sector.

By injecting innovation, offering skills development, and enhancing access to resources, a new era can be cultivated where farming becomes a symbol of opportunity and growth, ensuring the land continues to flourish under the care of the next generation. The future of agriculture depends on a transformative approach that not only attracts but also retains youth, turning the tide on the agrarian exodus and sowing the seeds for a flourishing future. This challenges policymakers, educators, and industry leaders to address the misconceptions surrounding agriculture and to rebrand it as a field ripe with technology, sustainability, entrepreneurship, and inclusion. Such insights propel the need for a concerted effort to cultivate interest and expertise across the less represented domains of agriculture. Providing access to innovation, education, and markets can catalyse a more balanced and sustainable integration of youth, fostering an agricultural sector that aligns with the evolving aspirations of young farmers. Youth have begun to sow seeds of innovation, viewing agriculture not just as tradition but also as a realm ready for entrepreneurship and technological transformation. However, societal structures and cultural norms often curtail youth participation. Educational barriers, mobility constraints, social norms, and financial hurdles shadow their path.

### **Gender Considerations in Youth Engagement**

Gender analysis of youth engagement in the agriculture sector reveals a pronounced gender gap in youth employment and opportunity. More young women are unemployed or underemployed compared to men and a gender wage gap permeates the sector. Young women's engagement in the sector is commonly restricted through reduced mobility curtailed by social norms, caregiving responsibility, and security concerns. The restriction on mobility – often couched in terms of protection and security – affect women's access to contacts and customers. The risk of gender-based violence in and around the workplace constrains young women's employment opportunities. For instance, a study from Kenya showed young women are asked for sexual favours in order to obtain a job, or once they are recruited, to keep their jobs. Furthermore, on-street harassment undermines young women's businesses and working at a distance from home means that women risk violence on their way to and from work. The risk of sexual harassment is especially high for women who go into male dominated employment sectors.

Gender research affirms that the increasing movement of young men away from agriculture, in the search of alternative employment, places a greater share of agricultural responsibilities on women's shoulders as they are often required to fill the gap left by these young men. At the same time as women become increasingly involved in, and responsible for farming activities, avenues are opened for increased agency and participation in agricultural decision-making processes. The upsurge in women's involvement in agriculture offers fresh avenues for women and reinforces the need for broader engagement strategies that extend beyond traditional roles and empowerment of women with leadership and management skills.

The majority of female youth are invested in crop cultivation, a foundational pillar of agricultural activities. This tendency towards plant agriculture may be attributed to various factors, including accessibility, perceived suitability, or existing skill sets within traditional farming communities. While crop cultivation remains a cornerstone of agricultural involvement, the lesser representation in livestock farming, horticulture, agribusiness, and farm management embodies a broader narrative. It suggests a landscape where young women's contributions are yet to be fully recognised, or where opportunities may be limited due to social or structural barriers. The engagement of young women in agriculture amplifies the need for purposeful efforts to address gender-based norms and challenges in order to maximise the untapped potential of women.

Encouraging young women to enter new sectors outside their traditional gender roles, through community and individual sensitisation and role modelling, and featuring successful young female entrepreneurs in non-traditional roles, helps to challenge gender-based job segregation. There is a need for targeted initiatives that empower female youth, providing them with the tools, training, and resources necessary to flourish in diverse agricultural roles, thereby reinforcing their vital role in shaping a resilient and forward-thinking agricultural sector. A strategic and gender-transformative approach is essential—one that not only fosters awareness and education in modern agricultural practices but also equips youth with the means to overcome social, logistic, and financial barriers. Combining gender-focused life-skills trainings<sup>8</sup> with entrepreneurship and vocational training is needed.

Youth unemployment is globally perceived as a threat to economic prosperity and social cohesion, leaving youth with few avenues for a secure future. Initiatives aimed at enhancing market access, promoting job creation in the agricultural sector, and providing mentorship in advanced farming techniques, serve as catalysts for realising the aspirations of young Agripreneurs. Comprehensive agricultural education programs that resonate with youth aspirations, curricula infused with modern agronomic practices, agribusiness acumen, and entrepreneurial spirit are a must. Agricultural stakeholders must rethink extension services to cater to the ambitions of the new generation and develop programmes and knowledge-sharing platforms that sharpen skills in market navigation, value addition, and digital agriculture, making the field more accessible and attractive to young men and women.

An initial step towards inclusion of youth in the agriculture sector is to support community frameworks that value women and youth input in decision-making, recognising them as integral contributors to the agricultural ecosystem. This can be reinforced through entrepreneurial programmes tailored to aiding young men and women in crafting sustainable business models, and connecting young entrepreneurs with government support programmes that provide financial assistance, technical advice, and market access to start-ups in the agricultural sector. Empowering educated youth to become changemakers, equipped to introduce and lead the adoption of efficient agricultural practices and training youth as specialised agriculture service providers, can fill gaps in areas such as pest control, crop health, organic compost, seeds, and market facilitation.

Empowering youth with the tools of knowledge, innovation, and enterprise, could usher in an era of prosperity and redefine the agricultural narrative. The challenge ahead is to encourage a generation of empowered young men and women who will not just inherit the agricultural

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<sup>8</sup> Such as trainings on SRHR and gender-based violence.

legacy but will reinvent it, fostering a future where agriculture is synonymous with innovation, opportunity, economic vitality, and sustainability. This calls for a shift in the perception of youth roles within agricultural groups, ensuring that they are not only present but also powerful and pivotal in driving the sector forward.

## **6) Financial Innovations**

Financial constraints are particularly amplified for women and youth in the agriculture sector. These groups often have restricted access to assets, land, and collateral, undermining their access to financial services. Women and youth farmers, face considerable hurdles in leveraging assets for credit, due to both gender and age bias, and hesitancy of formal financial institutions to engage with them without traditional collateral. Data reveals an overarching need for innovative financing models that accommodate the unique circumstances of women and youth. Establishing alternative forms of collateral, providing collective borrowing options, and fostering women-youth-centric financial literacy programs could serve as game-changers. Considering the pivotal role of women and youth farmers in sustainable agriculture it is salient that inclusive and responsive financial products and services are required.

Research underscores the transformative impact of providing equitable resources. For instance, economic benefits are evidenced in tangible examples from Tanzania, Malawi, and Uganda which illustrate that reducing the gender gap in agricultural productivity could bolster the gross domestic product by USD 105 million, USD 100 million, and USD 65 million, respectively. Fostering an environment where women and youth partake in financial education, gain access to resources, and assume leadership roles – a shift where women and youth farmers are not just participants, but key economic decision-makers – taps into this transformative potential.

The establishment of village-based saving committees emerges as a potential solution to foster financial inclusivity among women and youth farmers. These committees serve as spaces for pooled resources and collective investment offering inclusive financial ecosystem where farmers are not only aware of, but actively involved in, financial instruments designed to bolster their economic independence and resilience.<sup>9</sup> Financial empowerment of women and youth through financial literacy workshops, tailored to women and youth farmers and aimed at improving their understanding and management of banking, savings, credit, bank accounts, and the seasonal volatility of farming are essential. Orientation of women and youth farmers on use of digital financial services to provide greater autonomy, privacy, and ease in economic transactions, will advance efforts to overcome barriers to formal financial institutions.

## **7) Leadership and Decision Making**

Empowering women and youth in decision-making is not only about equity; it is a strategic move for enhancing agricultural productivity and community well-being. Strengthening the capacity of women and youth is essential for an inclusive and sustainable agricultural sector. The two-fold predicament of limited confidence and insufficient information, constitutes a major barrier for women and youth, impeding their effective engagement in agricultural

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<sup>9</sup> If available, conduct awareness campaigns on women/youth-specific loan schemes offered by State Bank, ensuring women are informed about eligibility, application processes, and benefits.

decision-making. Such barriers hamper the collective productivity and sustainability of agricultural practices. Data collected through CABI studies underscores an urgent need for targeted interventions. Enhancing information accessibility and confidence, women and youth farmers can take a more active and informed role in the decisions that affect their work and livelihoods. It is imperative to cultivate an environment where women and youth have both the knowledge and the authority to make decisions, thereby fostering growth in the agricultural sector. The need for targeted interventions that strengthen women and youth capacity and confidence through education, training, and support systems that enhance their agency, will ensure that their voices resonate where they matter the most—in the decisions that shape their work and lives. The entire sector benefits from diversified leadership knowledge and perspectives leading to more resilient and adaptive farming practices.

Comprehensive empowerment and mentoring programmes that provide women and youth with a well-rounded mastery of agricultural resources, modern farming practices, and effective pest management and a shift towards inclusive decision-making processes that value the contributions of women and youth, ensuring that their voices and agency are included *and* given due weight in the collective management of agriculture is long overdue. These measures align well with the establishment of women and youth farming collectives. Farming collectives provide the platform for strengthening the skills and confidence required to be decisive agricultural leaders. Leadership development programs can be included in agricultural groups, strengthening skills in assertive communication, strategic planning, leadership and decision making.

#### **8) Livelihoods Diversification and Nutrition**

For sustainable income diversification of women and youth in agriculture to be realised, it is essential to address the seasonal and volatile nature of agricultural income that leaves households vulnerable to external shocks. This vulnerability is often more pronounced in female-headed households, where income instability can directly impact nutritional security. Moreover, studies suggest that asset poor farmers, of whom women farmers constitute the majority, have difficulty meeting required regulations and standards, especially when it comes to the initial investment costs. A gender-blind approach followed by agribusinesses providing training to farmers on food safety can exclude women. By integrating livelihood diversification with nutritional support programs, women can ensure a steady food supply and improve overall household health. Simultaneously, strategies to reduce household and farm input costs can free up resources for reinvestment into diversified income streams. This dual approach not only stabilises income but also fortifies households against the dual challenges of food insecurity and economic uncertainty, fostering resilient rural economies.

Training programs that combine livelihood diversification with nutritional education equip women and youth farmers with the knowledge to cultivate nutrient-rich crops and create supplementary income streams. Localised training delivery that considers women and youth specific needs and offers specialised workshops in nutrition can be implemented to boost agency in both domestic and agricultural roles. Specialised capacity strengthening programmes aimed at women and youth in agriculture, are notably absent reflecting a critical oversight that hinders the development of skills and effective participation in these sectors.

CABI designs agricultural programmes that emphasise not just income generation but also the production of high-nutrient food sources contributing to a reduction in malnutrition and hunger. These can be taken further to promote techniques for preserving and enhancing the

nutritional value of farm produce, enabling women and youth to process surplus yields into nutrient-preserving goods such as dried fruits and vegetables. Encouraging women and youth to establish social enterprises focused on farm inputs that are cost-effective and nutrition-sensitive, such as bio-fertilisers and organic pesticides supports improved nutrition as well as economic engagement. This can be achieved through innovations in agro-product development oriented towards both marketability during the off-season and nutrition improvement. Linkages with markets and microfinance institutions can support these sustainable and nutritious enterprises through emphasising the adoption of products that utilise low-cost agro-waste and support dietary diversity and nutrition.

Training on food safety often overlooks women farmers, focusing on heads of households and landowners. Trainings on proper use of pesticides also overlook women farmers, assuming they don't handle pesticides, even though they are exposed in different ways. To increase women's access to information and capital to meet food safety standards, women should be directly targeted in food safety standard trainings and linked to financing systems to access capital to meet these standards.

## **9) Policy Reform**

Empowering women and youth in agriculture goes beyond field-level decision-making; it involves elevating their profiles to the forefront of provincial, national, and regional dialogues. This level of recognition is critical for positioning women and youth as key stakeholders in policy-making arenas to validate their labour, entrepreneurship, and to recognise their capacity as drivers of innovative agro-biodiversity. The government's role is essential for establishing a supportive policy environment and projections for the future suggest a stagnant situation for women farmers without significant structural and policy reforms. Policy reforms are required to dismantle formal barriers facing women and youth engagement in agriculture such as access to land, capital, and modern resources.

A policy framework that supports the integration of women and youth perspectives in all agricultural initiatives requires institutional arrangements that encourage the adoption of innovative farming practices and technologies by women and youth farmers. This includes advocating for policy frameworks that establish comprehensive support structures, embracing policy reforms, and creating tailored initiatives to foster an agricultural trade landscape where women and youth can thrive. Strategic alignment with policy frameworks is crucial for long-term sustainable empowerment of women and youth in agriculture. Ensuring gender and age equity requires adopting an inclusive perspective into agricultural policies. For example, gender and age-sensitive policy reforms and advocacy for reforms that secure land rights and provide social security benefits for women and youth are required. Collaboration with relevant NGOs and civil society organisations to advance policy reforms can help ensure facilitation with stakeholders and the ultimate push required for reform to take shape.

Facilitating dialogues at the provincial, national, and regional levels, enabling women and youth farmers to share experiences, challenges, and strategies, can be harnessed to ensure women and youth are engaged at all levels. These can be engaged to mobilise campaigns that pair awareness with action, providing legal counsel and support to solidify claims to agricultural land. Encouraging the establishment of advocacy groups with membership from key stakeholders who can effectively communicate the concerns and interests of women and youth in agriculture to policymakers, empowers women and youth to have a say in policy

formulation. Through these groups, advocacy with agricultural departments can be conducted to leverage specific budgets earmarked to cater specifically to the needs of women and youth in agriculture. Advocacy for policy reforms that institutionalise the recognition of the full range of women and youth agricultural labour, ensures their contributions are valued and compensated accordingly.

## 10) Addressing Gender Norms

The findings across gender research conducted by CABI, coalesce to reveal a profound gender disparity in access to essential agricultural resources, which significantly hampers the productivity and economic autonomy of women farmers. Disparities span from tangible assets like land and livestock to intangible yet crucial inputs such as financial services and modern agricultural technologies. Data shows a systemic lack of access to resources due to deeply ingrained social norms which entrench women in a cycle of dependency. There is a cautious optimism for the gradual increase in the recognition and empowerment of women within the sector, despite the likelihood of traditional practices prevailing. These collective insights reveal a complex picture: one where farming's future is seen as an interplay between the upholding of heritage, and the adoption of progressive, inclusive agricultural strategies to ensure its viability for the coming generations. Social norms, particularly those affecting women in agriculture, are expected to remain a formidable barrier unless targeted efforts for change are undertaken. Gender based social norms underpin all areas of the agriculture sector and are the most pervasive. Addressing the negative impact of these is commonly perceived as time and resource expensive. That said, without shifts in norms that restrict women's access, opportunity and benefit they will remain on the edges of the sector.

Data suggests the need to take a holistic approach engaging both men and women and appealing to communities to shift gender norms. Developing community dialogue initiatives that involve both men and women to address and reshape gender norms is a starting point. Transforming perceptions of women in agriculture and acknowledging them as a force that shapes the sector and integral to the discourse and prosperity of the sector rather than merely farm helpers in their own right is vital. CABI research underscores a strong influence of socio-cultural norms on women's mobility and autonomy. These norms restrict women's participation in agricultural activities, limiting their opportunities for empowerment and development in this sector. Gender roles influence farmers knowledge and practice of pest management, uptake of recommended best practice pest management and control solutions by men and women farmers. Gender norms permeate the agricultural sector from the labs to the fields. Failure to recognise this, will result in a partial and incomplete sector.

An innovative gender transformative approach involving Community Conversations (CC) was implemented by CABI Plantwise Burundi in three provinces. The aim of the CCs was to shift social norms that impede women's engagement in agricultural extension. The CC strategy was based on social transformative concepts involving a wide range of community members, such as local administration, religious leaders, men, women, and people of different age groups. Participants engaged in organised dialogue led by professional facilitators to discuss obstacles to women's empowerment in agriculture. The CC aimed to enhance women's input and authority in agriculture production and income generation through shifting social norms.

The conversations resulted in developing strategies and action plans to shift community's attitudes, values, beliefs, and practices. The conversations addressed topics including the



uneven distribution of care work, gender norms related to women's involvement in public life, and decision-making in agricultural tasks. The conversations identified norms that influence women's access to agricultural extension advisory services, including visiting plant clinics and understanding how norms affect and assess work balance for men and women. The CC were used to showcase the economic and social benefits of shared household duties to encourage redistribution of unpaid care work.

Data from the evaluation of this approach revealed a complex interplay of cultural norms and social resistance to change, as having implications on women's decision-making at the household level. The study found that traditional gender roles influence the types of crops that men and women have control over, that men are more dominant in agricultural and agribusiness decisions at the household level and enjoy higher mobility than women, highlighting cultural norms as significant barriers to women's mobility that affects their participation in agricultural extension and advisory. Gender norms also influence the dynamics of extension education participation, where women's attendance is often contingent upon male family members' approval, reflecting traditional gender roles and decision-making power within households. The complex interplay of cultural norms revealed traditional gender roles and care responsibilities that prevented women from adequately participating in collective action.

Through this CABI initiative in Burundi the CC have proven to influence a shift in social norms and women's empowerment in agricultural communities. There was also a notable rise in awareness and engagement with agricultural advisory services among both genders attributed to CC initiatives and plant clinic models. The CC's influence is evident in the evolving community attitudes towards gender roles, hinting at a gradual yet significant movement towards gender equality in agriculture. Taking a holistic approach such as the CC, involving men, women, and key community stakeholders to dismantle gender norms that inhibit growth in the sector is an imperative. If agricultural development professionals intend to take gender seriously there needs to be recognition that social change – especially change related to gender – takes time. However, this kind of approach, combined with the approaches discussed above is an excellent starting point.










### Closing remarks

The untapped potential of women and youth in agriculture awaits transformation. The stark realities uncovered in research echo the need for change. From the confines of limited mobility, where in certain contexts a staggering 65% of female farmers have never visited a market alone, to the underutilisation of their influence in agricultural groups, the barriers are clear. Strategic, action-oriented steps designed to amplify women and youth roles in agriculture, promote youth engagement, and embrace technological advancement, are required, to set a new standard for equity and excellence in agriculture. The challenges identified—ranging from harassment to limited digital engagement—highlight systemic issues that prevent women and youth from accessing the full benefits of agricultural trade and processing

Gender research commissioned by CABI, highlights 10 key areas where interventions can be designed to address these challenges (shown in the diagram below). *Communication and Information Sharing* is peppered across all 10 areas and is an elementary starting point. The way we as an organisation communicate gender through all medium is fundamental to

articulating our meaningful commitment to gender and social inclusion. The remaining 9 areas – working through *Extension Advisory* services, enhancing *Digital Advisory*, working with *Farmers Cooperatives*, intentionally supporting *Youth Employment*, supporting Financial Innovations, including women and youth in *Leadership and Decision Making* through capacity strengthening and access, supporting diversification of *Livelihood and Nutrition* through capacity strengthening and knowledge sharing, engaging local expertise through technical working groups to ensure *Policy Reform*, and addressing restrictive *Social Norms* through taking a transformative approach, are all areas where CABI currently has impact. These 10 areas emerge from the respondents to CABI gender research as requiring critical and ongoing focus. It is important that CABI reinforces its focus on these, both as unique components of the agricultural landscape, as well as each of these interacting and overlapping the others. These findings provide support to existing CABI work as well as to the future trajectory for CABI commitment to gender equality and social inclusion.

## Looking Forward: Gender and Youth Inclusion in PW+

Communication & Information Sharing		
 Extension Advisory	 Youth Engagement	 Social Norms
 Digital Advisory	 Policy Reform	 Financial Innovation
 Farmers' Cooperative	 Decision Making	 Livelihood & Nutrition