THE ROLE AND POSITION OF YOUTH IN AGROECOLOGY IN AFRICA

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ACRONYMS AND ABBREVIATIONS

BvAT	Biovision Africa Trust
TOR	Terms of Reference
FGD	Focus Group Discussions
KII	Key Informant Interviews
EOA	Ecological Organic Agriculture
NGO	Non-Governmental Organization
USAID	United States Agency for International Development
IFAD	International Fund for Agricultural Development
AU	African union
SADC	Southern African Development Community
EAC	East African Community
ECOWAS	Economic Community of West African States
PRA	Participatory Rural Appraisal
CBO	Community Based Organization
KAP	Knowledge Attitude Practice
CAPI	Computer Assisted Personal Interviews
PME	Planning, Monitoring and Evaluation
SPSS	Statistical Package for Social Sciences
AGRA	Alliance for a Green Revolution in Africa (AGRA)

EXECUTIVE SUMMARY

BIOVISION trust commissioned an assessment of the role and position of youth in Agroecology (Ae)/Ecological Organic agriculture (EOA) In Africa. The assessment was carried out in fifteen countries, Burkina Faso, Central Africa Republic (CAR), Chad, Congo DRC, Egypt, Ethiopia, Kenya, Madagascar, Mali, Morocco, Mozambique, Rwanda, Tunisia and Zimbabwe were reached individual survey, key informant and focused group discussions interviews. 1,367 youths between 15 to 35 years were reached through individual survey, 60 FGDs and 135 Key informant interviews done. The definition of youths was based on the African Youth Charter, namely people between the ages of 15 and 35. The assessment took an assets-based approach to youth participation in agroecology by recognizing youth as an asset, adopting a fully participatory, mixed method research design, using quantitative and qualitative research approaches.

Demographic characteristics

The study noted that 36% of the 1,367 youths interviewed were female while 64% were male. 41% of the youth were in Urban, 23% were in college while 36% were in rural areas. The study noted that 4% of them were divorced or separated, 29% married, 67% single and 2% widowed. A higher proportion of youth who couldn't read and write were located in the rural areas, with majority being in the 15-19 age cohort. Youth who didn't attend school, were found in rural areas, while those who completed primary and above level of education are in the urban. 32% of youth in urban had attended university level of eductaion, compared to 13% in the rural.

Youths are migrating from their current locations as confirmed by 66% of them in the past 3 years, with more young men (43%) migrating compared to young women (26%). More migrants are comming from rural (72%), towards the urban or other rural areas compared to 68% migrating from urban to either rural or other urban areas. Fewer women/girls, represented by 7% have migrated in the past 3 years, with 10% from the rural compared to 5% from Urban. Reason for migration was related to search for work opportunities (25%) migration to abroad (24%) in search for better lives, while 12% migrated in search for education opportunities, 4% got married while another 4% escaped from conflict and violence.

Study assessment area 1: Identifying position of youth in agroecology/ EOA transformations.

About half of the youth (42%) are currently involved in farm level production, 16% in farm produce trading, 10% in farm input sale and distribution, 10% are in agricultural processing. Further, 47% of youth in rural are in farm level production, compared to 40% in the urban areas. Majority in agrifood processing (11%) in urban, while 8% in rural areas, probably due to access to diverse raw material and electricity connectivity. Among 4% of the youth in 26-35- and 20-25-age cohort, are engaged at farm level production, while 16% of youth collage are in engaged in input sales and distributions, 13% of them are in Agro-processing and 10% are providing extension service. 19% females are in produce trading, compared to 12% young male.

Almost a half of the youth, 45% aspire to provide farm labor, which differs from what they are currently doing, in which majority, 42% were in farm level production, compared to only 4% who are providing farm labour. 41% of youth currently in collage would prefer providing extension service, 31% preferred trading while 28% would provide farm labour. 13% of the youth would participate in digital interventions. Based on gender, 41% of female prefer trade, compared to 35% male, while 46% male would prefer provision of farm labour compared to 39% women.

Lack of capital to venture into agroecology interventions is affecting 71% of the youth, 56% lack training and knowledge to manage the enterprises, 17% are affected by government policies and regulations while 11% lack mentors to guide them in venturing into the unknown areas of agroecology. Majority of youth in the rural areas, 76% lack capital compared to 69% in the urban areas. Based on gender, more male youth, 72% are affected by lack of finance, compared to 67% women.

Sale of food products are generating income to 35% of the youth, while provision of manual labor is an income generation for 20%. Those who earn from remittance from relatives were 20%,

while 13% earned from provision of services such as transport services. Majority of those who earn from sale of food products, 39% are in the rural areas. 24% of the youths are providing manual labour, while 35% in urban areas are selling food products and 26% rely on remittance from relatives. Youth in collage, 36%, sale of food product while 30% relied on remittance. Based on age cohorts, 32% in 15-19, relied on sale of produce, 18% on remittance from parents and 17% on provision of manual labour. Based on gender, 33% female relied on sale of farm produce, 24% rely on remittance and 2% are providing labour.

Study assessment area 2: Assessment of scope and role of youth in interventions related to Agroecology/EOA to provide an overview of the entry points for effective youth engagement.

Majority of the parents, guardian or siblings are engaged in farming as mentioned by 77% of the youth, Majority, 85% of those engaged in farming, are in the rural areas, compared to 75% in the urban areas. Of the 77% in farming, 46% are practicing agroecology interventions, compared to 30% who are practicing convention agriculture, with majority, 49% who are undertaking agroecology, are in the rural areas compared to 40% in the urban areas. 31% are influenced to a greater extent by what their parents, guardian or siblings are doing, with majority, 39% being rural youth, compared to 26% in urban youth. But why are youth not taking this challenge from their parents, guardian, or siblings? 70% lack access to land, while 67% lack capital to invest and 48% lack farm inputs such as seed. Limited access to land majorly affected more youth in urban, as reported by 73% compared to 61% in the rural areas, while poor access to finance affects more of youth in rural areas (69%) compared to 61% youth in the urban Access to inputs affects more of the youth in the rural areas (49%) compared to 43% in the urban areas.

Vegetable, cereals, and legumes are the most preferred youthful value chains. Vegetable and fruits currently being produced by 63% of the youth, while 54% are in production of cereals such as maize, sorghum and rice. Half of the youth, 50% were into production of legumes such as beans, while 26% were rearing chicken, 19% were into beef farming, while 19% were into dairy production. Vegetable and fruit production are majorly produced in rural areas, as reported by 58%, compared to 53% in the urban areas, while cereals were mainly produced by youth in the rural areas, as reported by 48% youths compared to 29% in the urban areas. Majority of young female, 53% of young female are in vegetable and fruits production, compared to 65% young male, while cereals are also produced mainly by men, as reported by 57% compared to 49% female. More women, 49% are producing legumes as compared to 46% male.

Knowledge, attitude, and practices on agroecology interventions: 36% of the youth are aware of agroecological practices applied in crops, while 15% are aware of those applied in livestock, while 17% are aware of those applied in soil and water conservation. Rural youth had a higher proportion, 38% of those who were aware of the crop production practices, compared to 31% among the youth in Urban, while more male, 38% compared to 33% female were aware of the crop production practices. On livestock production practices, more rural youth, 21% are aware of the practices, compared to 11% urban youth. In soil and water conservation, more rural, 20% compared to 14% urban are aware of the practices, while based on gender, more men, 19% are aware of the practices, compared to 16% female. 70% of youth in 26-35 age cohort are aware of the crop production practice compared to 65% among the 20-25 age cohort and 56% of 15-19 age cohort and 69% among youth in the collage.

Limited access to finance is affecting 70% of the youth, while 67% face limited access to land, 47% face poor access to farm inputs while 46% face limited market access challenges. Lack of skills to manage these technologies affected 39% youth, lack of access to extension services for mentorship and trainings affects 37%, adverse weather conditions affect 28%, technology barriers, limited involvement in policy dialogue and unfavourable traditions and cultural practices especially among young female, affected 23%, 19% and 16% respectively of the youth. Access to finance affects more, 73% local youth than 62% in the urban, while access to land affects more of youths in the urban, 70% compared to the rural youth, as represented by 57% youth. Access to input is a challenge in the rural areas, affecting 51% compared to 42% in urban due to distance and poor distribution systems compared to the urban areas, Technology barriers

affect more youth in the rural (25%) compared to 23% in the urban. Youth in collage are affected by limited access to finance (79%), access to land (76%), access to inputs (58%) and access to markets (55%).

Study assessment area 3: Assessment of aspirations and strategies of youth participation in supporting Agroecology/EOA interventions.

Career engagement and aspiration among the youth: Majority of the youth, 39% are in agricultural sector, while 8% are engaged in other forms of business and 8% are engaged in salaried employment. More men, 41% are into agriculture related activities, while 9% women, compared to 8% men are business not related to agriculture. Career choice among the youth is mainly determined by potential to get high income, as mentioned by 63% of the youth, while 58% would be motivated by career that provides high living standard. 34% want a career that would make them become respected in the society, 24% of the youth want to be engaged in careers that would enable them to acquire high material possessions such as houses and cars. The youth in urban would be convinced by high paying careers as mentioned by 58% of the youth, and high standard of living also mentioned by 58% of the youth. Women want careers that would provide high standard of living as reported by 61% compared to 57% men, while men want a high paying jobs as represented by 63%. The agroecology interventions need to become competitive if the youth were to achieve their career aspirations.

Youth in engagement in collective action: Apparently, only 25% of the youths belong to group/association of which 28% are in the Rural, while 24% are in Urban areas. More of those in groups are older youths as 32% of 26-35 age cohorts, 19% of youth in college, 15% of those in 15-19 age cohort and 24% in 20-25 age cohort are in group/association. On gender, more male, 29% belong to such groupings, compared to 17% women, indicating low participation among women in collective action in agroecology interventions. The types of groups they belong to also varied. 15% belong to community-based organisations (CBO), while 5% belong to cooperatives and 8% belong to self-help groups. To what extent being in a group influences youth participation, 24% strongly agreed that yes, they are influenced to participate in agroecology by belonging to groups, with majority, 27% in the rural areas compared 24% in the urban areas. More young men, (27%) are more influenced to participate in agroecology production when in group, as compared to women (17%). Youth in the 26-35 age cohorts are more influenced by working together in a group, as reported by 32% compared to 23% in the 20-25 age cohort, 16% in 15-19 and 17% of the youth in collage.

> We are not members of the groups because we have not had that an opportunity. Some of us are employed and lack time for the groups.
>
> FGD, Nurkina FASO

Youth engagement in advocacy and policy influencing: Youth participation in advocacy and policy influencing is still low, at 20% who have participated in advocacy and policy influencing activities over the past 12 months. More of those who have participated, 24% are in rural, while 16% are in urban. Are urban youth accessing better services? And therefore, no need for advocacy? more men, 21% participated in advocacy and policy influencing activities, compared to 15% women. Are we having more policy issues in farming than in trade and processing where women are? more youth in the 26-35 age cohort, represented by 27%, followed by 20-25 represented by 20%, and 19% youth in collage and 12% youth in the 15-19 age cohort, participated in advocacy and policy influencing activities. Does one gain confidence as they get older to participate in policy influencing activities.

There exists several advocacy and policy influencing opportunities for the youth. 52% agreed that there is opportunity in promotion and uptake of new technologies, 49% in promotion and support production, such as access to credit, inputs and extension services, while 48% see opportunity in Improvement in marketing and collective action and 47% see a role in advocating for conflict management and peace building. 45% indicated that they could participate

advocating for gender and youth participation in agroecological activities. Rural youth, 52% in production areas, conflict management and peace building respectively, 45% improved marketing, while Urban youth 49% see opportunities in promotion and uptake of technologies, 47% participation in conflict management and peace building and 48% in improved marketing.

Study assessment area 4: Constraints and challenges to youth participation in Agroecology/EOA initiatives across dimensions of practice & advocacy, production, supply chains and consumption: Access to technologies in agroecology is affected by awareness, with about a half of the youth being aware of mainly the use of mobile phones in financial transaction, soil testing, drip irrigation and post-harvest management. Majority of those who are aware of the technologies are in urban and in collage. The possibility of adopting technologies is mainly affected by access to finance to invest, the fear of unknown due to lack of exposure. Low literacy levels especially among the youth in rural areas is glaring.

Youth are facing challenges in access to credit, with only about a quarter accessing credit in the past 12 months. More youth in the 26-35 age cohorts are accessing credit than the younger ones, probably due to access to collaterals, built relationships and are bankable. Majority of those accessing credit source from family members, while others, especially the older one's access from financial institutions. Youth of all age cohorts do agree to a greater extent that access to credit is key for their participation in agroecology. Development of youth friendly credit sources and models will be key game changer. High cost of credit due to high interest rates, especially for youth in urban areas, lack of collaterals especially for younger youth and those in rural, and women and complex process to access the credit are key challenges youth face.

Land is an important factor of production in agroecology interventions. Only about a third of the youth own land that they call their own, with majority, almost half in rural areas. Majority of those who own land are of the older youths, which correlates well with the findings that majority in this age cohort has access to credit and are therefore using land as a collateral. Access to credit has also enabled youth in 26-35 to have bought land, while the others have accessed land through inheritance. High cost of land, conflict at family, clan and village, tedious process in acquiring land and unfavourable land tenure systems is affecting access to land among the youth.

Market access act as a pull of products from the production areas. About three quarters of the youth have been able to access land in the past 12 months, with majority in rural, compared to urban areas. Most of the youth, 55% strongly agree that access to market influences their participation in agroecology interventions. Majority of them are older youths in 26-35 age cohort compared to those in 15-19 age cohort. Access to market was also influenced by distance, with majority of the youth, especially in rural are located 6 km to the nearest market, while those in urban are within 1 km to the market, which increase access to markets. Lack of market information to make informed discission on when, where and at what price to sale the product especially among the youth in urban, high cost of doing business affecting more of youth in rural areas, post-harvest losses and poor infrastructure are the major impediments towards market access.

Observation, conclusions and recommendations

The study noted a number of areas where youth can become an Asset in Agroecology and intervention areas.

(1) Farm level production and related services: Youth are currently engaged at farm level production, trade, processing, and input service provision. To be successful, youth will need sustainable linkage to financial institutions.

(2) Policy advocacy and influencing: Youth participation is in promotion and uptake of technologies, promote access to credit, inputs and extension, improved marketing and collective action, conflict management and peace building and gender and youth participation in agroecology. Increased awareness improved capacity and mentorship will enhance their participation.

(3) Technology in agroecology: Youth, especially those in urban and those in collage, have a high awareness level of existing technologies. Exposing the youths to more technologies, improving access to finance, improving skills will be important.

(4) Extension service provision: Youth currently in collage are providing extension service by nature of their trainings. Investment in training, access to information and application of technologies will be key.

(**5) Marketing and agro- processing:** Resale of agroecology products were seen to be the major source of income for youth in both rural and urban areas, especially among women. Access to finance, capacity development on financial management and record keeping will be relevant.

Study Recommendations and conclusions

(1) Strengthen inclusive agroecological production system for increased incomes among the youth: Agroecology production interventions should be attractive to the youths. There is need to develop financial models targeting the youth, around access to finance. Promotion of agroecology technologies will be important, as part of social behavioral change. Digital inclusion to facilitate extension service provision will be attractive to youth, especially those in urban areas. This needs to target rural youths of all age cohorts. **(2) Institutional capacity development of youth owned groups and associations, policy engagement and knowledge management:** The study noted the potential of youth group and association as a platform for market access, advocacy and policy influencing. Need to create youth Policy Advocacy Forums and or youth councils, to serve as an advisory or advocacy body to stakeholders, through which they will be able to engage with the local and national stakeholders. This will target youths in both rural and urban areas, across all the age cohorts.

(3) Leverage technology and digital solutions for efficiency and scaling up impact in extension, and access to markets and financial services: There is potential for integration of digital extension systems within the production and marketing systems in rural and urban areas. Investment in Human-Centered digital study, to prioritize users' needs in development or adoption of an extension digital system. This needs to target both rural (in production) and urban on marketplace development.

(4) Strengthen market systems that respond to consumer and Market demand: Development of a strong agroecology Marketing Hubs to facilitate consistent supply of quality agroecologically produced products from producers to end markets. There is need for putting in place quality assurance mechanism at the agroecology marketing hub that will imposes a set of standards and procedures. This should target youths in urban areas, while at the same time sensitizing the youth in rural areas on producing quality products that meet the market and consumer demands.

CHAPTER ONE: INTRODUCTION

1.1 About Biovision TRUST

BvAT is a not-for-profit organization established in Kenya in 2009 and based in International Centre of Insect Physiology and Ecology (ICIPE) in Nairobi is responsible as lead agency for SDC grant in the coordination of the Ecological Organic Agriculture (EOA) Initiative. BvAT is also the official host of Secretariat of the African Union EOA - Initiative Continental Secretariat, the agency of the AU overseeing the implementation and reporting on the progress of the initiative on the continent. BvAT is also involved in the coordination of the Knowledge Centre for Organic Agriculture in Eastern Africa. This is part of the Germany Ministry of Economic Cooperation and Development (BMZ) Special Initiative One-World-No-Hunger (SEWOH) coordinated by the Germany Development Agency (GIZ). The overall objective of Knowledge Centre for Organic Agriculture in Africa KCOA is to introduce knowledge hubs successfully as an innovative strategy for promoting organic agriculture with actors in the regions of West, East, Southern and Northern Africa. The Continental Digital Knowledge Platform is a major component of this initiative. The Eastern Africa Knowledge hub aims to ensure that Ecological Organic Agriculture is integrated into the country agricultural systems in 4 countries in Kenya, Uganda, Tanzania, and Rwanda. The organization plans to undertake an Assessment of the role and position of youth in Agroecology (Ae)/Ecological Organic agriculture (EOA) In Africa

1.2 Rationale of the study

The study will create entry points for the new SDC Agroecology program planned to start in 2024 by strengthening the 'youth and entrepreneurship' pillar of the program. Currently, initiatives are emerging in Africa to motivate youth to play their role significantly and in dignified manner towards Agro-ecological transitions. The Ecological Organic Agriculture (EOA) Initiative is one of those initiatives with youth engagement being streamlined within its projects. Other initiatives focusing on the youth include the Heifer International's AYuTe Africa Challenge, encouraging entrepreneurship and job creation in the agriculture sector and the YALTA Initiative – a partnership between the Netherlands Food Partnership(NFP), and the IKEA Foundation supporting young (aspiring) entrepreneurs in agroecology to effectively realize the transition towards sustainable food systems with solid business opportunities and capacity strengthening through youth caravans, mentorship programs, policy engagements, and business accelerators to apply agroecology principles provide some of the much needed entry points and kinds of support required for effective youth engagement. The need for broader clarity on the entry points and kinds of support required through various interventions targeting youth motivates the undertaking of this study. It is an obligation that should be fulfilled to bring youth into greater focus and play of sustainable food systems.

1.3 Purpose and Scope of the Study

The purpose of this study is to: (1) Underscore the importance of and potential for youth participation in agroecology transformations. (2) Identify and clarify opportunities and entry points for youths as agents of change in promoting sustainable food systems frameworks in Africa, and (3) Provide recommendations to donor agencies, policy makers and other stakeholders interested in strategies for youth inspirations/ aspirations, imagined futures and future orientations in AE/EOA.

PENGUIN will collect data that will bring out the desired results of the assignment. The scope of work will be done limited to the nine (9) EOA countries (Kenya, Tanzania, Uganda, Rwanda, Ethiopia, Mali, Benin, Nigeria and Senegal). PENGUIN will also engage conventional farmers in the same countries BIOVISION operate.

1.4 Africa's Agriculture sector

Agriculture is the Mainstay of the Africa economy contributing to 65 per cent of Africa's employment, of which 38 percent are youth. In 2021, the sector represented around 17 percent of Sub-Saharan Africa's GDP, with countries like Sierra Leone registering the highest contribution of the to the GDP in Africa of 60%, followed by Chad and Ethiopia, accounting for approximately 54 percent and 38 percent of the GDP, respectively. The sector is a major source of income and has the greatest potential to lift the African continent out of poverty, alleviate hunger[1] and provide employment opportunities.

The important role of the agricultural sector in contributing to food security and national development is reflected in its prioritisation in the development agenda. The Africa Union's (AU) Agenda 2063 envision to promote an inclusive growth and sustainable development, which is people-driven, especially relying on the potential offered by its women and youth. The Rwanda's vision 2020 is a multi-sectoral long-term development vision and policy for promoting socioeconomic transformation. It delineates agriculture as a key sector and a major engine to achieve the country's inclusive growth and poverty reduction targets. The Kenya's Agricultural sector development ambitions are outlined in the recently approved Kenya Agricultural Sector Transformation and Growth Strategy (ASTGS, 2019-2029)[2], which aims at increasing the opportunities for small scale farmers, by increasing agricultural output and boosting household food resilience. The Federal Democratic Republic of Ethiopia's growth and transformation plan II 2015-2020[3] envision the country to become a lower middle-income country by 2025, creation of a competitive, productive, and inclusive economy in all its aspects.

Against these investments, the African agriculture is beset by a host of challenges such as lack of market access, low productivity on-adoption of modern farming systems, climate change, low fertilizer usage, and inadequate storage and processing facilities. The agricultural production efforts are still left in the hands of aged farmers who presently constitute the major farming population. The future of the continent is in the hands of the youth. They are one of the greatest assets and an inevitable force for improving the productivity and growth of all sectors of Africa's economy.

1.5 The "youth bulge" and unemployment challenge

Global population is projected to reach 9 billion by 2050, with the number of young people below 35 years is expected to increase to 1.3 billion, accounting for almost 14 percent of the projected global population. The Sub-Saharan Africa (SSA) accounts for more than 950 million people, approximately 13% of the global population and by 2050, this share is projected to increase to almost 22% or 2.1 billion. This large share of youth, sometimes referred to as the 'youth bulge', has increasingly been addressed on the national and international agendas, and the major challenge is on how to absorb youth into satisfactory employment. The "youth bulge" therefore, poses challenges on the demand for employment and for food security. The number of youths joining the labour market is estimated to be 440 million by 2030, presenting an important development challenge for African governments. According to the AfDB (2016), one third of the nearly 420 million youth (15-35) in Africa are unemployed, with only one in six participate in wage employment. According to the ILO (2019) almost one in every five young people is unemployed, and of the estimated 38.1 percent of the total working poor in SSA, young people account for 23.5

[1] https://www.afap-partnership.org/afap-intervention-on-covid-19-impact-on-rural-livelihoods/
[2] GOK. 2019. Kenya Agricultural Sector Transformation and Growth Strategy (ASTGS, 2019-2029),
[3] Federal Democratic Republic of Ethiopia.2016. Growth and Transformation Plan II (GTP II) (2015/16-2019/20

percent. The agricultural sector is still one of the sectors that offers most employment opportunities in general and for youth, providing gainful employment opportunities if it is supported with increased investment and conducive legal and policy frameworks (IMF, 2012).

1.6 Role of agriculture in employment creation.

The future of the continent is in the hands of the youth. They are one of the greatest assets and an inevitable force for improving the productivity and growth of all sectors of Africa's economy. Rural youth face many hurdles in trying to earn a livelihood. They do not perceive agriculture as a remunerative or prestigious profession, and until they find meaningful economic opportunities and attractive environments in rural areas, they will continue to migrate to cities. This trend not only contributes to the emerging phenomenon of over urbanization and growing unemployment in urban areas but is also expected to affect global food production. Investing in young people living in rural areas is therefore key to enhancing agricultural productivity, boosting rural economies, and ensuring food security.

1.7 Youth in agroecology

Africa's economic and social development agenda will be fully realized only if youth are mobilized, incentivized, energized, and equipped for transformation. Most of the African youth live in rural areas, mainly depending on agriculture and have limited opportunities for gainful employment. However, they have untapped potential to transform the sector through innovation and entrepreneurship. The ability to adopt new technologies and practices are based on the premise that youth are better at taking risks and innovating. Young people, with their creativity, drive, and innovation, have incredible potential to revolutionize agroecology, ensuring safe and reputable livelihoods. They are crucial players since there will be no sustainable, future-proof food systems. Against this, the involvement of youth in agroecology is still limited. Introducing youth to successful agri-businesses founded on agroecological principles is an integrated solution to contribute to the sustainability of food systems, youth employment, and socio-economic transformation. Mentoring youth along the agroecological value chains will give birth to a young generation that is economically empowered and self-sustaining, critical for reforming food systems building resilience against climate change. There are opportunities for the youth in agroecology to become producers and suppliers of food to meet the demand created by Africa's expanding domestic market. The sector is promising with huge opportunities to be harnessed. For instance, there is growing for health food production which will trigger market growth, availability of ICT infrastructure and innovations which have permeated all sectors of the economy including the agriculture sector.

The intensive use of chemicals and energy inputs is contributing to environmental degradation and climate change, which will make it increasingly difficult for farmers to grow crops in the future. Achieving the second Sustainable Development Goal (SDG2), Zero Hunger, needs a transition towards more sustainable food systems, with more socio-economic benefits and with less environmental consequences. Agroecology aims to optimise the interactions between people, plants and animals, and is a more suitable approach to mitigate the effects of climate change. This approach focuses on the use of environmentally friendly inputs and methods that promote sustainable agriculture. Agroecology practices are key to driving Africa's development, creating jobs for young people across the continent, presenting a unique opportunity for youth to create decent work for themselves and others. Agroecology secures the future of food systems and planet, through scalable and replicable business models creating employment, stimulate innovations, influence change and sustainability. Having young people involved in agroecology is crucial for the future.

CHAPTER TWO: METHODOLOGY AND APPROACH

2.1 Defining the youth.

Based on literature review and referring to terms of reference, there are several definitions of youth that exist, with each country, organization having their own definition. For example, the Kenya Government defines a youth as one who is below 35 years old. USAID on the other hand defines a youth as one below 30 years. The United Nations, for statistical purposes, defines those persons between the ages of 15 and 24 as youth without prejudice to other definitions by Member States." (Secretary-General's Report to the General Assembly, A/40/256, 1985)[4]. The African Union's African Youth Charter defines youth as people in the age group 15-35[5]. Alliance for a Green Revolution in Africa (AGRA) (2015)[6] in its study of the Youth in Agriculture in Sub-Saharan Africa, used the Africa youth Charter definition of the youth 15-35 years. Bezu and Holden (2014)[7] looked at preferred livelihood options for youth in Ethiopia, with youth defined as the age group 15-29 years. Ahaibwe et al. (2013)[8] examined the challenges and prospects of youth engagement in agriculture in Uganda and they define youth as the age group 18-30 years.

In this study, we shall base the definition of youths based on the African Youth Charter, namely people between the ages of 15 and 35.

The age group was arrived after research was conducted on the state of the African Youth, commissioned by the African Union Commission[9], which provides an avenue for effective youth participation in the development process. This age group will enable the study reach youths currently in school or have dropped out of school and living either in the rural or peri-urban areas (15-19), those who may be in school or completed (20-25) are either in school or finished or didn't attend any school but living in the rural or peri-urban. Those who are 26-35, who have left school and living in the two locations, urban and rural.

2.2 Design and data collection approach

The studies will use a fully participatory mixed methodology research designs, where each component will be studied comprehensively using quantitative and qualitative research approaches, while engaging the target population and stakeholders at each stage. PENGUIN shall develop data collection framework, in consultation with BvAT to guide on the type of information that will need to be collected for each analysis.

This assessment will be conducted through an **assets approach** to youth participation in agroecology. An asset-based approach is twofold: (1) Recognizing that young people have assets and not simply viewing them as lacking capabilities or being deprived by circumstances. (2) Recognizing that young people collectively can be an asset to development at local, national, regional and international levels. Central to this approach is a belief in core principles, recognizing young people's agency and dynamism and advocating for It., building youth-adult partnerships and understanding local attitudes towards youth and prioritizing excluded youth.

The research shall take a two pronged in its survey, targeting youths and agro-focused organizations in the eleven countries of focus. The first method shall use a survey to reach the youth and agro-focused organizations, and the second method shall be conducting

4 https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf
5 African Union (2006) 'African Youth Charter'.
6 Alliance for a Green Revolution in Africa (AGRA). 2015. Africa Agriculture Status Report: Youth in Agriculture in Sub-Saharan Africa. Nairobi, Kenya. Issue No. 3
7 Bezu, S. and S. Holden (2014). "Are Rural Youth in Ethiopia Abandoning Agriculture?" World Development, Vol. 64, pp. 259–272.
8 Ahaibwe, G., S. Mbowa, and M. M. Lwanga (2013). "Youth Engagement in Agriculture in Uganda: Challenges and Prospects", Economic Policy Research Center, (EPRC) Research Series No 106.
9 https://www.youthpolicy.org/library/documents/african-youth-charter/

focused group discussions with youths in the eleven countries to have an in-depth understanding of the problem statement. This approach and data collection methodology shall provide evidence-based analysis of the issues around young people and agriculture barriers and thinking, smallholder farmer's challenges and agro-focused organizations view about youth participation in agriculture.

2.3 The evaluation will undertake a detailed secondary literature review.

The comprehensive review of the secondary data will rely on available studies, undertaken by other donors, organizations, and governments on matters concerning on youth, including policy documents for the respective countries. The study will review specific country strategic plans on youth and inclusion in the agricultural sector. BIOVISION related reports will also be reviewed. In addition to relevant documents and reports to be sought at country and AU level, PENGUIN shall request and review various documents valuable to this study including but not limited to: Report of the study on the legal, policy and institutional development of EOA in Southern; Northern, Central and Southern Africa undertaken by AUC under the EOA-I, Report on the legislation and policy development of EOA-I in the three eastern Africa countries of Kenya, Uganda, and Ethiopia; Country specific reports, plans and strategies on Agriculture and particularly EOA, EOA Strategic Plan (2015-2025) and EOA Action Plan (2015-2020); Report of the Assessment of SSNC contribution to second phase (2016-2020) of EOA in Eastern Africa, EOA Phase I (2014-2018) External Evaluation Report 2020 o Report of the Organizational and Capacity Assessment (2018)**,** Baseline Study of EOA Initiative in Africa- Phase 2 – 2019 o EOA Phase II (2019-2023) and External Evaluation Report 2022.

2.4 The study will undertake Key Informant Interviews (KII):

PENGUIN shall undertake a stakeholder analysis using the PRA tools to determine the most crucial key informants or institutions for the interviews. Government officials, Biovision Africa Trust staff, partners, local government departments (Agriculture). The study shall also have a discussion with organizations implementing youth interventions, innovations, Agro-based organizations, government departments and private sectors involved in the youth interventions in the respective countries.

2.5 The study shall triangulate the through Focus Group Discussion.

These will be conducted with various categories of respondents that will include youthful men and women based on the definition of who is a youth in that country. For example, in Kenya, a youth is below 35 years. This may differ from country to another. Other options are to use the BVAT definition of a youth based on age. In each of the country, we shall have three FGDs for youthful men, youthful women and a mix of the two genders. The number of participants will be limited to 8-12 participants. A total of three (3) FGDs will be undertaken per country, totaling to 33 FGD across all the countries. 11 of these will be mixed groups, while 11 will be with youthful women and 11 youthful males only.

2.6 Individual youth survey and sampling

A cross-sectional individual respondent survey will be used; gathering data attributed to the 1,037 youths, in eleven countries. The study will undertake a multi - stage sampling methodology. PENGUIN shall purposely sample the eleven countries was based on regional balance with 2 each from West, East, North, South and Central Africa. This was guided by discussion with BIOVISION during inception meeting. Structured and semi-structured questionnaires will be used. CAPI/ Mobile (Android) phone data collection procedure will be used for the study. This will involve scripting survey questions in the mobile phone platform for actual data collection. PENGUIN will use Survey CTO, to collect the data due to its temper free and quality.

Individual youths shall be randomly selected at locations where the research will be done. If the youths will be in groups, random sampling will be done at that level, while if lacking, sampling will be done at the smallest unit of administration, such as Ward, Location or village. PENGUIN shall work closely with the specific national organic agriculture forums, to inform the producers in the selected locations. Previous study on COVID19 provided the production hotspots where the study shall be done, as presented in the table below.

2.7 Enumerations, analysis and quality control

To facilitate data collection at household and among other partners, Penguin will recruit eleven (11) country representatives within countries and 23 data enumerators within the specific research locations. The eleven (11) country representatives will be selected in targeted countries. They will be involved in supervise the enumerators, undertake KII and FGD within the locations where they will be based/selected for data collection. They will work for a maximum of 7 days, which include 2 days of training and 5 days of field work. They will generate a summary field report to the country representative.

2.8 Recruitment and Training of Enumerators

The recruitment of the Enumerators shall be done in line with the policy of BIOVISION AFRICA TRUST and their partners. 23 enumerators who will be professionally selected and thoroughly trained in the use of mobile data collection tools, research methodology for field data collection, research protocol, and Ethical issues among other themes, will collect the data under supervision, etiquettes and the rules governing working with communities. **Their role will be data collection at individual youth level through interviewing youths/respondents.** In general, the training will be designed to familiarize the interviewers/ enumerators with the intent and meaning of the questions, give them a chance to role play interview situations so that they could acquire the necessary experience required during the actual interview sessions in the field as they collect both qualitative and quantitative data. All the trained field team shall be actively involved in the administration of the questionnaires and other tools developed for primary data collection. The training will be done virtually via Meetings or Zoom by the PME consultant at PENGUIN, assisted by key country team leaders. Each team will come together at a single place for training. PENGUIN will train the teams from Anglophone and francophone countries separately. The Francophone shall be trained by one of the country representatives from either Mali or Senegal.

2.9 Pre-Testing & Refining of Data Collection Tools

Following training, we shall pre-test the study instruments under real conditions to determine if they meet study requirements within the respective countries. This will be done at a selected site close to study location at the respective country for a period of 1 day. We will carry out pilots of the questionnaire with selected households (outside the study sample) in close consultation with the BIOVISION AFRICA TRUST. Each enumerator shall conduct at least 1 actual famer interviews. The pilot will provide useful feedback on length of interview (individual questions, modules and the entire questionnaire), strategies for approaching households and inform on the challenges and intricacies to be expected in the field as well as identify areas that may require fine-tuning. Once the instruments have been revised following feedback from the pilot, the PDA versions and the analysis plans shall also be revised to reflect changes. Associated adjustments to the field protocol will also be made upon completion of the adjustments to the instruments.

2.10 Quantitative data collection

The research team proposes the following approaches to capture data during implementation of study. CAPI/ Mobile (Android) phone data collection procedure will be

used for the study. This will involve scripting survey questions in the mobile phone platform for actual data collection. This will use Survey CTO or KOBO Collect platforms (Based on BIOVISION AFRICA TRUST data management system). Electronic data collection is more time- and cost-effective because responses are keyed directly into the device, and the data appears on the database immediately (eliminating the need for data entry). The physical data collection does not depend on network as the application runs independently on the handset. The final database will be available at the end of fieldwork and data will be cleaned and analysed within a few days of completion of data collection. The data will be collected using cross-sectional household survey.

2.11 Data analysis and report writing

Data collected will be uploaded daily for analysis: in practice, it will give the research team the opportunity to monitor the relevance, consistency, and accuracy of all the data collected by the survey team from a: 1) logical; 2) contextual; 3) and technical point of view. The assessment team will conduct morning and evening debriefs with field teams to address any issues and/or confirm trends in the data. During and after the data collection is completed, the data will be entered into the database and data will be cleaned to ensure that it is fit for use in statistical computations. Any discrepancies will be duly corrected. The data analysts will proceed with analysis of all the variables of interest as well as disaggregated analyses of all key indicators. Statistical Package for Social Scientists (SPSS Version 25 for quantitative) data analysis program shall be used to analyse the data and to give frequency distribution and cross tabulations of key variables. Qualitative information will be analysed using NVIVO, Stata/SPSS software's in the interest of triangulating information analysed through the quantitative survey. This will allow us to uncover subtle connections and visualize qualitative findings in a rigorous method.

2.12 Enhancing quality of data.

A back-check exercise by the country representatives on 10% of total respondents across the survey countries will be done to enhance data accuracy, credibility and to correct anomalies in responses. The follow-up survey will be used to cross-reference responses to ensure data accuracy and identify any potential anomalies in responses. To further enhance quality control, supervisors will accompany each enumerator during the interviews to confirm that data collection is done as planned. An accompaniment report will be developed and shared with the project steering team. Other quality control during the exercise shall be ensured through the following: Recruitment of qualified 23 enumerators and Pre-testing and mobile based data collection has potential to enhance supervision and quality data entry. The PME will review the data on daily basis to ensure consistency.

2.13 Mitigation for non-response

PENGUIN shall make every effort to minimize the rate of non-response by working closely with the BIOVISION AFRICA TRUST staff, partners and survey guides on planning for the field work and reviewing any challenges that might be experienced. To ensure that the desired sample of households/respondents will be met from the sampled list of target population, some extra households/respondents (10%) (30) shall be added and distributed per country.

2.14 Ethical Considerations

Consenting: All participants will be consented in their language of choice (English, French or local language). The informed consent document will outline study procedures, explain the risks and benefits of participation, and describe alternatives to participation. Ultimately, the assessment will be independent and impartial, whereas participation in the survey shall

be strictly voluntary. Furthermore, there will be no risks and benefits for individual participants.

Confidentiality and Protection from Risk: Every effort will be made to maintain confidentiality and to minimize risk of disclosure of participants' information at all stages of the study process. No study documents, either electronic or paper based, other than the consent document and locator sheet shall contain participants' names. All electronic data will be stored in a master database which will be password protected and accessible to a limited number of people, all of whom shall have human subjects' protection training certification. Furthermore, telephone numbers for the study investigators shall be provided, and participants who need further information shall call in and receive guidance. We shall also ensure that all recruited staff shall have completed research ethics training. Finally, interviews shall be conducted in a location where participants indicate that they feel comfortable answering questions.

Approvals and Authorizations: Permission and authorization to conduct the study will be sought from the respective cooperatives, local governments down to the local community leadership. All procedures to be used in the study shall be reviewed and cleared by BIOVISION AFRICA TRUST and their Partners in the field within the respective counties. The study shall also adhere to strict human rights code of ethics and child protection policies (Safeguarding policy). The cultural traditions of study populations and communities shall also be respected.

CHAPTER THREE: STUDY FINDINGS AND DISCUSIONS

3.1 YOUTH DEMOGRAPHIC CHARACTERISTICS

3.1.1 Proportion of youth reached

BIOVISION Trust commisioned an assessment, to determine the role and position of youth in Agroecology (Ae)/Ecological Organic agriculture (EOA) In Africa. The study was undertaken in 15 countries in Africa. 1,367 youths between 15 to 35 years were reached through individual survey, Key inroemant interviews and Focused group discusions. This was composed of 23% (310) youth who were aged 18-25 years in collage (universities and TVETS), 35% (495) in the rural areas and 41% (562) in the rural areas. Based on gender, 36% of the respondents were female, while 64% were male. In the rural areas, majority of women, 77% were reached in Rwanda, followed by Madagascar, reaching 75% female. Among male, majority were reached in Congo DRC, Zimbabwe, Mali and Burkina Faso.

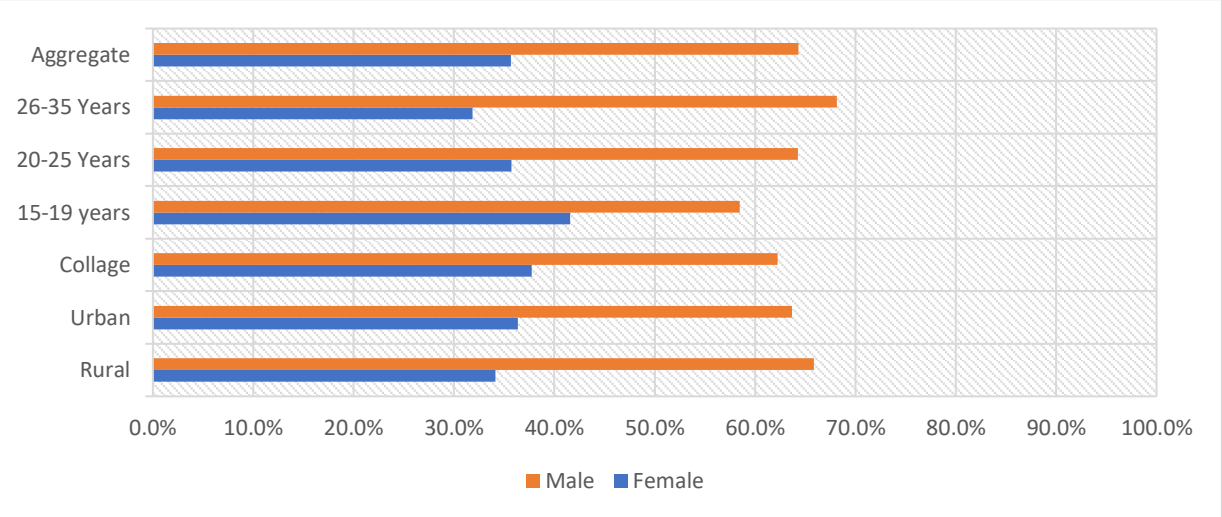

Figure 1: Proportion of youth reached

3.1.2 Marital status

The Study noted that 4% of the youth who participated in the survey were divorced or separated, with majority, 6% in Rural and 5% in urban. 9% who have divorced or separated were within the 26-35 age cohort. Majority of those who were divorced or separated were in Madagascar, represented by 16%, while among the age cohorts, majority of those who were separated were within the 26-35 age cohort, mainly, 37% in Madagascar, followed by 17% in Morocco. 67% of the youths were single, with majority, 66% in urban, compared to 54% in rural. 99% of those in the 15-19 years age cohort were single, compared to 86% youth in college, 78% within the 20-35 years, and 26% within the 26-35 years age cohort.

Table 1: Youth characteristics based on marital status (%).

	Rural	Urban	Collage	15-19 years	20-25 Years	26-35 Years	Aggregate
Divorced/ Sep	6.2	5.1	0.0	0.0	3.1	9.3	4.2
Married	41.1	28.0	14.0	0.6	19.3	65.1	28.6
Single	54.3	65.7	85.8	98.5	77.9	26.0	67.2
Widowed	0.0	5.0	0.0	0.0	0.2	6.6	1.8

The study also noted that majority of those who were single, 91% were in Tunisia. followed by 77% in Rwanda. 29% of the youth reached were marries, with majority, 41% in the rural

areas compared to 28% in urban. Based on age cohorts, 65% who reported to be married, were within the 26-35 age cohort, followed by 20-25 age cohort represented by 19%. Among those married, majority, 41% were in Mali, and the least, 4% in Tunisia. This study confirms that across the Africa continent, youth get married when they are above 26 years.

3.1.3 Proportion of youth having children

The study further interrogated the proportion of youth who have children. 33% of the youth have children, with majority, 47% in the rural areas, compared to 34% among the youth residing in the urban areas. On average, rural youth have 3 children, compared to 2 in the urban areas. Based on the age cohort, majority, 72%, who have children are in the 26-35 age cohort, followed by 20-25, represented by 22%, while 6% among those in 15-19 age cohort have children. Based on gender, 31% men indicated that they have children, compared to 33% female youth. 14% of youth in collage, reported to be having children. Majority of youth who reported to have children were in Central Africa republic (CAR), represented by 57%, followed by Mozambique (44%) and Congo DRC (40%). Further analysis indicated that Mali reported the highest average (4) number of children at household level, followed by Kenya, Congo DRC, Chad, Zimbabwe, and Rwanda with an average of 3 children. These results indicates that there is pressure for food availability in the rural areas compared to the urban. This is due to high proportion of youth who are married within the rural areas, compared to urban. This therefore require investment in good agroecological production practices for improved production and productivity.

3.1.4 Youth Literacy level

The study assessed the literacy levels among the respondents. 92% can read and write, with majority, 95% in urban areas, compared to 85% in rural areas. 4%, with only 7% in rural and 3% in urban areas, have attended literacy programs, while 7%, with majority, 10% in rural compared to 7% in Urban have not attended any schooling. 14% have achieved primary level of education, with majority, 25% in rural, while 31%, with majority, 41% in Urban compared to 33% in rural. Among 12% of those who have attended TVETs, 11% were in Urban, while 6% in Rural.

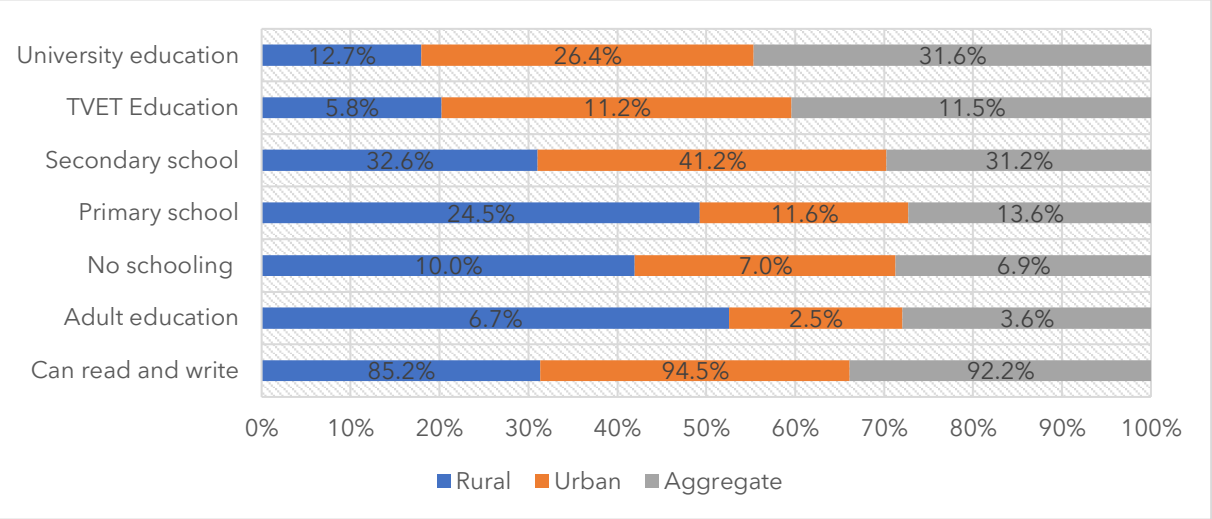

Figure 2: Youth Literacy level in the selected 15 countries in Africa

Among the 32% who have attended university, 26% were in Urban compared to 13% in rural. These statistics indicates that urban population are more learned than the rural, indicating that when a youth achieves a higher level of education, they move to the urban areas. This is confirmed by more youths who didn't attend school, being domiciled in rural, while those who completed primary and above level of education are in the urban. The statistics also

indicates that in delivery of training to both rural and urban population, there is need to take a participatory mixed approach, that combines demonstrations (learning by seeing) supplemented with written materials, delivered orally.

3.1.5 Youth migration and migration pathways

The study interrogated whether there has been migration from rural and urban areas to other destinations. 66% confirmed that there has been migration in the past 3 years. Specifically, major migrations have been from the rural areas to other locations, as reported by 72%, compared to 68% respondents in the urban areas. The study noted that significant migrations were in Mali, as reported by 99%, followed by Tunisia, 95%, Congo DRC, 88%, Chad, 78%. Countries that reported high out of rural migrations were in Mali, Rwanda, and Zimbabwe, with all respondents indicating that there have been migrations over the past 3 years. Tunisia (100%), Kenya (100%) and Mali (96%) reported more migrations from Urban areas. Rural-Rural migration was prevalent in Congo DRC, as reported by 38%, with majority, 63% from Rural areas.

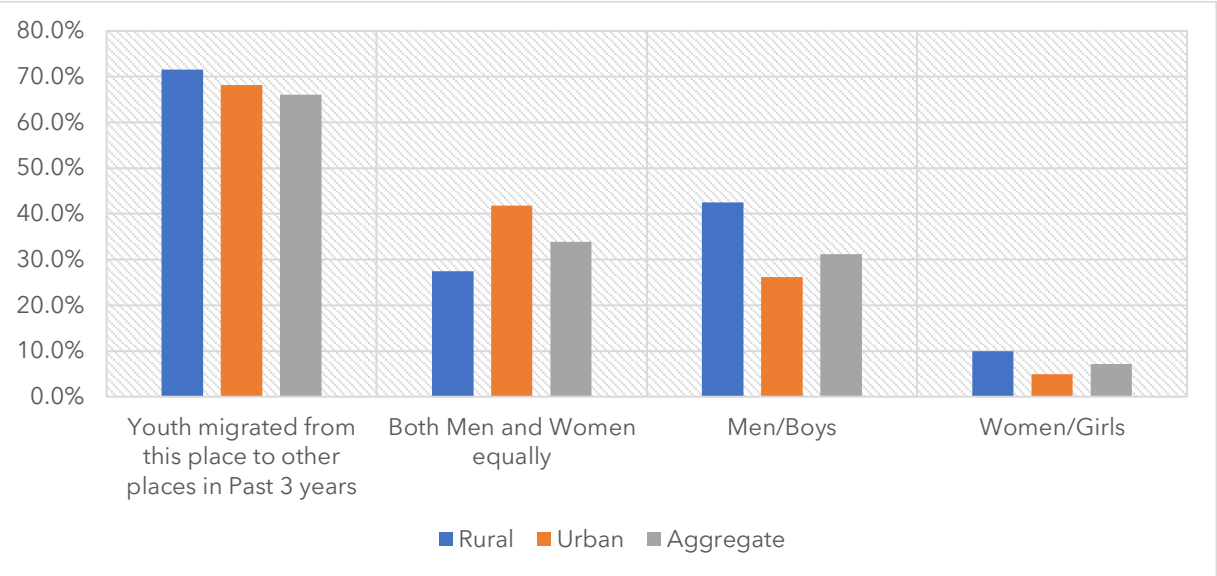

Figure 3: Youth migration and migration pathways

Among those migrating to overseas, 80% were in Tunisia, followed by 41% in CAR, 33% from Morocco and 30% in Mali and 30% in Ethiopia. Among those migrating from urban to Urban, 71% were in Rwanda, with majority, 94% from rural urban, followed by 69% in Kenya, 64% in Chad and 61% in Mali. Generally, both men and women have migrated, as reported by 34%, with majority, 42% in Urban areas. More boys, 43% are migrating from the rural areas, compared to 26% girls compared to 27% in the rural. More men or boys, 31% have migrated, with majority, 43% from rural as compared to 26% from Urban. Fewer women/girls, 7% have migrated in the past 3 years, with 10% from the rural compared to 5% from Urban.

> "We left where we live before (Rural kebele) and moved to the city because we couldn't find work. Our biggest problem is access to land and resources like financing. In order to live and clean people's shoes, we move to the city'' (FGD 15-19 Age Cohort).
>
> FGD, Ethiopia

3.1.6 Reason for youth migration

The reasons for Migration indicated that looking for work opportunities in town (Urban) was the main reason for 25%, with majority, 28% from rural being enticed, compared to 23% from urban. 24% migrated abroad, looking for work opportunities. Search for education enticed 12%. while 4% got married. 4% escaped from conflict and violence. Among those

who migrated to escape conflict and violence, Burkina Faso, Congo DRC, Morocco, Ethiopia, CAR, CHAD, and Mali were the countries where such reasons led to youth migration. 11% were in Burkina Faso, with both rural (11%) and urban (10%) youth equally migration. 7% were in Congo DRC. 34% of youth in Chad, migrated for education, with majority, 50% from rural areas. 30% from CAR also migrated in search for education, with 29% from Urban.

Among those who migrated to search for jobs, majority, 72% were in Kenya, with majority, 100% reporting such migrations from urban areas over the past 3 years. The out of urban migrations such as in Kenya could have been caused by COVID19, cost of living or loss of job opportunities in Urban areas, leading to youth either migrating to either rural areas or other urban locations.

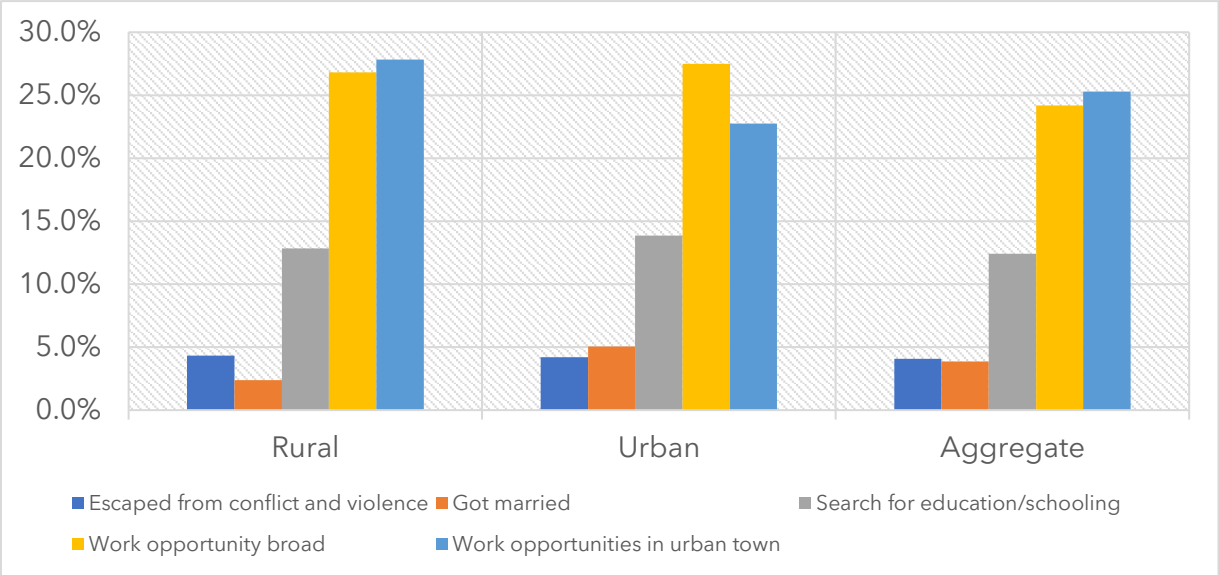

Figure 4: Reason for youth migration

In Rwanda, 60% migrated in search for job opportunities, with majority, 82% from Rural compared to 63% in Urban. 45% in Mali migrated for employment, while 40% in Zimbabwe migrated, with majority, 56% from Rural. Working opportunities abroad has enticed 60% of youth in Tunisia, with majority, 75% of them from rural areas, compared 50% in Urban, followed by Mali, by 40%, Congo DRC with 38% and Ethiopia, 31%. CAR (9%), Madagascar (12%), Benini (13) and Rwanda (13%) reported fewer cases of youth migrating abroad. Generally, migrations have been from rural to Urban, in search for better opportunities in the Urban or abroad especially in the North and West Africa Countries. Burkina Faso and Ethiopia.

3.1.7 Hope and Happiness among the youth

The youth study interrogated whether the youth are happy with their life today. 57% agreed that they are happy, while 25% were neither happy nor unhappy. 10% were very happy, while 3% were Unhappy. There were no clear differences among youth who indicated that they were happy between rural and urban, gender and age cohort. Youth in CAR, Mali and Egypt are happy with their life today, as reported by 79%, 75% and 73% youths. More male youth, 82% are happy compared to 65% female in CAR. Similar trend was observed in Egypt with more male, 74% being happy compared to 55% female. More female, 86% were happy in Mali compared to 74% male. The countries that reported youth who are less happy were in Kenya (35%), Morocco (40%) and Mozambique (41%). Generally, men were happy (58%) compared to 53% women youth. Youth in 15-19 age cohorts were generally unhappy, probably since majority in this age group have just finished high schools or have not proceeded to High school. as represented by 11% compared to 9% in collage and 10% 20-

25 years age cohort. Female in the 15-19, 20-25 and 26-35, seems to be a little bit very happy compared to their male counterparts except those in college, where 15% male were very happy compared to 9% female.

The youths were assessed on whether they are hopeful that their living conditions and that of other youths will be better or worse in the next 12 months. 43% indicated that it will be better, while 21% agreed that it would be much better. Only 6% agreed it will be much worse, while 18% felt it will be the same. 9% agreed it will become worse. More youth in the Urban areas, 13% reported that living conditions will be worse compared to 4% in Rural. Kenya reported a higher proportion of youth, 45%, who think that their living condition shall be much worse to worse in the next 12 months, with majority, 37% being men compared to 44% female. Madagascar had 14%thinking that living condition will be worse, with 16% being women and 12% men. In Tunisia, 29% felt that the living condition will be worse to worse, with 29% being male and 28% being female. Based on age cohort, more youth in collage (18-25) as represented by 11% and those who are in the 26-35 years age cohort as represented by 12% indicated that living condition will become worse in the next 12 months. Majority in collage are in final year of their studies and are uncertain of the life after college. Those in 26-35 are uncertain about the future due to family burden as most of them have children to take care of.

3.1.8 Rosenberg Self-Esteem Score

Rosenberg self esteem score was determined among the youth. The study noted that majority of the youths, 78% are within the normal range of self esteem, while 13% are in low eslef esteem. 9% are in high esteem score. There is high normal self esteem among the youth in rural areas, as reported by 82% compared to 74% of the youth in urban areas, while those with low self esteem were more in urban, as reported by 16% compared to 9% in rural. No difrrence was noted among the youth who had high self esteem in rural (9%) and urban (9%). Based on gender, more youth with normal self esteem were thoise in collage, as represented by 82%, compared to 79% of those who are 15-19 age cohort, 80% in 20-25 age cohort and 77% in 26-35 age cohort. More of the youth, 14%, in 15-19 years, reported low self esteem, compared to 11% in collage, 1% in 20-25 and 12% in 26-35 age cohort. High self exteem was reported among the youth in 26-35 age cohort. Based on genedr, more men, 10% reported high self esteem, compared to 7% women, while 14% of women reported low self esteem compared to 12% men. No diffrence was noted among men (79%) and women (79%) who reported normal range of self esteem.

Based on the countries, Mali reported the highest proportion of youth (25%) who reported high self esteem, foloowe by Kenya by 16%, Chad by 16%, Benin by 14% and CAR by 13%, closing on the 5 leading countries where youth have high self esteem. Rwanda, Mozambique, Burkina Faso and tunisia, reported a higher proptortion of 29%, 26%, 20% and 20% youth with low self esteem. Countries where youth reported normal range of self esteem were in Madagascar (92%), Zimbabwe (90%), Egypt (87%), CAR (85%), Chad (82%) and Kenya (81%).

3.2 Study assessment area 1: Identifying position of youth in agroecology/ EOA transformations.

3.2.1Current roles of youth in agroecology activities

The study assessed what the youths were currently engaged in within the agroecological practices. Farm level production of crops and livestock is currently the leading intervention that has attracted 42% of the youth, followed by trading of the farm produce, which is being done by 16% of the youth. 10% of the youth are engaged in farm input sale and distribution, while agricultural processing has engaged another 10%. The proportion of youth who were engaged in farm level production were more, 47% in the rural areas, compared to 40% in

the urban areas. This shows that there is diversity of activities that urban youth are engaged with in the urban areas, compared to their counterparts in the rural areas. Further analysis indicated that trading was equally practiced among rural (19%) and urban (18%) youth, with no clear differences. More youth in the rural, 10%, compared to 8% in the urban are engaged in input supply and distribution, probably due to more potential customers in the rural areas for the inputs compared to the urban areas. In the agrifood processing, majority of those participating were in urban, being practiced by 11% of the youth compared to 8% in rural areas. This could be due to availability of diverse products from the urban markets and access to power for running the equipment's, compared to the rural areas.

Table 2: Proportion of youth (%) reporting current roles in agroecology interventions

	Rural	Urban	Collage	15-19 years	20-25 Years	26-35 Years	Female	Male	Total
Farm level production	46.6	40.4	38.2	41.0	42.5	43.1	32.5	45.1	42.2
Agricultural produce trading (selling)	18.9	18.2	7.1	13.0	12.8	21.6	18.6	12.3	15.7
Farm input sale/distribution	10.4	8.4	15.7	12.3	11.2	8.5	10.4	10.8	10.4
Agricultural produce processing	7.6	11.2	12.6	9.6	11.0	9.5	12.9	8.5	10.3
Agricultural produce transportation	2.7	6.7	4.2	4.5	5.6	3.4	2.7	6.4	4.8
Provision of extension services	2.7	3.5	10.0	3.0	6.6	2.4	9.6	5.0	4.7
Provision of farm labour (temporary/permanent)	5.5	2.9	1.6	2.2	3.3	5.9	2.8	4.2	3.7
Bulking (collection/aggregation) of agriculture products	1.2	2.2	4.4	4.2	2.5	0.8	3.9	2.3	2.3

There was parity based on what role youth currently are engaged in based on gender. The study noted that young females are more engaged in produce trading, as reported by 19% compared to 12% young male. This could be due to male taking over the farm level production. Younger males 45% are more engaged in farm level production compared to their female (33%) counterpart. Both young male and female participate equally, in input distribution as reported by 10% and 11% respectively. More young women, 13% are in Agro processing, compared to 9% male. Processing is construed to be feminine in nature, and therefore more women would be participating at cottage level.

The study further analyzed the role of youth in agroecology interventions based on age cohorts. Youth in 26-35- and 20-25-years age cohorts were more engaged at farm level production, as reported by 43% respectively, while those in collage (16%) were more engaged in input distributions and 13% in Agro processing, and 10% are providing extension service. It was also noted that youth in 26-35 are into trading, as reported by 22%, compared to 7% in collage, 13% in 15-19 and 13% in the 20-25 age cohort. This indicates that as the youth ages, they become more attached to their farms, mainly providing farm level production. Those in collage would prefer Agro-processing and extension.

3.2.2 Potential roles if they were not engaged in what they are currently doing.

The study assessed what could be the alternative engagement for the youth against what they are currently doing. The study noted that majority of the youth, 45% would provide farm labour to agroecological production activities, while 37% would be traders. This differs from what they are currently doing, as majority, 42% are in farm level production, compared to only 4% who are providing farm labour. This indicates that youth need immediate cash, and

probably they see being engaged in farm production, defers their income. Those who are currently in input provision are 10% compared to those who aspire this work being 16%. This indicates that engagement in input distribution services has potential to attract more youths. Further, 13% of the youth indicated that they would be contributing towards digital interventions, 11% would provide transport services using motorcycles. Only 9% would be apprentice as either mechanic or plumbing. 24% of the youth indicated that they would be providing extension services, while 16% would be providing input services and distribution.

There was parity in what the youth aspire to do, between the locations, countries, and age cohorts. The study noted that youth in the rural areas, 58% are aspire to provide farm level labour, compared to 42% in Urban, while 36% in the rural would like to be traders, compared to 42% in Urban. In the rural areas, where the study has noted that majority of the youth are in farming, it becomes the available option for income generation, compared to the urban areas, where those in farming are low, and there are also diverse options available for employment and generation of income.

Table 3: Proportion (%) of youth reporting potential roles if they were not engaged in what they are currently doing.

Potential contribution	Rural	Urban	Collage	15-19 years	20-25 Years	26-35 Years	Female	Male	Total
Farm labourer	57.8	42.2	28.1	48.1	39.4	52.7	39.4	46.3	45.0
Trading	35.8	42.0	31.3	43.7	35.6	34.5	41.0	35.3	37.4
Extension services	18.0	18.6	41.0	15.9	29.2	19.3	29.0	22.5	23.9
Input services: Agro vets	17.4	9.8	23.1	9.5	18.9	15.7	15.4	17.5	15.7
ICT/Digital interventions	9.0	9.1	22.3	10.2	17.4	5.9	15.7	11.7	12.6
Motorcycle services	12.8	7.6	13.8	11.3	12.3	9.4	6.9	14.1	11.3
Apprentice: Mechanics	4.9	10.4	14.4	9.1	10.2	6.9	9.9	10.1	8.9

Trading in agroecologically produced products in the urban areas is lucrative due to access to diverse produce and potential high demand for the products, compared to the rural areas, where everyone produces farm product, and are not ready to purchase the same from the market. In provision, provision and distribution of Inputs, more youth in the rural areas indicated preference, as mentioned by 17% of the youth, compared to 10% in the urban areas. This indicates that due to high proportion of youth in farming in rural, compared to urban, there is high demand for inputs, compared to the urban. This attracts more youth to participate. Produce transportation to the market was observed to be another option youth could venture, as mentioned by 13% in the rural areas, compared to 8% in Urban. Urban youth have access to diversity of transport services and therefore poses competition to the youth who are investing in motorcycle business, compared to their rural counterpart.

> When we were in school, we aspired to be costumers, farmers, magistrate, architect, teachers. These aspirations have not been achieved, except for one of us who wanted to be a farmer, due to lack of education and finance to fund our education.
>
> **FGD, Burkina FASO**

Based on age cohorts, 41% of youth in collage (18-25 years), would prefer provide extension service, followed by 31% who preferred trading and provision of farm labour, as reported by 28% of them. High affinity to extension service provision is based on their current trainings and engagement in collage. It was further observed that 48% of the youth in the 15-19 age cohorts, would prefer provision of farm labour, while 44% would contribute to trading and 16% in extension service provision. It should be noted that the preference of the 15-19 age cohorts to provision of farm labour has been due to their low education level

and would prefer to provide non-technical services. The study further noted that 38% of the youth in the 20-25 age cohort, would contribute towards farm labour, while 36% would become traders and 29% provide extension services. 53% of those who are 26-35 age cohort, would be involved in provision of farm labour, while 35% would become traders and 19% as extension service providers. Based on gender, 41% of the young female prefer trade, compared to 35% male, while 46% male would prefer provision of farm labour compared to 39% women. Previous finding showed that more men are in farm level production and therefore, provision of farm labour could be the option for them. On the other hand, 29% women would prefer providing extension services, compared to 23% young male.

> One young man found teaching farmers about production the most interesting role. He has a passion for sharing knowledge and empowering others. By educating farmers about sustainable farming practices, they can contribute to the broader adoption of agroecological farming methods and help improve agricultural productivity. This young man believes that educating farmers is the key to creating positive, long-term change in the farming community.
>
> FGD, Egypt

The study noted that majority of the youth who would want to provide apprentice services were in Mozambique (36%), Congo DRC (28%) and CAR (17%), while trading in agroecological products was preferred by youth in Morocco as reported by 69%, compared to 67% in Ethiopia and 55% in Kenya. Those who would like to provide farm labour were Mali, as reported by 82% of the youth, while 74% were in Chad and 69% in Rwanda. The youth who aspire to invest their time in ICT and digital innovation were mainly found in Tunisia as represented by 38%, followed by 27% in Zimbabwe and 26% in Mozambique. On the other hand, those who would want to be involved in inputs provision and distribution were in Mozambique as reported by 44%, followed by 32% in Ethiopia and 21% in Rwanda. Provision of extension services, which was majorly preferred by youth in collage (18-25 age cohorts) and women was more preferred in Zimbabwe as reported by 54% while 45% were in were in Mozambique and 40% in Tunisia.

3.2.3 Disincentives influencing youth from taking the aspired roles.

The study has been able to document what the youth are currently undertaking under the auspicious of agroecology and what they aspire to be their role if things were different.

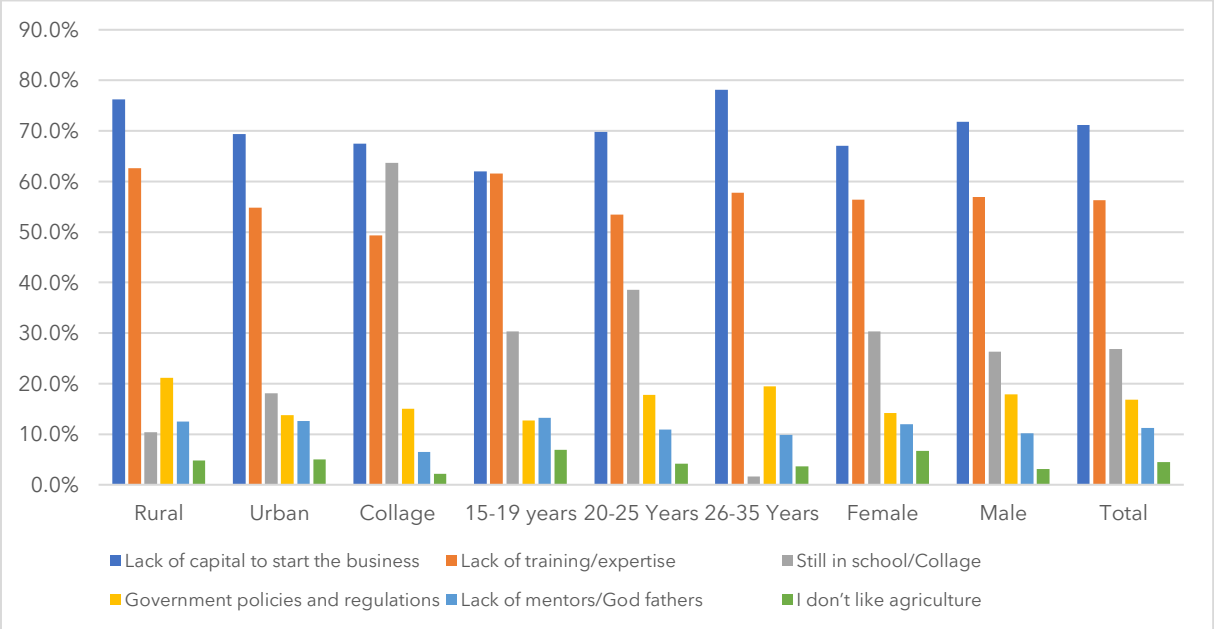

Figure 5: Disincentives influencing youth from taking the aspired roles.

The study noted that lack of capital to invest in that business or activity, is the greatest impediment, affecting 71% of the youth. 56% of the youth lack training and knowledge capacity to venture into agroecology interventions, processing, or transport business, while 27% are still in school. Government policies and regulations are prohibitive to 17% of the youth, while 11% mentioned they lack mentors to guide theme in venturing into the unknown. Government policies such as licencing, and tariffs when selling products, especially in the urban areas, were mentioned as the major challenges. More youth in the rural areas are facing access to and lack of finance challenge, as reported by 76% of the youth, compared to 69% in the urban areas. This could be to lack of financial institutions in the rural areas as compared to the urban. Lack of training or expertise and capacity to manage the agroecology interventions, businesses and provision of services is affecting more youth in rural areas as reported by 63% compared to 55% in urban areas. This study noted that majority of the youth migrating are from rural to other locations, leading to knowledge flight, leaving a group that has low capacity. Government policies are mainly affecting youth in the rural areas, compared to those in the urban as indicated by 21% in rural compared to 14% in the urban areas.

> We involved in cleaning the community shoes and we generate income from it to sustain. We select cleaning shoes because of it needs small finance to start as we have not enough finance to participate on other works. We didn't consider these activities as an employment but, we did it to live, Sure the income from these activities is descent, only from hand to mouth.
>
> FGD, Ethiopia

Based on the age cohort, the study noted that youth in collage ability to engage in agroecology at farm level, provision of services and investment into business is mainly affected by being in school as they take more time in class as mentioned by 64% of the youth, and lack of finance affecting 68% of youth in collage. Access to finance was also seen as a great impediment to 78% of the youth in the 26-35 age cohort, followed by 70% in the 20-25 age cohort and 62% in the 15-19 age cohort. Lack of training, expertise and capacity in agroecology is majorly affecting youth in the 15-19 age cohort, compared to 49% who are in college, 58% in the 26-35 and 53% in the 20-25 age cohort. Youth in 15-19 age cohort were found to be of low in literacy levels, which negatively affect their ability to read and understand new initiatives. Further, government policies are majorly affecting youth in the 26-35 age cohort, as reported by 20%. Based on gender, male is the greatest affected by lack of finance, as indicated by 72% compared to 67% women. This is because mainly men are on the farms. Further analysis showed that more men, 57% compared to 56% women, lack training, expertise, and capacity to manage investments in agroecology, more men, 18% are being affected by government policies compared to 14% women.

3.2.4 Income generation from Agro ecological enterprise.

In the past 12 months, 47% of the youth, with majority, 58% in rural compared to 46% in urban and more men, 52% compared to 35% women, have generated income from agro ecological enterprises. This indicates that agroecology practices have been more commercialised in the rural areas, compared to the urban areas, and that more men are participating in agroecology compared to their women counterparts. Based on age cohort, a higher proportion of youth, 60% in the 25-35, have made income in the past 12 months from agroecology enterprises, compared to 40% in the 15-19, 43% in 20-25 age cohorts and 34% among the youth in collage. A higher proportion of older youth, in the 26-35 reported that they have generated income compared to the younger youth and those in collage. This indicates that commercialisation of agroecology come with age. The older youth could be having more experience and have access to more services. A higher proportion of youth, 77% in Zimbabwe have made income from agroecology practices, followed by Egypt (69%),

Chad (66%) and Congo DRC (65%). Only 4% in Tunisia reported to have generating income compared to 23% in Madagascar, 31% in Burkina FASO and 33% in Morocco from agroecology.

3.2.5 Sources of Income

The study noted that 35% of the youth generated income from sale of food products, produced under agroecology, such as milk, honey, and fruits, followed by 20% who provided manual labour. Further, 20% earned from remittance from relatives, guardians and or parents, while 13% of the youth earned their income from services such as provision of transport services, while product processing, remittance from government and rental of assets such as tractors to producers, was a source of income to 7%, 5% and 4% of the youths respectively. The study observed that more youth, 39% in the rural areas are generating income from resale of products, followed by 24% providing manual labour, while in Urban areas, more youth, 35% are selling food products, followed by 26% who rely on remittance from relatives who are practicing agroecology.

Among the youth in collage, a higher proportion, 36% generated income from sale of food product, followed by 30% who relied on remittance from relatives and parents. Those in 15-19 age cohorts, relied on sale of produce (32%), followed by remittance from parents (18%) and provision of manual labour (17%). Those in 20-25 relied on sale of produce (34%), followed by provision of labour (27%), while those in 26-35 sources their incomes form resale of produce (34%) and provision of labour (27%). Based on gender, female, 33% relied on sale of farm produce, followed by 24% who rely on remittance from relatives and 2% providing labour. This indicates that even though women are not more at farm level, they are playing a significant role in linking men to the market. More male youth, who made up of, 34% rely on produce sale, followed by 30% who provide manual labour. Investment that targets improved income therefore need to focus on rural, younger youth below 25 years and women, to reduce dependence on remittance. The study further observed that as the youth become older, they become more independent from remittance from parents and venture into sale of produce and provision of labour.

Table 4: Proportion of youth reporting sources of income (%)

Income sources	Rural	Urban	Collage	15-19 years	20-25 Years	26-35 Years	Female	Male	Aggregate
Sale of food products	38.7	35.0	36.2	32.3	34.3	34.0	33.4	34.2	34.6
Provision of manual labour	23.6	17.9	18.2	17.4	17.5	26.9	20.7	22.9	20.3
Remittance from relatives, guardians, or parents	10.2	26.3	29.6	17.8	24.2	13.1	24.2	18.6	19.7
Services such as transport	9.7	10.8	19.3	6.6	14.5	12.1	8.3	14.2	12.5
Food processing and hotel business	5.0	5.5	10.6	10.6	6.9	4.4	8.2	5.8	6.6
Remittance from governments	4.7	2.5	9.3	5.9	6.8	2.9	4.3	4.9	5.2
Rentals of assets (tractors, spray etc.	3.6	2.3	11.8	1.0	4.5	3.5	1.4	4.1	3.7

3.2.6 Satisfaction from current income

The study assessed whether the youth are satisfied with the current income they are getting from interventions associated with agroecology. The rating was based on (1) Satisfied to very satisfied, (2) Dissatisfied and (3) Neither satisfied nor dissatisfied. It was noted that 29% are satisfied to very satisfied, compared to 9% who indicated that they are dissatisfied, while 9%

were neither satisfied nor dissatisfied. High proportion of youth who reported being satisfied to very satisfied were in rural areas as represented by 35% compared to 26% in the urban, indicating high potential for the commercialisation of agroecology practices in rural compared to urban. There is a probability that the urban youth have more diversity in sources of income compared to their rural counterparts, who mainly rely on farming. The high proportion of those who are satisfied indicates potential for adoption of agroecological practices in providing income to households, especially in the rural areas. Among the age cohorts, 38% of the youth in 26-35 were satisfied to very satisfied with their current income, compared to 20% in collage, 23% in 15-19, and 24% in 20-25 age cohorts, indicating that level of satisfaction increases with age and location where the youth are operating (either rural or urban).

> The general challenges affecting youths from accessing employment or income generating opportunities are the illiteracy, and the difficult access to finances.
>
> FGD, Burkina FASO

3.2.7 Mean monthly on-farm gross income earning from in the past 12 months.

The study noted that majority of the youth, 40% earn below a mean monthly income of USD $ 500 from their on-farm activities, while only 10% earned a mean of USD $ 501 and above, in the past 12 months. A higher proportion of youth who are earning an average of USD $ 500 and below were in the rural areas, as represented by 46%, compared to 39% in the urban areas, while those earning more than an average of USD $ 501 were also in the rural areas, as represented by 14% compared to 10% in urban areas. This confirms why more youth in the rural areas are more satisfied with the income they are generating. Based on age cohort, 48% of youth in 26-35 years earned a mean monthly average of USD $ 500 and below, compared to 37% among 20-25, 36% among 15-19 and 31% among the youth in collage. More youth in 26-35 years are earning an average of above USD $ 501 per month, as represented by 19%, compared to 7% among the 15-19 age cohort, 4% of the youth in collage, and 6% among 20-25 age cohort. This also confirms the reason the older youth were more satisfied and motivated by the incomes they are currently getting from the farms, compared to the younger youth.

3.2.8 Income as a motivation to participate in agroecology value chain(s).

The study assessed to what extent income from agroecology interventions motivate youth to continue participating in agroecology practices. The assessment scored based on (1) Moderately to greater extent (2) Smaller extent and (3) Not motivated. The study noted that 41% of the youth were moderately to greater extent motivated, while 7% were motivated to a smaller extent, and 6% were not motivated at all by the incomes. More youth in the rural areas, represented by 46% compared to 41% in urban areas, are moderately to greater extent motivated by income from agroecology interventions to continue participating in agroecology value chains, while among the age cohorts, 50% of the youth in 26-35 age cohort are moderately to greater extent motivated by income from agroecology interventions to continue participating in agroecology value chains, compared to 38% among the 20-25 and 33% among youth in collage and those in 15-19 age cohorts. Previous analysis indicated that rural and aged youths, in the 26-35 years, are more satisfied with income from on-farm interventions, from which they access income from sale of produce and provide manual labour.

3.2.9 Potential for increasing income from the agroecology interventions.

The study interrogated the youth on what they require to increase the income they are generating from on farm, more specifically from agroecology interventions. Access to

finance was mentioned by 86% of the youth as a prerequisite to improve income, with majority, 88% in the rural, compared to 83% in the urban.

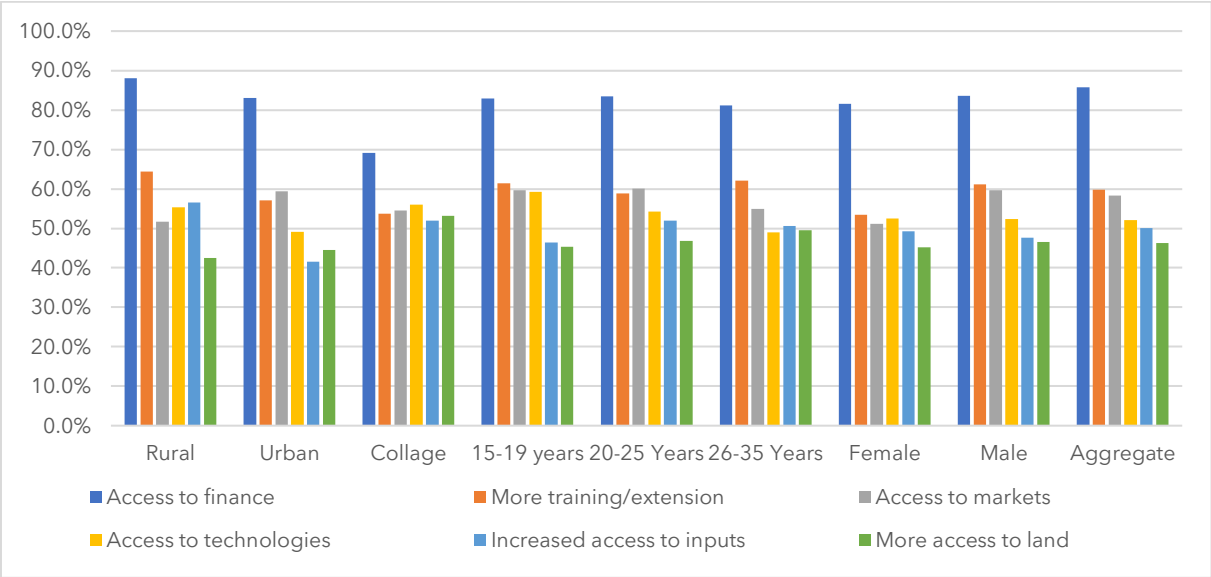

Figure 6: Potential for increasing income from the agroecology interventions

Subsequent analysis on challenges affecting youth in agroecology noted access to finance as the greatest challenge, especially among the youth in the rural areas. Based on gender, more men, 84% need finance compared to 82% women for them to increase income from agroecological activities, since majority of them, men, are involved in farming, while women are into trade and processing. Access to extension services and trainings were mentioned by 60%, followed by access to market as mentioned by 58%, while 52% mentioned access to Agro ecological technologies. Increased access to inputs and more access to land was mentioned by 50% and 45% respectively.

Based on locations, youth in the rural areas need access to finance (88%), followed by access to training and extension (64%) and technologies (55%), while their counterparts in the urban areas, 83% require access to finance, 59% need access to markets, while 57% are in need for extension services. Based on the age cohort, youth in collage need access to finance (69%), access to technologies (56%) and access to markets (55%), while those in the 15-19 age cohorts require access to finance (83%), training and extension (61%) and Markets (60%) and technology (59%). Youth in 20-25 years, need finance (83%), markets (60%) and extension (59%). Older youth in the 26-35 age cohort, prefers access to finance (81%), extension (62%) and markets (55%). Based on gender, women need finance (82%), extension and technologies represented by 53% respectively. Men need finance (84%), extension (61%) and markets (60%). More urban youth mention they need more land as mentioned by 45% compared to 43% in rural, while more youth in collage, 53% need more land compared to50% older youth in the26-35 age cohort. More men reported to be in need of extension services (61%) compared to 54% women. This could be more men in farming than women, warranting more access to extension services among the men.

3.3 Study assessment area 2: Assessment of scope and role of youth in interventions related to Agroecology/EOA to provide an overview of the entry points for effective youth engagement.

3.3.1 Participation of parents/guardian/siblings in farming.

The study noted that 77% of the youth guardians/parents are involved in farming, with majority who are engaged, are in the rural areas as represented by 84%, compared to 75%

in the urban areas. This indicates that farming interventions are more prominent in the rural areas compared to urban areas. Based on the age cohort, more parents, 83% of the youth in the 15-19 age cohorts are into farming, compared to 69% among the collage youth, 72% of 20-25 age cohort and 78% of the 26-35 age cohort. The study noted that majority of the youth in collage are based in the urban areas, where farming is not popular among the residents. The study further assessed the proportion of farming parents/siblings and guardians who are involved in agroecological interventions. The study noted that 46% of the parents, guardian or siblings are practicing agroecology compared to 30% who are practicing convention agriculture. More parents of the youth undertaking agroecology, are in the rural areas, as reported by 49% of the respondents, compared to 40% in the urban areas.

The study further determined whether parents/guardian/siblings' involvement in agroecology practices influence youth participation in Agro ecological interventions. This was based on a scale from (1) Greater extent (2) Moderately (3) Not influenced. We noted that 31% of the youth indicated that they are influenced to greater extent by their parents, especially among the youth in rural, as mentioned by 39% compared to 26% in urban. 30% indicated that they are moderately influenced by what their parents are doing, with majority, 35% in the urban, compared to 27% in the rural areas. Based on the age cohorts, more youth, 32% in the 15-19 age cohorts are influenced to great extent with what their parents are doing, compared to 33% in the 25-35 age cohort, and 30% in 20-25 years. Youth in all age cohorts are squally moderately influenced by their parents, as reported by 31% youth in collage, 29% among 15-19, 30% among 20-25 and 30% among the 26-35 years age cohort. The starting point in bringing youth into agroecology will be to extent through their parents.

3.3.2 Duration of involved in agroecology among the youth's parent/guardian.

The duration of experience among the parents and or guardians who have been implementing agroecology practices was determined in this study. 36% of the youths indicated that their parents/guardians have been into agroecology in the past 15 years, with majority, 52% in rural areas compared to 29% in the urban. In the previous analysis, 16% of the youths in rural had practiced agroecology for 15 years and above, more so, those who are in the 26-35 aga cohort, indicating that older generation, with longer experience in agroecology, are transferring the knowledge to the younger generation. Further analysis of the based-on gender, revealed that more guardians/parents of the 39% of male youth have been practicing the interventions for more than 15 years, compared to 30% women. This indicates that more men and youth in the rural areas have been exposed to the agroecological practices, leading to increased awareness, and practising of the interventions.

> In this village, the youth are involved in farm activities during wet season. During the dry season, the do trading, building works, etc. they consider their activity as an employment, but they think the revenue is not descent.
>
> FGD, Burkina FASO

3.3.3 Duration of involved in agroecology among the youths.

The duration of experience in the implementation of agroecology practices among the youth was determined in this study. 32% of the youth in Africa, have been involved in agroecology production interventions for the past 5 years, with more in the urban areas as represented by 36%, compared to 31% in the rural areas. Access to information may have contributed towards the high proportion of youth in the urban who have been engaged in agroecology. This could be due to exposure among the urban youth due to access to mobile connectivity and therefore are exposed to social media, have access to electronic media and

interact with diverse group of people, compared to the rural population. Based on age cohort, 26% of youth in collage have been involved in agroecology for less than one year, while those in 15-19 years, 37% started practicing the interventions in the past 1-5 years and 21% in less than 1 year. Only 15% of the youth have been practicing agroecology for between 6-10 years. The study further noted that 9% of the youth have been practicing agroecology interventions for the past 15 years, with majority in the rural areas, as represented by 16% of the youth, compared to 4% in the urban. It was also noted that 18% of the youth in the age cohort of 26-35 have spent most of their time, 15 years, in implementing agroecology practices, compared to 5% of the youth in college, 1% in 15-19 age cohort, and 6% in 20-25 age cohorts. Based on gender, more men, 32% have practiced agroecology interventions for 1-5 years compared to 28% women, while more women. The study noted that more women, 24% have less than 1 year in practicing agroecology compared to 18% men.

3.3.4 Challenges facing as a youth to participate in agroecology interventions.

The study noted several potential challenges that youth may face if they want to get involved in agroecological interventions. Limited access to land was the leading potential challenge, affecting 70% of the youth, followed by access to finance, affecting 67%, while access to inputs affects 48% of the youths. Limited access to land majorly affected more youth in urban, as reported by 73% compared to 61% in the rural areas. Based on the age cohort, more youth in collage (74%), and those in 20-25 age cohorts (72%) compared with those in 26-35 age cohorts (65%) are affected by limited access to land. This shows that older youth in the 26-35 age cohort have accessed land in which they are practicing agroecology. Based on gender, limited access to land affect both female (69%) and male (68%) in equal proportion.

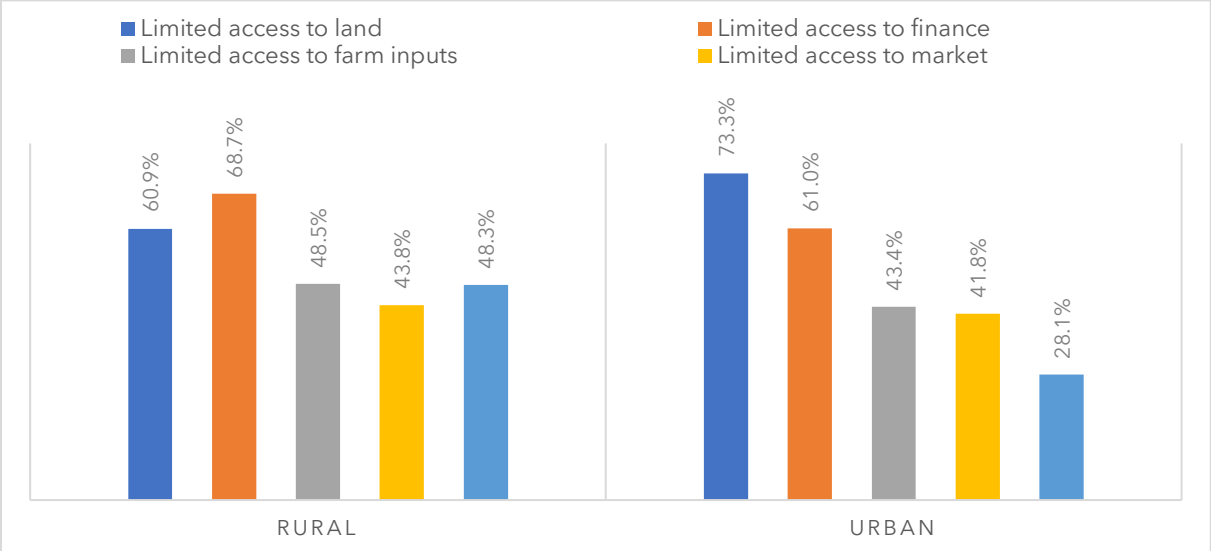

Figure 7: Challenges facing as a youth to participate in agroecology interventions.

Access to finance affects more of youth in rural areas (69%) compared to 61% in the urban, while based on genders, access to finance affects both men (67%) and female (67%) in equal measure. More youth in collage were affected by limited access to finance, as mentioned by 75% of the youth, compared to 72% among youth in 25-35 age cohorts. The later, age cohort, 26-35, could be due to more responsibility at both households and community level, while the former, collage youth, due to lack of collateral to access finance. Access to inputs affects more of the youth in the rural areas (49%) compared to 43% in the urban areas. Similar situation was observed in access to market, where more youth in rural, 44% face access to market challenge, compared to 42% in the urban areas. In the urban areas, there

are many input service providers increasing access and cost of inputs are relatively lower compared to rural areas. The study also noted that limited skill to manage the enterprises, associated with agroecology interventions was a challenge majorly among rural youth as mentioned by 43%, compared to 34% in the urban. This study noted a higher illiteracy level in the rural areas compared to urban, which affect understanding and adoption of good practices. Youth in the rural areas are affected by access to finance, limited access to inputs, limited access to market, skills, climate change and technology barries.

3.3.5 Support areas to take up agroecology interventions.

Access to finance is the main support being requested by the youth to participate in agroecology initiatives, as mentioned by 87%, with majority, 90% in the rural areas, where access to finance was a challenge, compered to 85% in the urban areas.

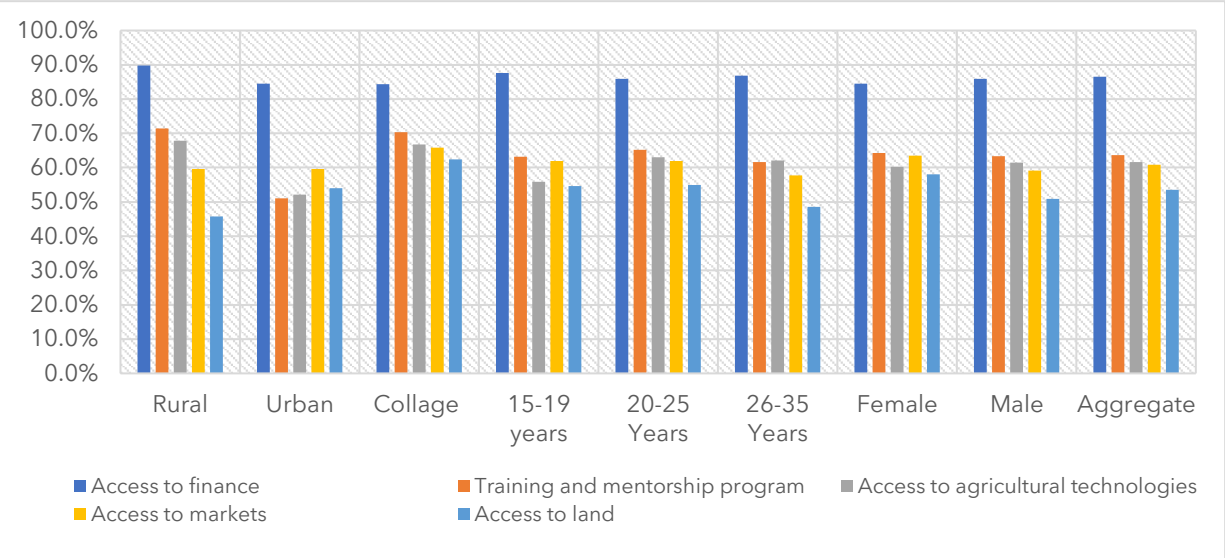

Figure 8: Support areas to take up agroecology interventions

Based on the age cohorts, access to finance was mentioned by more, 88% of youth in the 15-19 years age cohort, while based on gender, 86% men compered to 85% women, mentioned access to finance. Further, 64% of the youth indicated increased access to trainings and mentorship program, with majority, 71% in the rural areas compared to 51% in the urban. More youth in collage, 70% mentioned that they need more training and mentor shop programs, compared to 63% among the 15-19 age cohorts, 65% among 20-25 and 62% among the 25-35 age cohort. The collage youth mentioned that the training they are receiving is more theoretical and therefore practical oriented trainings will help them participate in agroecology interventions. Access to agricultural technologies was mentioned by 62%, with majority, 68% in the rural compared to 52% in the urban. Access to market was mentioned by 61%, though it was equally a requirement for both youths in the rural and urban as mentioned by 60% respectively. Access to land was mentioned b y 54%, with majority, 54% in the urban, compared to 46% in the rural. Land in urban areas is limited due to real estates, pushing agriculture to the periphery, with limited land to apply agroecology. Request for more land was noted among women, with 58% compared to 51% men requesting more access to land for farming.

3.3.6 Diversity in products being produced under agroecology interventions.

The diversity of products being produced by youth, under agroecology practices were assessed. 63% of the youth are into vegetable and fruit production, while 54% of the youth were into production of cereals such as maize, sorghum and rice. 50% of the youth were into production of legumes such as beans, while 26% were rearing chicken. 19% were into beef

farming, while 19% were into dairy production. Other products produced by youth include Herbs, apiculture, and fish farming (Aquaculture), as reported by 12%, 8% and 2% respectively. More youth in the rural, 58% were producing vegetables and fruits, compared to 53% in the urban areas, while cereals was mainly produced by youth in the rural areas, as reported by 48% youths compared to 29% in the urban areas. The study further noted that more youth in rural were into poultry farming as reported by 25% compared to 12% youth in urban areas.

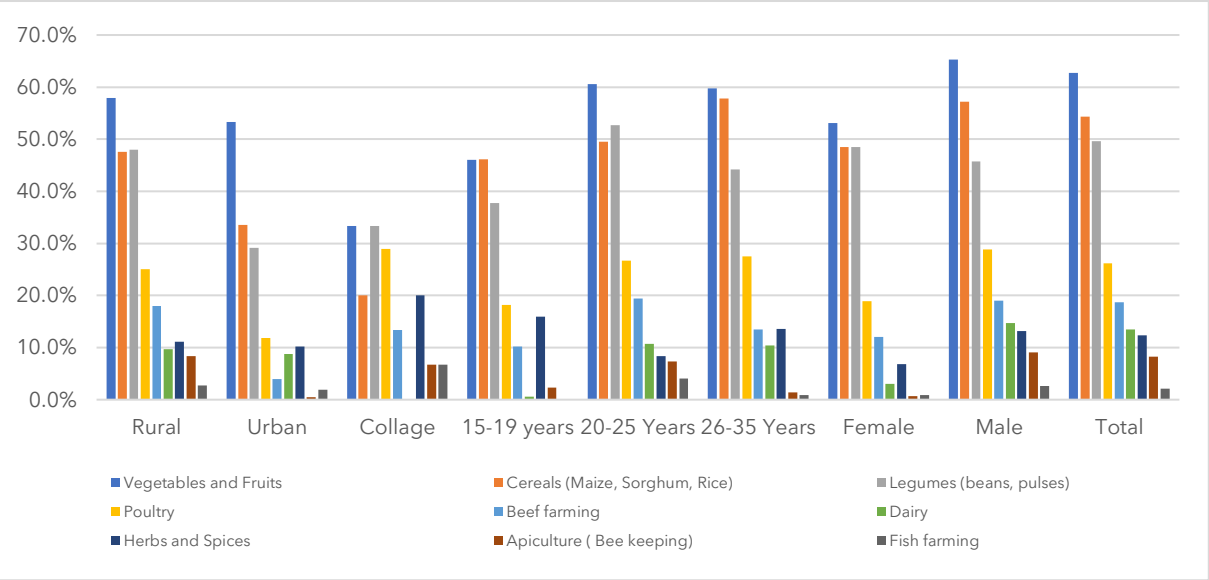

Figure 9: Diversity in products being produced under agroecology interventions

Based on age cohort, vegetable, and fruits (33%), and legumes (33%) production is majorly done by youth in collage. More youths in collage (20%) and 15-19 years age cohort (16%) are producing herbs and spices, probably due to their faster growth rate and better prices. Those in 15-19 age cohort prefer vegetables, fruits (46%), cereals (46%) and 38% in legumes as the major crops they produce under agroecology. Youth in the 20-25 age cohort, are into vegetable and fruits as reported by 61%, cereals by 50% legumes by 53% and poultry by 28%. Among the 26-35 age cohort, majority, 50% are into vegetable and fruits, while 58% are into cereals, and 44% are in legumes, 28% in poultry, 14% in bee, 10% in dairy and 14% in Herbs. Based on gender, 53% of young female are in vegetable and fruits production, compared to 65% young male, while cereals are also produced mainly by men, as reported by 57% compared to 49% female. More women, 49% are producing legumes as compared to 46% male. Poultry is mainly produced by male, as represented by 19% compared to 12% female. Other value chains dominated by men include beef farming, dairy, herbs and spices, bee keeping and fish farming. Herbs and spices were produced in Morocco, Benin, Egypt, and Rwanda, while legumes, were reported being produced by youth in Mozambique by 92%, Congo DRC by 85%, Burkina Faso by 82% and Rwanda and Kenya by 70% youths. Poultry is mainly produced by 95% of the youth in Madagascar, 57% in Ethiopia and 47% in CAR.

These results indicates that youth prefer value chains that are faster in growth such as fruits and vegetable and legumes as compared to cereals. Urban youth prefer value chains that have shorter growth period such as vegetables and fruits, legumes, herbs, and that's why the fewer youth in urban are into cereal growing. Generally, we may say that youth in rural, and those in 26-35 age cohorts, are more patient than the younger youths and those youth in urban areas. Vegetables and fruits were widely produced across the continent. The study showed that vegetable and fruits were the most produced value chain under agroecology practices, while the youth, who are in the 26-35 age cohort and men, reported diversity in

number of value chains they are producing. This can be attributed to expertise and financial muscles compared to other age cohorts.

3.3.7 Agroecological practices awareness and adoption among youth

The study assessed the knowledge, attitude, and practices among the youth on agroecology practices. This was based on 23 different agroecological practices in three (3) livestock practices, eight (8) Soil and water conservation practices and twelve (12) crop production practices. 36% of the youth are aware of agroecological practices applied in crops, while 15% are aware of those applied in livestock, while 17% are aware of those applied in soil and water conservation.

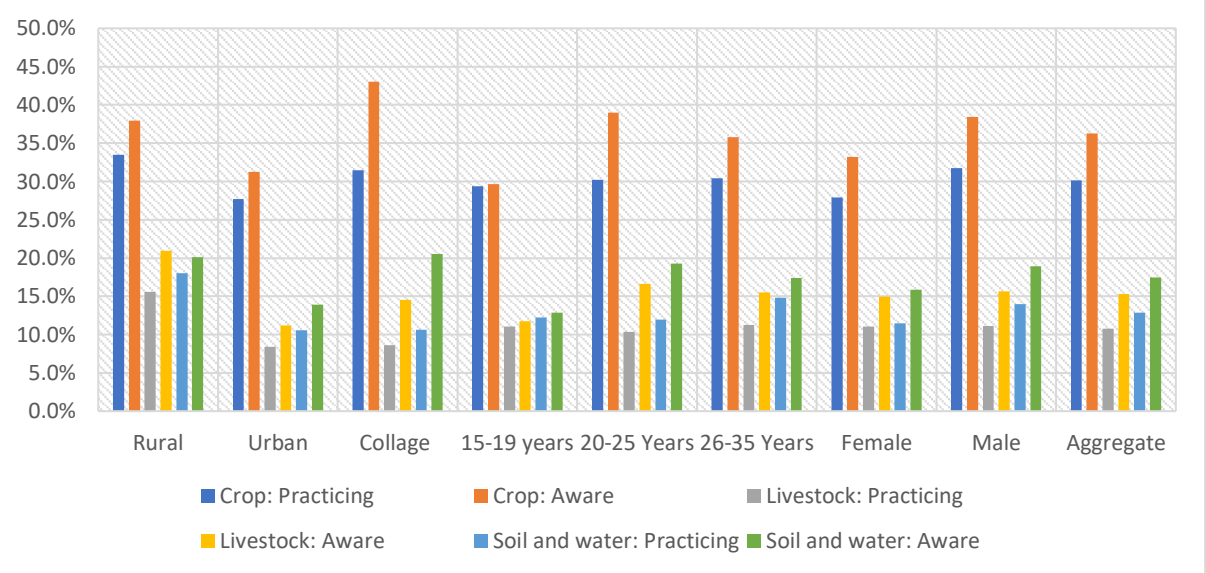

Figure 10: Agroecological practices awareness and adoption among youth

The study noted that more rural youth than urban youths were aware of the agroecological practices being applied on their farms. Specifically, the study noted that the rural youth had a higher proportion, 38% of those who were aware of the crop production practices, compared to 31% among the youth in Urban, while more male, 38% compared to 33% female were aware of the crop production practices. On livestock production practices, more rural youth, 21% are aware of the practices, compared to 11% urban youth. In soil and water conservation, more rural, 20% compared to 14% urban are aware of the practices, while based on gender, more men, 19% are aware of the practices, compared to 16% female.

In crop production, compost manure (XXX), crop rotation (64%), farm waste manure management (60%), minimum tillage (54%) and intercropping (38%) were the most known crop production agroecological practices. Compost manure was the most known practice among the youth, with more of male (67%) compared to 57% female, while majority, 72% of youth in the rural are aware of the practice compared to 54% in the urban areas. Previous results have indicated that majority of youth in rural areas do practice farm level production, which is mainly implemented by men. This is why more young men, more so in the rural areas, are aware of the crop production practices compared to those in the urban areas. The study further noted that 70% of youth in 26-35 age cohort are aware of the crop production practice compared to 65% among the 20-25 age cohort and 56% of 15-19 age cohort and 69% among youth in the collage. Older youth were found to be majority in farm level production and have had a lengthy exposure to these practices compared to the younger youth. In the livestock production, minimal use of antibiotics was known by 17% of the youth, followed by paddocking by 16% and free range by 13%.

Paddocking was well known by youth in rural as reported by 23% compared to 9% in urban, while minimal use of antibiotics was well known by 20% who are in collage, compared to 12% in 15-19 age cohort, 18% of 20-25 and 26-35 age cohorts, respectively. Free range is known by youth (23%) in the rural, compared to 9% in Urban. The parity in awareness on livestock production practices between rural and urban is due to fewer households keeping livestock within the peri-urbans compared to rural areas. Across all the countries, poultry was the major livestock kept within the peri-urbans. More women are aware of minimal use of antibiotics (19%) compared to 16% men, due to their role in livestock production system compared to men. On soil and water conservation, mulching was the main agroecological practice known by most of the youth, especially in rural areas as represented by 54% compared to 41% in the urban. 53% in collage, 51% in the 20-25 and 26-35 age cohort respectively are aware of mulching. High awareness in collage could be due to exposure during trainings.

3.3.8 Agroecological practices adopted by self, guardian, or parents.

There was a leniear relationship bwteen agroecological practices awareness and adoption rates. Those practices that were known by many youths were also the ones which were adopted by majority of the youth. This shows that awarenss creation through communication, demonstration, training and exposure interventions has potential to increase adoption of agroecology preactices among the youths. The crop production practices that were adopted by majority of the youths included: use of compost manure, crop roratrion, farm waste manue, minimum tillage and intercropping as mentioned by 59%, 58%, 54%, 47% and 34% respectively. In soil and water conservation, practices such as muching, return of crop residures, raised beds and terracing were the most adopted practices 49%, 23%, 15% and 17% youths respectively.

The study further noted that there were fewer youths who had adopted the crop production practices, compared to awareness levels. While college students were leading in levels of awareness (43%) on crop production practices, fewer of them, 32% have adopted the practices, representing a 11% reduction. Similar reduction was noted among men by 7% and the youth in the 20-25 age cohort by 9%. In livestock production practices, the proportion of youth who have adopted the technologies has reduced by 4%, from 15% awareness to 11% adoption, with high differences being noted among youth in the 20-25 age cohort by 6%. Among the soil and water conservation practices, youths who were aware and those who had adopted differed by 5%, with majority among the youth in collage, which differed by 10%, followed by 20-25 by 7%. These findings indicates that while the level of awareness may be high due to exposure during trainings and observations, the proportion of those adopting were less, with majority being youth in collage and in the 20-25 age cohorts. This could be due to cost of investiment and time required for their implimentation, within the agroecology production system.

3.3.9 Current challenges affecting youth in agroecology in adoption of practices.

Limited access to finance is the greatest challenge facing 70% of the youth who are currently practicing agroecology interventions. This is followed by limited access to land affecting 67%, while access to farm inputs affects 49%. Market access for the agroecologically produced products affects 46%. Other challenges include lack of skills to manage the enterprise (39%), lack of access to extension services for mentorship and trainings (37%). adverse weather conditions (28%), technology barriers, limited involvement in policy dialogue and unfavourable traditions and cultural practices contribute 23%, 19% and 16% respectively. Access to finance affects more, 73% local youth than 62% in the urban, while access to land affects more of youths in the urban, 70% compared to the rural youth, as represented by 57% youth. Land spaces in the urban areas is taken over by building, relegating farming to the periphery. Access to input is a challenge in the rural areas, affecting

51% compared to 42% in urban due to distance and poor distribution systems compared to the urban areas. Technology barriers affect more youth in the rural (25%) compared to 23% in the urban. Urban youth have diversity in number of technologies ate their disposal. Based on age cohorts, youth in collage are affected by limited access to finance (79%), access to land (76%), access to inputs (58%) and access to markets (55%), indicating that older youths in 26-35 are becoming more resilient to these challenges compared to younger youth in 15-19 years age cohort.

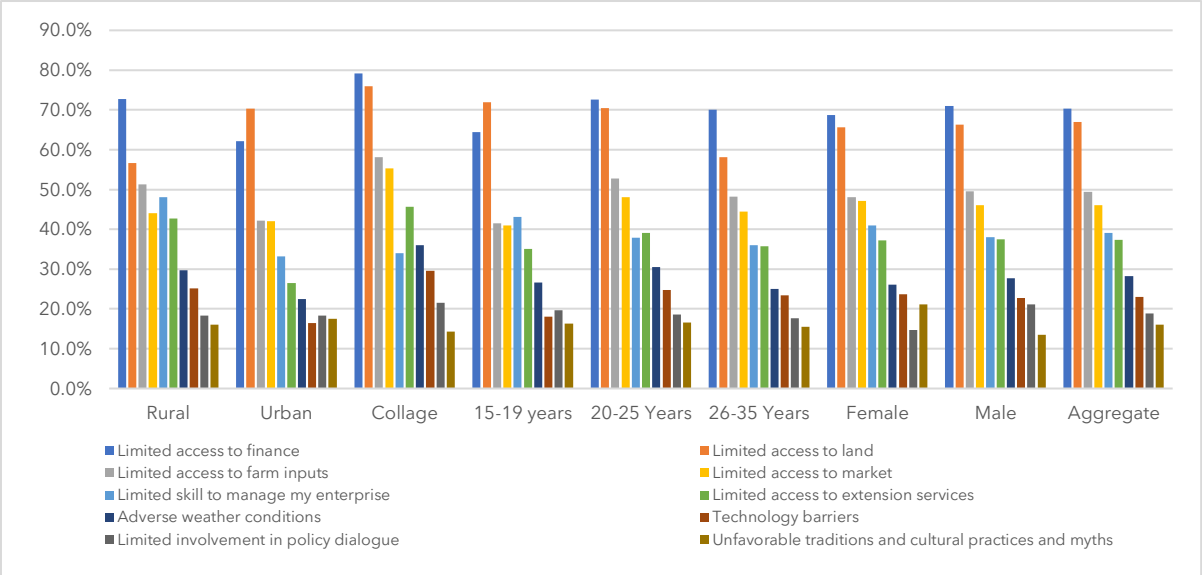

Figure 11: Challenges affecting currently in agroecology in adoption of practices.

Based on gender, more women, 69% were more affected by poor access to finance and land (66%), while men were affected by poor access to finance (71%) and land (66%). Unfavourable traditions and cultural practices and myths are affecting women (21%) compared to 14% men, and more, 22% of youth in the 26-35 years age cohorts, compared to those in collage (14%), 15-19 (16%) and 20-25 (17%). More youth in collage (30%) are affected by technology barriers compared to 23% in the 26-35 age cohort, due to poor access to finance to purchase the equipment.

4.0 Study assessment area 3: Assessment of aspirations and strategies of youth participation in supporting Agroecology/EOA interventions.

4.4.1 Youth career engagement in the community

The youth were askd what is their main current engegment within the community. 39% mentioned they are into agricultural related activities, while 37% are currently students. 8% are engegd in other forms of business, while 8% are engaged and salaried employments. Based on the countries, Tunisia recorded a higher proportion of youth, 55%, who are in school, followed by 54% in Ethiopia and 48% in Morocco. Mali reported the highest proportion of youth in agriculture, as represented by 70%, followed by Egypt by 64% and Rwanda, 64%. These statistics indicates that Agriculture is an important sector that engages majority of youths in Africa. Even though 84% youth who reported to be in school like those of 18-25 years, they were still engaged in Agriculture, as reported by 9%. Majority of the 26-35 years agegorup, as reported by 59% were engaged in agriculture related activities. 15% in the same age goup are also engeged in other form of business, while 11% are formally employed. Youths in 20-25 years age cohort are currently in school (52%) and into agriculture (30%). More of youth in the rural areas, 57% were eneged in agriculture compared to 41% in Urban, while majority, 27% who are in school reside in Urban areas, compared to 14% in rural. The youth who reported to be employed are mainly in urban, as

repoted by 12% compared to 8% in the rural areas. This indicates that in the urban areas there are more employment opportunities for the youth compared to the rural areas. Based on gender, more men, 41% are are into agriculture related activities, while 9% women, compared to 8% men are business not related to agriculture. Women are therefore playing a significant role in providinmg market for the products from the farms.

4.4.2 Career aspiration among the youth

The study interogated what would be the career aspiration among the youths, if they were not in the current career. 35% of the youth indicated that they would be in farrming career, while 16% would be self employed in agriculture sector. 12% indicated thet would be self employed in non-agricultural sector, while the same proportiojn would look for goverment jobs. 35% confirmed that they would be still in agriculture, with majority, 44% within the 26-35 age cohort, followed by 33% within the 20-25 age cohort. 39% in rural indicated they will still do farming compared to 35% in urban areas, while 39% men maintained agriculture compared to 29% women. Youth in 26-35 age cohort have already made up their minds and they may not change their career soon. 16% indicated that they would like to be self emplioyed in agriculture sector, while 12% mentioned that they would be employed in a non agriculture related sector and goverment job respectively. More youth in Urban would like to be engaged in goverment jobs (14%) compared to 9% in the rural. The study noted that youth who are in collage aspire to be more of self employed in the agriculture sector, as reported by 28%, compared to 7% in the 15-19, 21% of 21-24 age cohort, and 10% in 26-35 years age cohorts. Those in 15-19 age cohort prefer self employment in non agriculture sector, as reported by 16% and being in the casual labour employment, as represented by 13%. The aspiration into working in the farms is important among the youth as it wioll form an important entrty point for supporting them in agroecology initiatives along the value chains.

> If we were to be involved in Agriculture or agroecology, we would be interesting in the role of broker, trader in the market and processing/Value addition. Because of brokers, traders, and processors have several advantages over farmers in the agricultural value chain.
>
> FGD, Ethiopia

4.4.3 Economic and social motivations influencing choice career aspirations.

The study assessed what economic and social motivations would influence the choice of career among the youth. 63% of the youth indicated that they would be motivated by high income in a job, while 58% would be motivated by career that provides high living standard. 34% indicated that a career that would make them become respected in the society will be great, while 24% would go for those careers that would enable them to acquire high material possessions such as houses and cars. Only 10% would want career that make them known by few in the society and possibility of generating high income and attaining high standard of living. Among the youth in rural areas, 66% would choose careers that are high paying (Income), followed by 59% who would look for jobs that would provide high standard of living. The youth in urban would be convinced by high paying careers as mentioned by 58% of the youth, and high standard of living also mentioned by 58% of the youth. Based on gender, while women would be convinced with careers that would provide high standard of living as reported by 61% compared to 57% men, men on the other hand would be convinced by high paying jobs as represented by 63%. The possibility of a career in providing high income was the main influencing factor in career selection among the youths in Benin (43%), Burkina Faso (73%), Chad (52%), Congo DRC (83%), Ethiopia (69%), Mali (89%), Morocco (77%), Mozambique (60%) and Tunisia (71%). In Zimbabwe (90%), Rwanda

(65%), Madagascar (38%), Kenya (96%), Egypt (68%) and CAR (58%) the youth be motivated with careers that would provide high standard of living.

Table 5: Economic and social motivations would influence the choice the career aspirations among youth (%)

Motivation	Rural	Urban	Collage	15-19 years	20-25 Years	26-35 Years	Female	Male	Total
High income job	65.7	58.2	64.0	61.0	62.7	62.2	58.1	63.3	62.5
High standard of living	58.8	57.5	58.5	59.1	56.8	57.7	61.1	57.0	57.6
Respectable in the society	36.4	33.3	30.6	40.1	33.4	32.5	31.1	35.1	34.2
High material possession	26.9	23.1	18.3	26.0	22.9	23.6	19.3	24.0	23.8
Known in the society by few	10.9	10.1	9.5	13.7	10.0	9.7	9.8	10.5	10.4

4.4.4 Youth involvement in collective action

The study investigated the extent to which the youths are currently involved in any group/association that engages in Production, marketing, logistics/distribution, consumption of Agro-ecology products/services, as part of collective action. The study noted that a quarter (25%) of the youths belong to such entities, with a little bit more youth in rural (28%) compared to (24%) in the urban areas, affiliated to groups or association and are engaged in collective action. Those who belong to these groups are in the 26-35 age cohorts, as reported by 32, compared to 19% of youth in college, 15% of those in 15-19 age cohort and 24% in 20-25 age cohort. More male, 29% belong to such groupings, compared to 17% women, indicating low participation among women in collective action in agroecology interventions. Based on which outfits these youth belong to, the study noted that only 15% belong to community-based organisations (CBO), while 5% belong to cooperatives and 8% belong to self-help groups. More youth in the rural areas belong to CBOs compared to 14% of the urban youths, while more youth in 25-35 age cohort belong to CBO (19%) and self-help groups (11%). The requirements for registration and management of an CBO and self-help group are easier and cheaper compared to cooperatives.

4.4.5 Group membership as an influence to particiaption in farming activities.

The extent to which being a member or getting involved in group activities, influences youth participation in agro-ecology farming activities was determined. The study noted that only 24% of the youths are influenced to participate by belonging to groups, with majority, 27% in the rural areas compared 24% in the urban areas. Men (27%) are more influenced to participate in agroecology production when in group, as compared to women (17%). Youth in the 26-35 age cohorts are more influenced by working together in a group, as reported by 32% compared to 23% in the 20-25 age cohort, 16% in 15-19 and 17% of the youth in collage. Working together helps in information exchange and mentorship (peer to peer mentorship) among the groups. Youths, when in a group of the same age group feel safe and confident to participate in scoi-economic activities. Generally, men and youth in the 26-35 age cohort, are more motivated, in working in agroecology interventions, when working in a group, compared to women and younger youth.

4.4.6 Perception of youth on decision making

Perception that youth are being given equal opportunities in decision making: The study assessed the extent to which youth are being offered equal opportunities in decision making regarding production, marketing, and processing of agro ecologically produced

products. 69% of the youth believe moderatly to great extent, that youth are being provided with equal opportunities in decision making in production, marketing, and processing of agro ecologically produced products, with majority, 73% in the urban compared to 68% in the rural areas. On the other hand, based on gender, more men (70%) are being provided with equal opportunities in decision making in production, marketing, and processing of agro ecologically produced products compared to 69% women.

Based on age cohorts, more youths (71%) in the 26-35 age cohorts, comparted to 67% in the 20-25, 68% in the 15-19 and 65% youth in collage, reported that youth are being provided equal opportunities in decision making in production, marketing, and processing of agro ecologically produced products. The study observed that urban youths, youth in 26-35 age cohorts and male youth seems to be more exposed and knows their rights and are therefore are accesing equal opportunities in decision making with regard to production, marketing, and processing of agro ecologically produced products.

Youth are accorded equal opportunities in decision making in agroecology value chains: The study noted that youth are being accorded equal opportunities in decision making in agroecology value chains, with 49% agree to strongly agree with the statement, compared to 25% who are neutral and 25% who disagree to strongly disagree. This high proportion of the youth, who are neutral or disagree, shows that almost 50% of them, have no equal rights in making decisions regarding value chains in agroecology. This requires sensitisation and youth empowerment programs. Against this, more youth in the urban areas, 53% have equal opportunities in decision making regarding the value chain, compared to 47% youth in rural areas. Based on age cohort, more youth in the 26-35 age cohorts, represented by 53%, followed by 20-25 represented by 49% agreed to strongly agreed that youth are being accorded equal opportunities in decision making in agroecology value chains, indicating that older youths have increased equal opportunities in making decision, since most of them are independent from their parents or guardians, compared to the younger youth and those in collage. The higher proportion of youth in urban, who strongly agreed to the statement indicates that they are more empowered as initiatives that involve them in advocacy and policy influencing is more pronounced in the urban than in rural. Youth who are active in advocacy and policy influencing, such as those in the urban areas and older youths (20-35 years), have a higher chance of having equal opportunity in decision making, due to increased exposure.

Youth groups/associations are useful platforms for influencing agroecology decisions in the community: More than a half of the youth, 58%, agree to strongly agree that youth groups/associations are useful platforms for influencing agroecology decisions in the community, while 30% were neutral and 20% disagreed to strongly disagreed with the statement. These findings show that about a half of the youth (50%) either disagree or are neutral to this statement. They don't see collective action as a platform for influencing decisions on agroecology. Against this, the more than half of the youth who agree to strongly agree with the statement provides a great foundation for using the groups as part of policy influencing on agroecology. On the other hand, 55% of youth in Rural and 57% of youth in rural, agree to strongly agree that youth groups/associations are useful platforms for influencing agroecology decisions in the community. The higher proportion of youth in urban who agree to strongly agree with the statement is confirmed by higher number of youths in urbans registering as members in the youth groups and are realising how important collective action can influence decision making. Based on the age cohorts, more youth in 26-35 age cohort (61%) and those in collage (60%) agree to strongly agree that youth groups/associations are useful platforms for influencing agroecology decisions in the community. The high proportion from the youth in collage is based on experiences in college, where students influence decisions as a group and therefore see potential of doing that in agroecology, if they come together for collective action.

Support youth-led organizations: Foundations can support youth-led organizations that promote agroecology. This can help amplify the voices of young people and build their capacity to advocate for agroecology.

FGD, Burkina FASO

Youth regularly network with members of other Agroecology groups/associations: The study assessed the perception of youth on whether they regularly network with members of other Agroecology groups/associations. 41% of the youth agree to strongly agree that this happens, with majority, 45% in the urban areas, compared to 41% in the rural areas. The higher percentage realised in the urban areas is probably due to youth in in this location being immigrants and need support from each other through consolation, mentorship and sharing of experiences, than those in the rural areas. Based on age cohorts, most of youth in 26-35 age cohorts agreed to strongly agreed that the groups they belong, do network with one another, as reported by 44% of them, compared to 39% in collage, 41% in 15-19 age cohort and 42% among the 20-25 age cohorts. Elderly youths network a lot together, compered to the younger youths to learn more on agroecology due to a common interest in in farming.

4.4.7 Perception on influence of Youth Access to Social Capital

The groups/associations that the youth have joined offer adequate social support such as access to credit, friendship bonds: The study assessed whether the groups/associations that the youth have joined, offer adequate social support such as access to credit and friendship bonds. Below half of the youth, 40%, agree to strongly agree with the statement that ye, such grouping offer adequate social support, compared to 38% who were neutral, while 29% disagreed to strongly disagree. The 67% who are neutral and disagree with the statement indicates that they see no value from the groups, as they don't provide adequate social capital. This requires more concerted interventions at the group level in providing embedded services. More youth, 46% in the urban compared to 40% in rural, agreed to strongly that groups/associations offer adequate social support such as access to credit and friendship. This then resonates with the fact that more youths in the urban areas are working together as they see the benefits.

Based on age cohort, more youth in collage, 36% and those in the 20-25 age cohort, disagree to strongly disagree that groups/associations that the youth have joined offer adequate social support such as access to credit, friendship bonds/ties. Collage based groups have no embedded services apart from coming in handy to advocate for better services from the administration. The high proportion of those who are neutral represented by 38% of the youth, with majority, 42% in rural and 44% among the 15-19 age cohort show potential for working closely with the youth groups, building their institutional capacity, including diversifying their services to attract more youth to participate.

The youth feel that there are shared/common values among the group members: The study noted that 49% of the youth feel that there are shared/common values among the group members, while 37% of them were neutral and 20% disagreed to strongly disagreed with the statement. Among the 37% who disagreed to strongly disagree, 24% were in collage, while 22% were in the 20-25 age cohort. Among those who were neutral, 42% were in rural, compared to 35% in the urban. Based on age cohorts, more youth, 41% in the 26-35 and 42% in the 15-19 age cohort, were neutral. Youth or any member of the society will come together to address a common interest. More youth in the urban, 56% compared to 45% in rural, feel that there are shared/common values among the group members. This confirms why most of the youth in urban are in groups compared to those in the rural areas. Based on the age cohort, more youth in 20-25 (50%) and 15-19 (46%) feel that there are shared/common values among the group members.

There is trust among youth group members: The study observed that 50% of the youth agreed to strongly agree that there is trust among youth group members, compared to 39% who were neutral, and 24% who disagreed to strongly disagree. More of those who disagreed to strongly disagreed were in the rural areas, as represented by 22% compared to 20%, while based on age cohorts, 30% were in collage, compared to 28% who are in 20-25 and 21% among those in 26-35 age cohort. Only 16% of youth in 15-19 age cohort disagreed to strongly disagree with the statement, as possibly most of them do not belong to groups. There is some level of trust in groups with elderly youth (26-35) as indicated by the high proportion, 51% of the members, agree to strongly agree that there is some trust among the group members. Youth in groups located in the urban areas also seems to have high levels of trust, as indicated by 58% compared to 45% in the rural areas. The proportion of youth who are neutral and in disagreement, who make 63% is worrying, indicating that majority of the youth don't trust one another when in group, more specifically with groups in rural areas. Building trust within the group is a function of accountability and good leadership. Future investment in these will increase the level of trust among the youth in groups.

4.4.8 Challanges faced by youth in collective action

The challenges that youth face in participating in group/association that engages in production, marketing, logistics/distribution, consumption of agro-ecology products/services was assessed. The study noted that 41% of the youths lack opportunities for decision making, compared to 38% who face challanges with poor leadership in the goups, while 37% mentioned lack of accountability. Further, 36% of the youth goups are ridden with corrupt officials, while 28% felt that most of the groups are headed by older people, while 17% said that there are stringient processes and requirements to become a member of these groups.

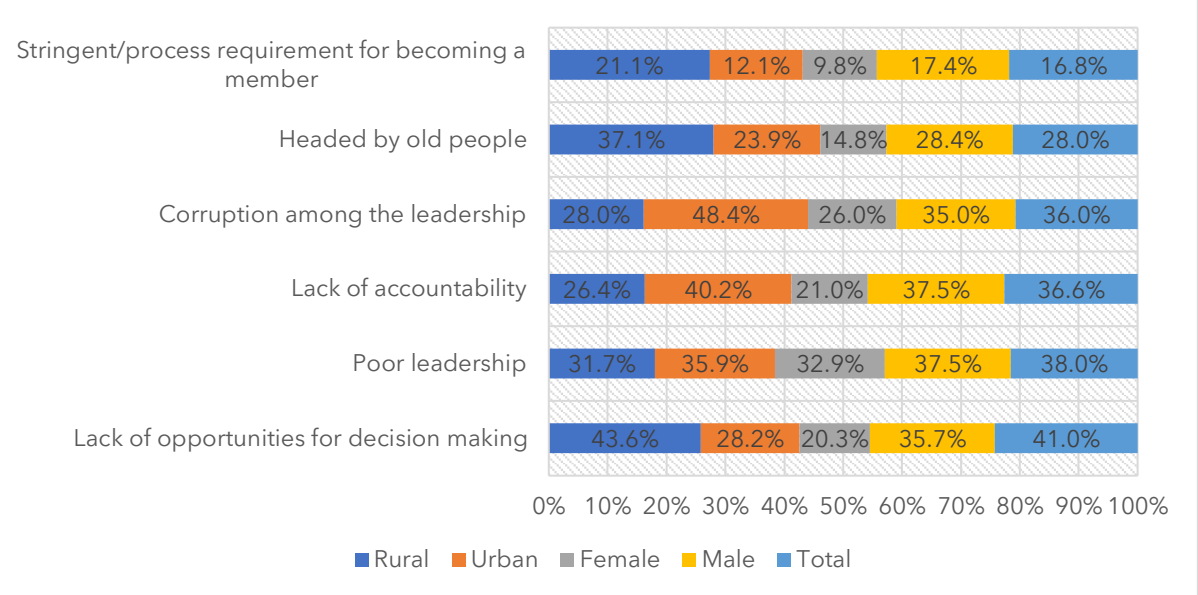

Figure 12: Challanges faced by youth in collective action

Youth in the rural areas are mostly challanged by lack of opportunities for decision making as reported by 44%. Secondly, 37% of the rural youth are complaining that most of the groupd are headed by older people. This therefore confirms the challange rural youths are facing in limited decision making. 32% of the youth in rural areas reported that there is poor leadership within the groups, which is a disinsetive to join such groups. The study further noted that 48% of youth in urban areas are not able to participate due to corruption among

the leaders, while lack of accountabilirty and poor leadership is a challange to 40% and 36% of the youth in the urban areas. Poor leadership is a challange among the groups where youth in collage belong, as mentioned by 42% of the youth, while 31% mentioned lack of accountabiliy.

Based on the age cohorts, youth in 15-19 age cohort, mentioned poor leadership (35%), corruption among leaders (34%) and leadership made of older people (31%) as the major challanges, while those in 20-25 age cohort mentioned lack of opportunities for decion making (43%), lack of accountability (35%) and corruption (31%) as the leading challanges that prevent them from participating in groups. Those in 26-35 age cohorts indicated that poor leadership (39%), corruption (37%) and lack of accountability (34%) were the main challanges. Based on gender, young women are more challanged by poor leadership as mentioned by 33%, corruption among the leadership as metioned by 26% and lack of accountability respectively. Among the youthfull men, poor lerdarship and lack of accountability by 38% respectively, and lack of opportunity for decision making as mentioned by 36%. Youth in 26-35 age cohorts have the oppotunity to make decisions in groups, as previously noted, and therefore the governance and management becomes their concerns. The younger generations are more concerend with the ability to make decisions, would not want older generation in leadership positions and are demotivated by poor leadership.

4.4.9 Youth participation in advocacy and policy influencing.

The study assessed the participation of youth advocacy and policy influencing. We noted that 20% of the youth have participoated in advocacy and policy influencing activities over the past 12 months, with the top 5 countries where the participation was higher included: 49% in Egypt, Congo DRC (41%), Rwanda (27%), Mali (25%) and Ethiopia (24%). Among the countries that recorded lower proportion of youth participation was in CAR (4%), Benin (5%), Tunisia (6%), Morocco (9%), and Burkina facso (12%). Comparatively, there were more youth in rural (24%) compared to 16% in urban who participated in advocacy and policy influencing activities. This could be due to urban youth accessing better services and see no need for advocacy compared to their rural counterparts. Based on gender, more men, 21% participated in advocacy and policy influencing activities, compared to 15% women. This could be due to more men being in farming compared to women, and are therefore would want better services at farm level and for change within the agroecological interventions.

Based on age cohort, more youth in the 26-35 age cohort, represented by 27%, followed by 20-25 represented by 20%, and 19% youth in collage and 12% youth in the 15-19 age cohort, participated in advocacy and policy influencing activities. These ststistics indicates that participation is more with the older youths than the younger ones. The study further observed that men, youth in 26-35, and those in rural areas, generally particiopate more in advocacy and policy influencing activities. This is becouse of their significant involvement in agroecological activites compared to the other groups.

4.4.10 Reasons for lack of participation in advocacy and policy influencing.

The study noted that there is lack of awarness among the youth on meetings happening on advocacy and policy influencing. This was mentioned by 55% of the youth. More youths in the urban areas, lacked awareness of such actifiteis as mentioned by 55% of them, compared to 53% among the rural youth. This could be due to diversity of activities the urban youth participate, making them not track such meetings. Based on age cohort, more youth in collage, 56% indicated lack of awareness of such meetings, followed by 56% in the 20-25 age cohort, 52% in 26-35 age cohort and lastly, 54% in the 15-19 age cohort. Lack of capacity to have an informed discusions and engagement in such forums was reported by 35% of the youths, while 26% indicated that such platforms are mainly driven by older

people in the society. Participation of older persons during advocacy mainly intimdated the youths in the rural areas, as reported by 33% compared to 20% in Urban areas. Similar centiment was mentioned by youth in the 15-19 age cohort, represented by 29%, compared to 24% in 26-35, 25% in 20-25 and 24% of the youth in collage. Lack of capacity is equally affecting both youth in rural and urban, as reported by 35% respectively, while youth in 15-19 age cohort, were the most affected by lack of capacity to have an informed discusion and engegement, as reported by 38% of them. 37% of the youth in collage also lacked capacity for informed discusion. Generally, participation of youth in advocacy and policy influencing was affected by older members in the society who are seen to be driving the process, more so in the rural areas, affecting aprticipation of youth in the 15-19 age cohort. Lack of capacity to have an informed discusions and engagement has affected the 15-19 age cohorts and those in rural areas due to low literacy levels.

4.4.11 Perception of youth on advocacy and policy influencing.

Acquisition of skills through learning by doing empowers youth to hold authorities accountable: The study interogated the perception ofthe youth on whether if their skills are enhanced, they can be empowered to hold authorities accountable. The study noted that 67% agreed to strongly agree, 17% diaagreed to strongly disagree, while 26% were neutral on the ststement. The study further noted that more youth in collage, 73%, felt that when one acqure skills, they are empwered to hold authorities accountable. This could be due to experience from their skills and ability to influence change in collage. There was no significant difference among the rural, gender and age cohort respondents on this ststement, indicating that all youth accross board, gives prominence to skill improvement as a prerequisite for policy influenicng and advocacy. Specifically, 66% among the youth in rural areas felt that when one acqure skills, they are empwered to hold authorities accountable, compared to 64% in urban areas. Based on age cohort, 69% among the youth in the 26-35 and 68% in 20-25 age cohort, 62% in 15-19 felt that when one acqure skills, they are empwered to hold authorities accountable. 26% were indifferent, with majority, 31% in the 15-19 age cohorts. This could due to lack of expeience or lack of understanding of what advocacy entails. The high proportion of youth who agreed with the statement indicate thats empowering the youth through eductaion and sensitisation, have potential to prepare them for policy influencing and advocacy.

When participating in advocacy for change, you are going against authority, and you should be punished: When the youths were asked whether by participating in advocacy for change, they felt that one is going against authority, and should be punished, 33% agreed to strongly agree, 23% were neutral, while 56% disagreed to strongly disagree. This indicates that youth dont fear when they are advocating for change. Against this, there is a high proportion of youth, 56% who agreed and neutral to the ststement, indicating a need to improve the confidence of this group to be able to participate in advocacy. Among those who disagreed to strongly disagree, were 55% in the urban areas, compared to 48% in the rural areas. Youth in urban areas are exposed and know their rights, compared to their counterparts in rural areas. Based on age cohorts, more of youth in collage, 67%, compared to 54% of the 26-35 , 61% of the 20-25 and 46% in 15-19 age cohorts disagreed to strongly disagree that those participating in advocay for change need to be purnished. Youths in collage, probably due to skills gained through training and sensitisation, know that advocacy is a right, and one should not be punished for argitating for change. More youth in the 15-19 age cohorts (33%) didnt know what to say, as they have not been exposed to advocay for change long enough compared to other age cohorts. The study shows that chances of youth participating in advocacy without fear or intimidation, is associated with maturity and exposure through training.

Youth should listen more to fresh ideas from young people: When asked, whether youth should listen more to fresh ideas from young people, 49% agreed, 14% were neutral, while 31% disagreed to strongly disagree, to the statement. This shows that peer to peer mentorship can be influencial in advocacy. More of the youth in rural (60%) compared to 37% in urban felt that youth should listen more to fresh ideas from young people. Based on age cohorts, 53% of the youth in the 15-19 age cohorts, compared to 49% in 20-25, 45% in 26-35 and 48% in collage, agreed to strongly agree, that youth should listen more to fresh ideas from young people. Younger youths in the 15-19 age cohort are more exposed to their age group and therefore finds it conducive for them to interact, since this age group may sparingly solicit for advice from senior members in the society. They therefore, may be relying on their age groups for adivices and mentorship. The older youths are at a stage that they need guidance from the elders and therefore, advice from their their age groups doesnt matter alot. There is need to strengthen peer to peer interaction in policy influencing. Capacity development therefore need to cut accross all the group members.

Youth should listen more to the wisdom of the elders: As to whether youth should listen more to the wisdom of the elders, 81% agreed to strongly agree, compared to 13% who were neutral, while 13% diaagreed to strongly disagreed. In africa tradition, youths usually listen to the wisdom of the elderly for advice and mentorship. This therefore requires close interaction with the elderly to be able to provide the right information to the youth. Both youths in rural and those in urban listen to the elders for advice and mentorship, as mentioned by 81% of the youth at both locations. This shows that even when youth migrate to urban areas, they still follow traditions. Based on age cohort, more youth in 26-35 age cohort (86%), agree to strongly agreed that youth should listen more to the wisdom of the elders, compared to 81% youth in collage, 79% in the 15-19 age cohort and 78% in 20-25 and cohort. The elderly youth have become parents and therefore expect younger youth to soliscit for advice from them unconditionally. These results indicates that elders in both rural and urban areas, weild more powers in changing the behavior and attitude of the youth and their advices are normally respected. Participation in agroecology and bringing more youth into agroecology, then needs a holistic approach that targest people of all age groups within the community.

4.4.12 Opportunities for advocacy and policy influencing

There exist opportunities for youth to participate in advocacy and policy influencing within the community. The study noted that 52% agreed that there is opportuinity in promotion and uptake of new technologies, followed by 49% of the youth who think that activities that promote and support production, such as access to credit, inputs and extension servives, are cut for the youth. 47% of youth in the urban areas proposed promotion and uptake of new technologies, compared to 47% of their rural counterparts. Improvement in marketing and collective action was mentioned by 48% youth, while 47% mentioned their role in advocating for conflict management and peace building. 45% indicated that they could participate advocating for gender and youth participation in agroecological activities. Among the rural youth, 52% preffered advocay in production areas, conflict management and peace building respectively, follwed by investiment in advocay for improved marketing as mentioned by 45% youth in rural areas. In Urban, youth preffered to promote and uptake of technologies, as mentioned by 49% ofthe youth, while 47% mentioned participaton in conflict management and peace buiilding and 48% in improved marketing. Among the youth in collage, promotion and uptake of technology was the leading area in advocacy, that was proposed by 65%, followed by actions that improve access to markets, marketing (55%) and promotion and support production (52%). Among the age cohorts, those in 15-19 preffer participating in conflict management and peace building, as mentioned by 51%, followed by promotion and support production (47%) and improved marketing (45%). Those in 20-25 age cohort preffered promotion and uptake of technologies (55%), followed

by production areas (51%) and improved marketing (49%). Further, those in 26-35 age cohort, preffered promoting new technologies (51%), followed by conflict management (50%) and promotion and support production (47%). Conflict management and peace building is an issue in the rural areas, as reoorted by 52% of the youth agianst 47% in urban. Advocay and policy influencing on gender participation attracted more youth in rural (43%) compared to 39% in the urban areas. Gender imbalance is more pronouced in the rural areas in terms of access to factors of production, low participation in policy influencing and agroecology interventions.

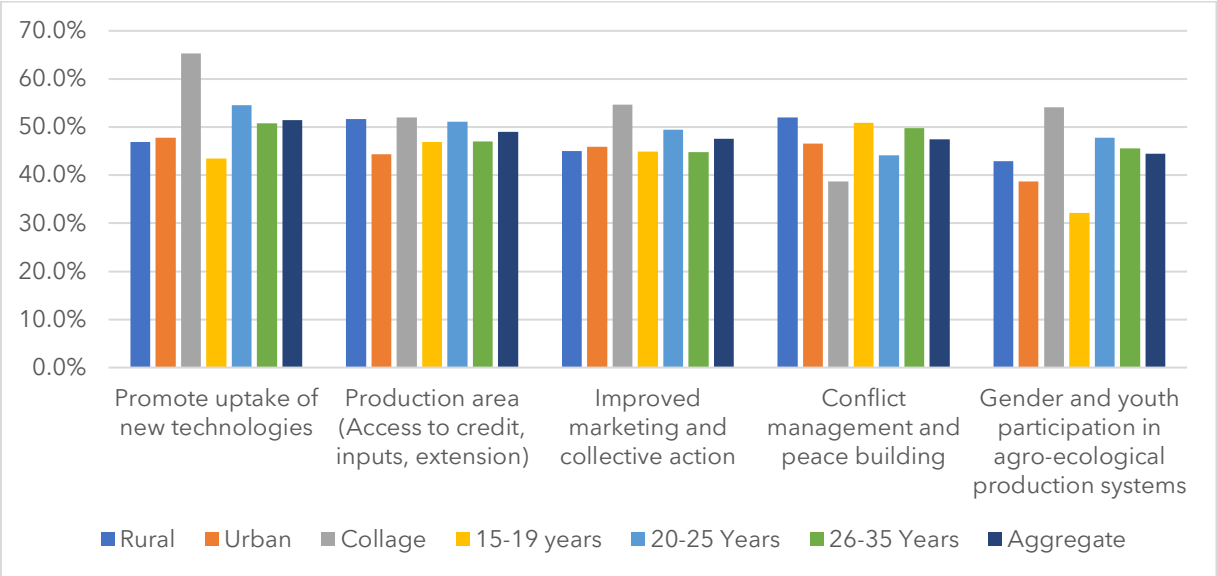

Figure 13: Opportunities for advocacy and policy influencing

5.0 Study assessment area 4: Constraints and challenges to youth participation in Agroecology/EOA initiatives across dimensions of practice & advocacy, production, supply chains and consumption.

5.1.1 Access to agroecological information and training.

Access to information is important as part of building resilience to disasters through early warning systems, while at production level, information is important as part of making decisions on what to produce, when to market and at what price. The study noted that only 39% have accessed agroecological information and training in the past 12 months. Further, among those who have accessed such information and trainings, 25% have accessed such information and training 1-6 times in the past 12 moths, against 12 times targeted in a year. This shows that youth interact with extension staff at least once every two months. The study noted that only 12% have accessed such information 6-11 times, while those who have accessed such information and trainings at for at least once a month were only 11%. 45% of youth rural and urban have equally accessed information, with majority, 21% having received such information at least once every month in the urban areas, compared to 20% youth in the rural areas.

Based on gender, more male youth, 11% have received at least a training or information once a month in the past 12 months, compared to 5% among women. More men, 13% compared to 9% women, have also received information and trainings once every two months. This shows that young women are not privileged to access information and training due to systemic and structural issues. Lack of time to attend such trainings and access to technologies such as mobile phones could contributing towards this parity. More youth, 45% in the 20-25 age cohort, have received more trainings and information in the past 12

months compared to 36% of those in collage and 26-35 age cohort. Based on frequency, youth in collage have received trainings more frequently, at least once per month, as reported by 24% in the past 12 months, compared to 2% among 15-19, 10% among 20-25 and 15% among the 26-35. Youth in collage interact with lecturers during classes which increases their contact frequency, while those who are 26-35, interact with extension staff more frequently compared to the younger group of youth.

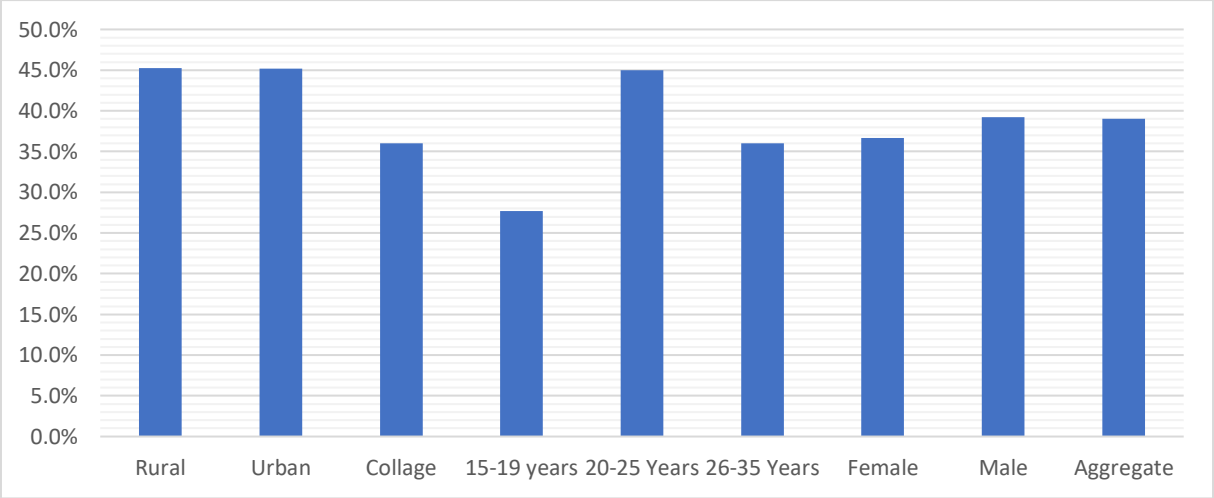

Figure 14: Access to agroecological information and training

5.1.2 Access to information and training as an influence to participate in agroecology.

The study noted that access to information and training influences youth to participate in agroecology interventions to a greater extent, as reported by 22% of the youth. 17% of the youth indicated that they are moderately influenced by access to information and extension, while 6% were influenced to a small extent, to participate in such interventions. The study observed that youth in the urban are influenced to a small extent, by access to information and training to participate in agroecology interventions, as reported by 42% compared to 30% in urban areas, while 16% in rural were to a great extent influenced compared to 18% in urban areas. Youth in collage, 20-25 and 26-35 age cohorts were influenced to a great extent as reported by 24% respectively. Men were influence to a great extent, as reported by 24% compared to 14% women by access to information and extension services. This is due to low frequency of young women receiving information and extension services in a year. The study observed that access to information and training, and its frequency of delivery to the youth have positive impact in influencing the youth to participate in agroecology interventions.

5.1.3 Sources of agroecology information /training

The study noted that neighbors and fellow youth play a great role in training and dissemination of agroecological information. 44% of the respondents, of which majority are in the rural areas, as represented by 57% compared to 45% in the urban areas, accessed agroecology information from their neighbors and fellow youth. Rural youth have created a social fabric that brings the members together through social gathering and community activities, through which they exchange information, compared to the urban areas, where individualistic tendencies are being observed. Based on the age cohorts, 52% of the 26-35 age cohorts relies on their neighbours, compared to 27% among the 20-25, 46% among 15-19 and 28% among the youth in collage. Schools are the second major leading source of training and information on agroecology, to youth in collage, as confirmed by 60%, followed by youth in 20-25 age cohort, represented by 50%. The 15-19 age cohort were out of school

and therefore, access to training and information through school was limiting. More urban youth, 30%, access information from schools compared to 13% in the rural areas. This was expected since majority of youth in college, were found in the urban areas. The third most rated source of information and training was from the non-governmental organizations (NGO), which serves 36% of the youth with information and training. Electronic media such as radio, TV, and social media such as Facebook, WhatsApp, and Instagram, were reaching 35% youths respectively, with agroecology information and training.

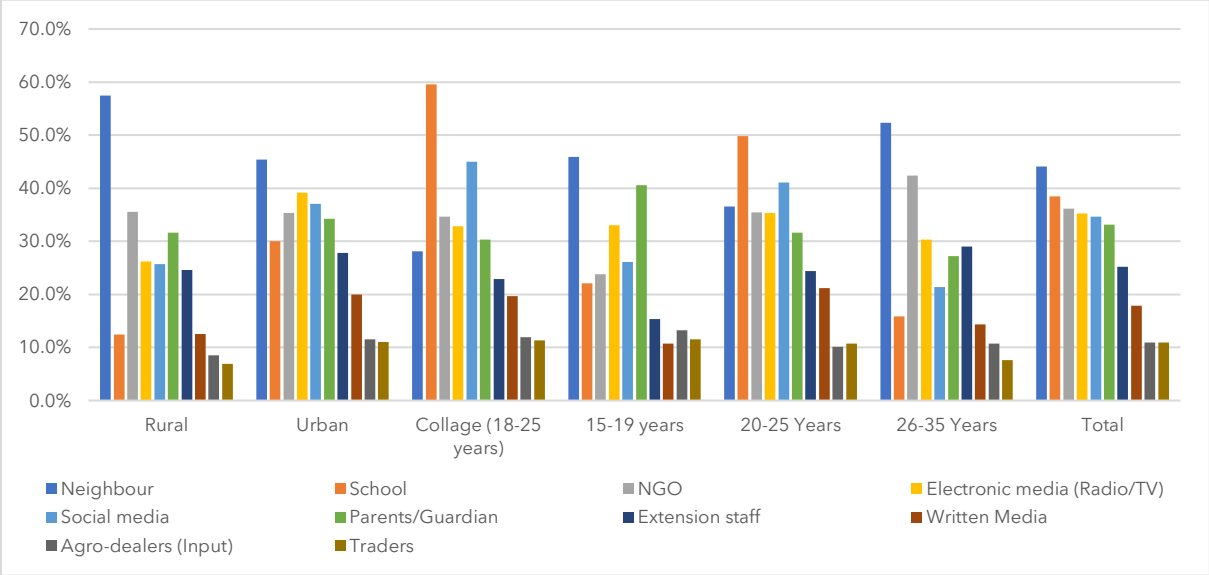

Figure 15: Sources of agroecology information /training

Youth in across all the age cohorts were accessing information from the electronic media, with 33% who were in collage, 33% in15-19, 35% in 20-25 and 30% in 26-35 age cohorts. More Urban, 39% compared to 26% in rural receive information from electronic media. This could be due to penetration of electricity and cost of generator or battery to sustain them, which is a challenge in the rural areas. On the other hand, more youth in collage, 45% and 41% in 20-25 age cohort, relied on social media (Facebook, WhatsApp, and Instagram) as source of information, compared to 26% among the youth in 15-19 and 21% among 26-35 age cohort. The study further observed that 37% of youth in the urban areas, compared to 26% in the rural rely on social media. This could be due to internet costs and poor mobile network penetration in the rural areas. 25% of the youth mentioned that they are accessing information from the extension staff from either private entities or government. 18% of the youth were accessing information from the newspaper, 11% from the Agro dealer network, and 11% from traders. Access of information and training from traders have potential of being distorted especially market prices.

Due to high proportion of youth accessing information and trainings from the neighbors and fellow youths, there is need to invest in farmer-to-farmer extension system, to develop a youth owned extension system. This will entail selection of elite youth who can be trained to deliver soft skill and technical trainings. The study also noted a significant number of youths accessing training and information from schools. There is need to improvement the school curriculum on agroecology, in line with contemporary issues. Improving the capacity of the government and private sector extension staff on new information on agroecology will be important for sustainability. Targeted and updated messaging through social media with agroecological content for the youth, in urban and collages will increase awareness and adoption of agroecological interventions.

5.1.4 Challenges faced when accessing Agro-ecology training.

The study noted that access to training is affected by distance to the training location, as mentioned by 49% of the respondents. Distance is a hindrance to youth in the rural areas, as mentioned by 48% of the youth compared to 41% in the urban areas. Based on age cohort, distance affected youth in collage as reported by 49%, compared to youth in 20-25, as reported by 50%, 26-35 by 49%. Distance to the training venue equally affected women and men, 48% of them respectively were affected. Lack of time to attend the trainings, affected 40% of the youth, with more of youth in urban areas, 39%, being the most affected, compared to 31% in rural. Based on age cohorts, 48% of youth in collage, were affected by time, compared to 46% in the 20-25, 30% in 15-19 and 33% in the 26-35 age cohorts. More male, 41% were affected by lack of time, compared to 37% women, due to more commitment to collage training among the youth in college, and engagement in farming activities among men. 19% of the youth were not accessing training due to attendance of old people in such trainings. Majority of those who were affected by virtue of old people attending were women, as mentioned by 22% compared to 16% among men.

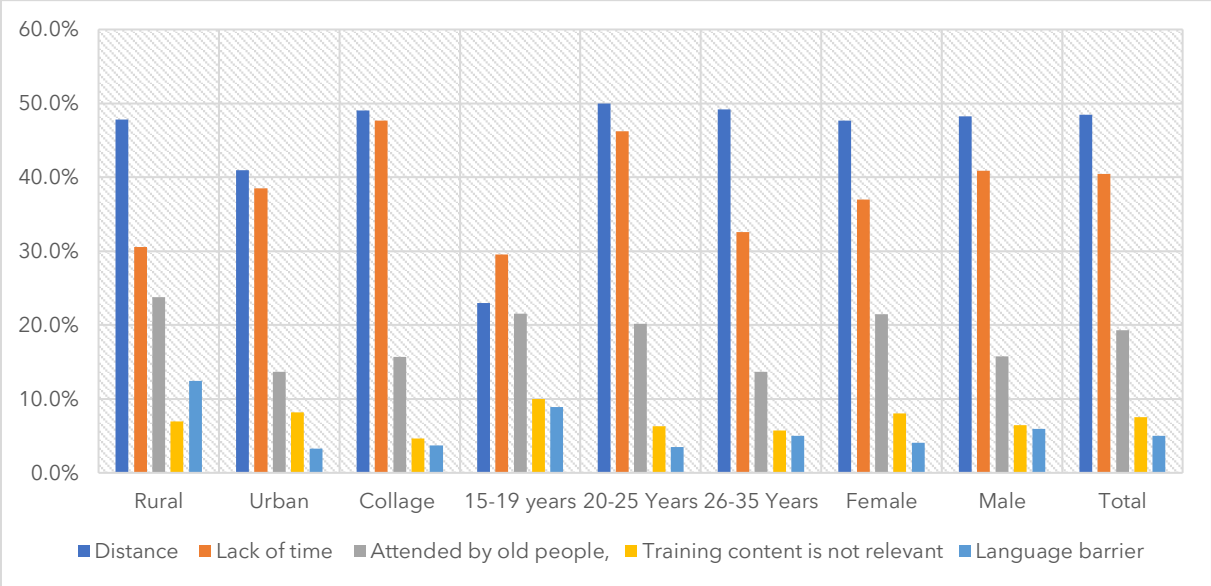

Figure 16: Challenges faced when accessing Agro-ecology training.

A training attended by older people intimidates young attendees, as they are not free to talk and share their experience. Further, 8% were affected by training content not being relevant to their needs, while only 5% did not understand the language being used in training. Language barrier affected the rural youth, as mentioned by 12% compared to 3% in the urban. This study noted low literacy levels among the rural youth, which can be a barrier to access to trainings and access to information. Adoption of a participatory, mixed methodology that incorporate demonstrations, oral and training manuals will be able to reach the wider population. Given that most of the collage youth complained of lack of time and the distance to the training venues, there is need to improve on the social media and curriculum content with agroecology training content to reach this group.

5.1.5 Challenges faced when accessing Agro-ecology information.

Lack of money was the leading challenge affecting 44% of the youth in accessing information, while lack of time is affecting 34% of the youth, as they are busy in schools and farming activities. 46% of the youth in the rural are affected by the cost of accessing information, compared to 34% in the urban. The study further noted that 15% of the youth felt that the information being disseminated were meant for the elderly people in the community, while 10% mentioned language barrier. Language barries affect 13% youth in

the rural areas compared to 11% in urban. 45% youths in the 20-25 years age cohort, mentioned that they were mostly affected by cost of accessing information, followed by 26-35, with 42% being affected, compared to 32% among the youth in 15-19 age cohort.

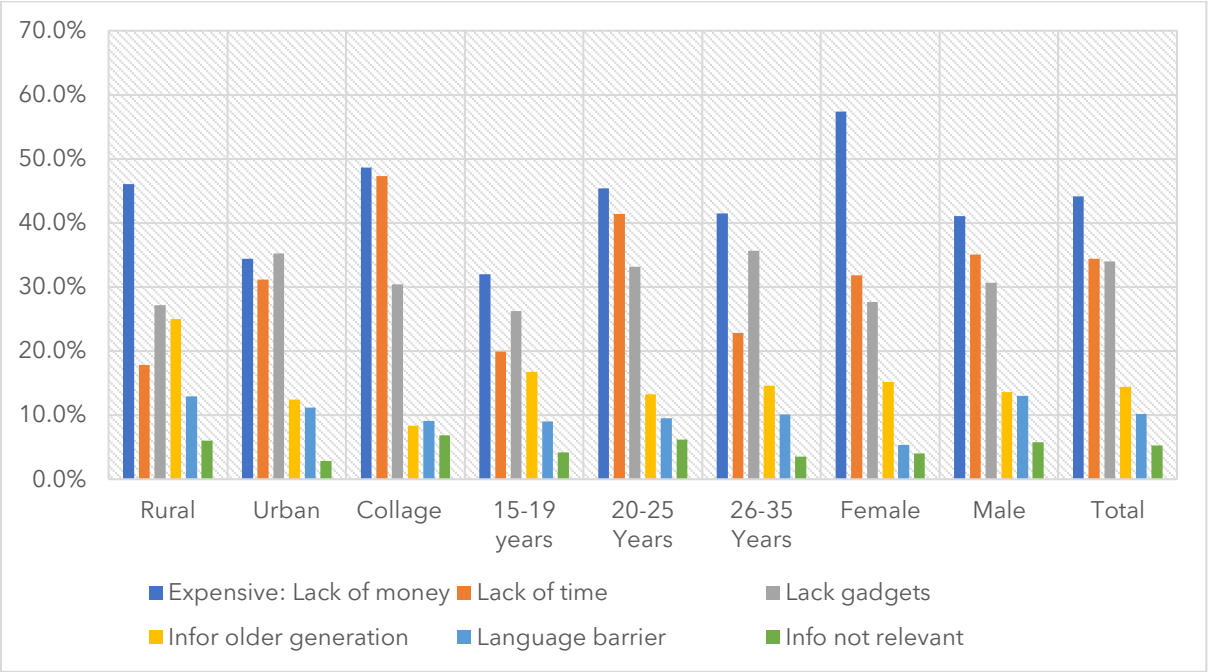

Figure 17: Challenges faced when accessing Agro-ecology information

The study noted that majority of the youth in the rural areas, depends on electronic devices to access information. These gadgets which include Tv and Radio are expensive to buy and maintain as they need electricity and battery, which are not readily available in the rural areas. More female youth, 57% mentioned that accessing information is expensive, compared to 41% male, while lack of gadgets such as mobile phones affects 34%. Lack of time affect youth in the urban areas, as reported by 31% compared to 18% youth. Youth in collage lack time as mentioned by 47%, due to class work and other school related activities. Based on gender, more men (35%) were affected by lack of time in accessing information compared to 32% among women. Men are mainly involved in farm production activities, taking their time compared to women, who, majority are in trade. Lack of gadgets to access information affect 35% youth in the urban areas, compared to 27% in the rural areas. Only 5% mentioned that the information being shared is not relevant to them. Rural youth access more information from the extension staff and therefore if the staff uses language that they are not familiar with, it becomes an impediment.

5.1.6 Perception on access to information and training on youth awareness and participation in Agro-ecological interventions

Local agricultural department/schools frequently organize training for the youth: This statement was to validate whether local agricultural department/schools frequently organize training for the youth. Forty-nine percent of the youth agreed to strongly agree that indeed they do frequently organize for such trainings, while 41% disagreed to strongly disagreed. The high proportion of youth disagreed to strongly disagreed is alarming, indicating that such system of extension is becoming in effective, and youths are not benefiting. Further, 24% of the youth were indifferent/neutral on the statement. More youth in the rural, 43% compared to 41% in the urban areas, disagreed to strongly disagree that agricultural department/schools frequently organize training for the youth, while more youth, 48% in the urban areas compared to 4% in rural, agreed to strongly agreed, that agricultural department/schools frequently organize training for the youth, while based on

age cohort, 57% of the youth in collage, agreed to strongly agree that agricultural department/schools frequently organize training for the youth, followed by 50% youth ion the 20-25 age cohort, 48% in the 26-35 age cohort and 42% in the 15-19 age cohort. Youth in collage do access trainings by virtue of their engagement, while it seems older youths are also accessing extension from the extension staff. With barely a half of the youth agreeing to strongly agree that agricultural department/schools frequently organize training for the youth, more efforts need to be in put in place to improve extension delivery by the extension staff.

The types of training and topics covered adequately meets the needs of youthful community: The study further assesed whether the types of training and topics covered, during trainings, adequately met the needs of youthful community. 45% agreed to strongly agree that it met their needs, while 32% disagreed to strongly disagree with this statement. Younth in the urban areas strongly agreed that the **training and topics covered adequately meets the needs of youthful community** as mentioned by 45%, compared to 39% among the youth in the rural areas. The study also noted that 53% of youth in collage agreed to strongly agreed that the **training and topics covered adequately meets the needs of youthful community**, indicating that the types of training and topics which is being delivered in collage adequately meets their. This is probably due to well structured curriculum in the collages and TVET, delivered to the youth as paty of their trainings. The study noted that 37% youth in 15-19 age cohort agree to strongly agree to the statement, compared to 49% among the youth in 20-25 and 43% in the 26-35 age cohort. Generally, 31% of the youth of which 35% in the rural, compared to 31% in the urban were indefferent, meaning that they lacked something to say. This could be due to lack of information on what exactly they need to be tought about agroecology. Majority of them are in the 15-19 age cohort, who were mainly made of school drop out either at primary or before filaising their secondary school. There is need to understand the training needs of the youth before delivery of such trainings in future, though capacity assessment.

There is extremely low local community awareness and involvement in youth oriented programs: The perception of the youth was assessed whether they think that there is extremely low local community awareness and involvement in youth oriented programs. The study noted that 45% agree to strongly agree to the statement, while 30% disagreed to strongly disagreed. 29% were indiffrent to the ststement. The study further noted that youth in the urban areas, 47% agreed to strongly agreed to the statement, compared to 42% in the rural areas. This shows that urban dwellers are not aware of youth oriented programs, leading to low participation and buy in among the community members. Based on age cohort, youth in collage (46%) and those in 20-25 age cohort (46%), agreed to strongly agreed with the ststement, due to lack of awareness of such programs by virture of being in collage among students, and being involved in farm level farming among the 20-25 age cohorts, taking most of their time to assess to what extent the community are aware of what they are doing. Generally, the study observed that high number of youth, 59% who disagreed to strongly disagree and who were neutral, indicates that community members are becomming more and more aware of what youth are doing. This need to be enhanced through communication and sensitisation. Against this, urban youth, youth in collage and youths in 20-25 indicated that the community were not aware of what they are doing. There is need for inclusivity in youth projects by sensitising the community, especially those in the urban areas and those in school on youth programs. This will create a buy in among the community in the implimentation of the agroecological interventions.

Youth always attends extension/school training sessions: The study assessed the perception of the youth that they always attends extension/school training sessions on agroecology. 41% of the youth agreed to strongly agreed with the statement, while 33% disagreed to strongly disagreed with the statement. 32% were indifferent, indicating that

they may be not aware of suchtraining taking place. Youth in the urban areas agreed to strongly agreed that youth are always attend extension/school training sessions, as mentioned by 45% compared to 37% in the rural areas. This shows that extension training in urban areas is more structured and popular with the youths. Based on age cohort, youth in collage (41%), 20-25 (41%) and 26-35 (42%) agree to strongly agreed on the statement, compared to 37% among the 15-19 age cohorts. The low proportion of youth who agreed with the statement in the rural areas, as represented by 37% against 45% in the urban areas, indicate the need for targeted reach to the youths during the trainings, especially in rural and the youth in the 15-19 age cohort. Sensitisation of the trainings need to be increased to bring on board most youth, especially the younger ones in the 15-19 age cohort.

Youth have a various sources and types of information to guide on successful agricultural project implementation: As to whether youth have various sources and types of information to guide them on successful agroecological interventions implementation, 42% agreed to strongly agreed to the statement, while 32% disagreed to strongly disagree. Majority of those who strongly agree (44%) were in urban areas, compared to 39% in the rural. The diversity of information sources was observed among the youths in the urban areas compared to those in the rural. Similar observation was observed among the youth in collage, which guides them in successfull agroecological intervention implimentation. Based on age cohort, 43% of the youth in collage and 44% of the youth who are 25-35 years, agreed to strongly agreed that youth have various sources and types of information to guide them on successful agroecological interventions implementation. 28% of the youth were neutral or indifferent to the statement. Investiment in information therefore will be important in changing the behaviour and attitude among the youth, especially those in rural and those in 15-19 age cohort.

5.1.7 Agro-ecological information and communication technologies (ICT)

Integration of information and communication technology (ICT) was assessed among the youth in Africa. The study noted that 42% of youth in Africa are aware of ICT technologies being used in agroecology. Awareness of existing ICT in agroecology was higher, 41% among the urban youth, compared to 36% youths in rural areas. Urban populations are more exposed to diverse number of technologies. It was noted that 52% of youths in Collage are aware of existing technologies compared to 30% among the 15-19, 46% of 20-25 and 46% among the 26-35 age cohort.

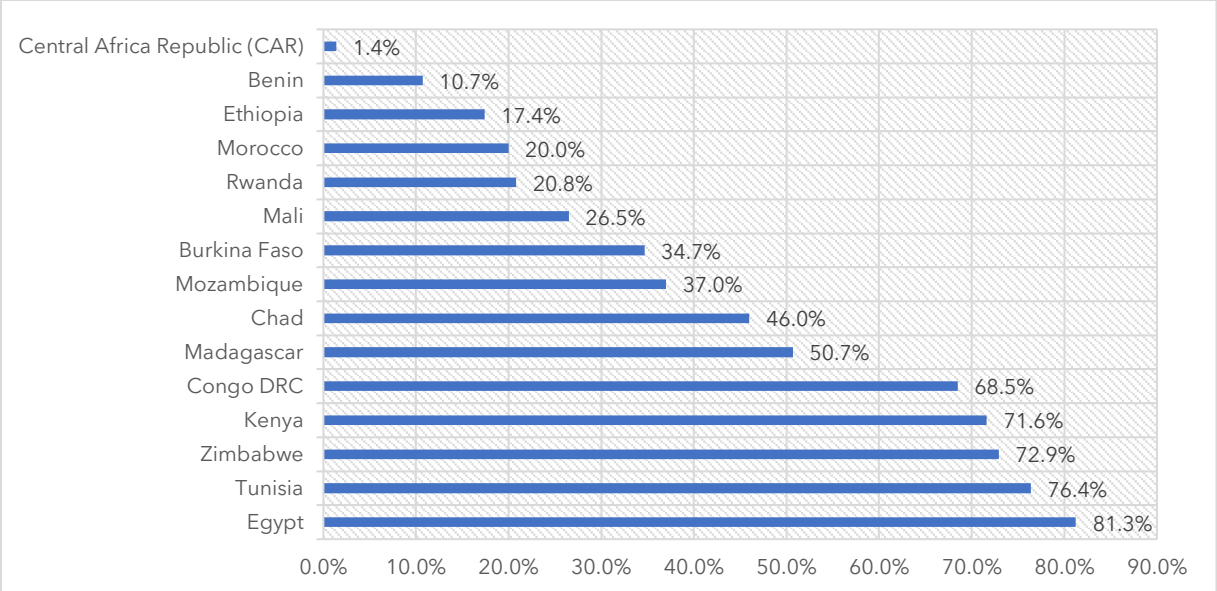

Figure 18: Agro-ecological information and communication technologies (ICT)

Both men and women are equally aware of the ICT in agroecology as reported by 42% respectively. Collage youths are more exposed to several technologies by virtue of being students. Majority of youth who were aware of ICT technologies were on Egypt as mentioned by 81% of the youth, 76% in Tunisia, 73% in Zimbabwe, 72% in Kenya and 67% in Congo DRC. Countries with lower awareness levels among the youth were in CAR, with only 1% youth awareness, Benin, with 17% and Ethiopia with 10%.

5.1.8 Diversity in Agri-technologies (ICT) in Agroecology.

The study noted that the use of mobile phone in financial transaction was the most used technology in agroecology by 65%, with majority, 64% being men compared to 59% female. Previous analysis indicated that more men, were earning more than USD $ 501 per month, which provides men with the opportunity to access mobile phones than women.

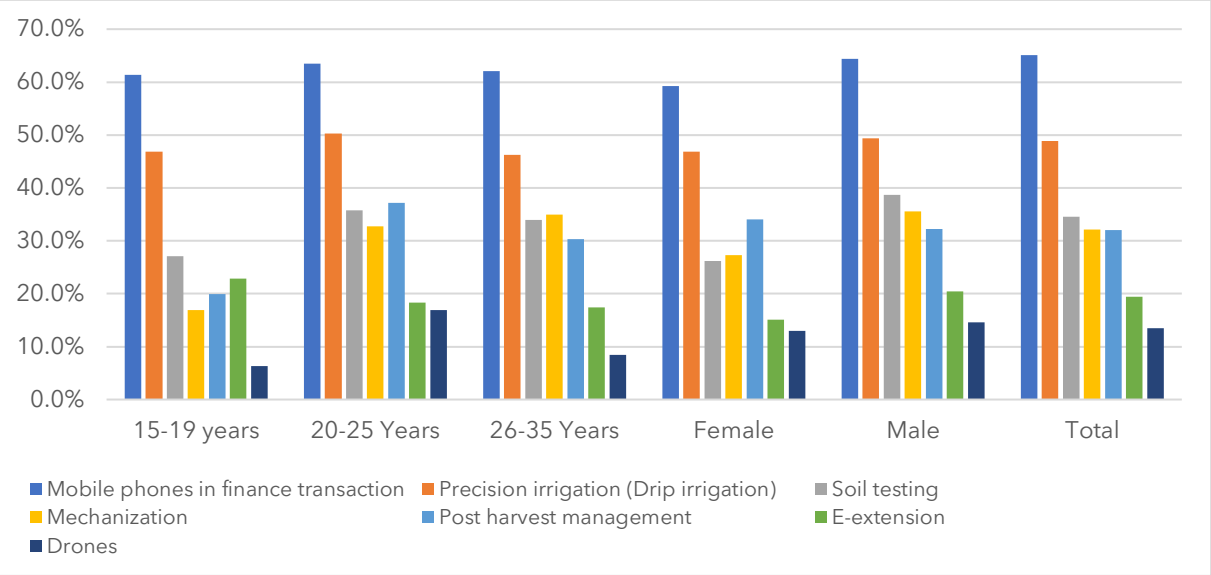

Figure 19: Diversity in Agri-technologies (ICT) in Agroecology

Further analysis revealed that 49% of the youth have used precision irrigation (drip irrigation) technology, with more of the youth in the 20-25 age cohort, are using drip irrigation, compared to 47% among the 15-19 age group. Soil testing is practices by 35%, compared to farm mechanization, which is being applied by 32% of youth. Post harvest management technologies are also being applied by 32% of the youth, while e-extension is being applied by 19%. Only 13% apply drones. Youth in the 15-19 age group are applying mobile phones for finance transaction, as mentioned by 61% of them, precision irrigation (47%) and soil testing (27%). Youth in 20-25 age cohort apply mobile phones technologies in financial transactions as represented by 63%, while precision irrigation is practiced by 50%, soil testing by 36% and post harvest management by 37%. Female youth apply mobile phones (59%), precision irrigation (47%) and post harvest management (34%). Mobile phones, drip irrigation, soil testing and post harvest management technologies were the four most applied technologies by the youth.

> Youth in Burkina Faso are using several technologies to improve on their involvement in agroecology. These include Machinery, new technologies of information and communication by use of use of mobile phones.
>
> FGD, Burkina FASO

5.1.9 Personal challenges impeding promotion of agroecology technologies.

The study observed that lack of finance and high cost of acquiring the technology is the leading impediment in creating, providing, and promoting agroecology technologies among the youth, as mentioned by 72% of the youth. Further analysis indicated that 41% of the youth lack of skills to creating, providing, and promoting agroecology technologies. Un availability of agroecological technologies within the locations where they live is affecting 38% of the youth, while 26% risk and fear the uncertainty. That they are not sure whether the technology will work against the financial and time investment they have put in place. This could be due to lack of data for verification on technology performance.

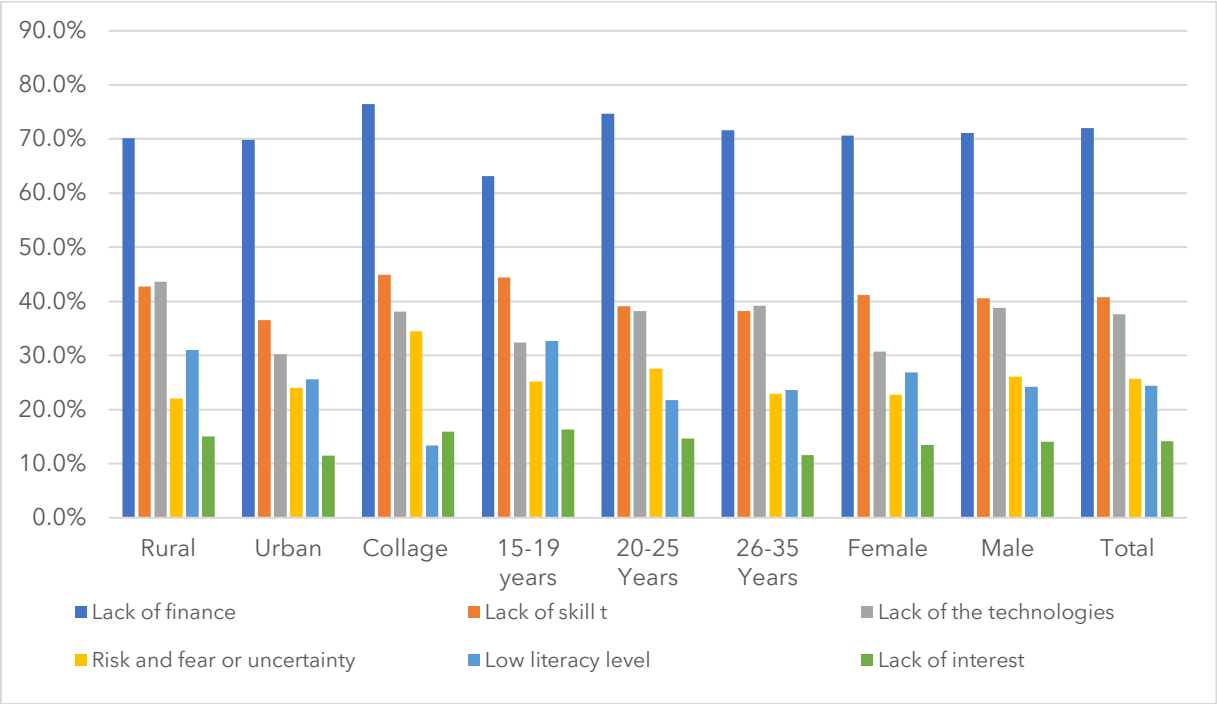

Figure 20: Personal challenges impeding promotion of agroecology technologies

They fear experimenting with new technologies. Exposure to new and existing technologies is a challenge to 39% of men, compared to 31% of women, as most of the technologies don't exist in locations where they are operating. Low level of literacy and lack of interest were mentioned by 24% and 14% youths, respectively. Low literacy levels are affecting youth in the rural areas as mentioned by 31% compared to 25% in urban, while more women, 27% indicated that low literacy levels are affecting their creation, providing, and promoting agroecology technologies, compared to 24% men. The high cost needed to apply the technologies mainly affect 77% of youth in collage, compared to 74% youth in the 20-25 age cohort, and 72% in the 26-35 age cohorts. Youth perceive implementation of agroecology as expensive especially when you want to purchase equipment's such as smart phones and drones. Access to finance, skill and literacy levels are the main impediment to youth in creating, providing, and promoting agroecology technologies.

5.1.10 Access to credit

The study noted that only 16% of the youth have accessed credit in the past 12 months, for agroecology interventions. Majority of those who have accessed credit were in the rural areas as reported by 23% of the youth, compared to 13% in the urban. More youth in the 26-35 age cohorts accessed credit as reported by 23%, compared to 12% among youth in collage, 11% in the 15-19 age cohort and 14% in the 20-25 age cohort. The study noted that access to credit is enhanced with age and based on location. It seems that rural youth and those who are 26-35 years old, are more credit worth compared to other age cohort and

urban. Those in 26-35 age cohort have been in practice for a longer time, created a rapport with the financial institutions, have collaterals, increasing their ability to access credit compared to youth in other cohorts.

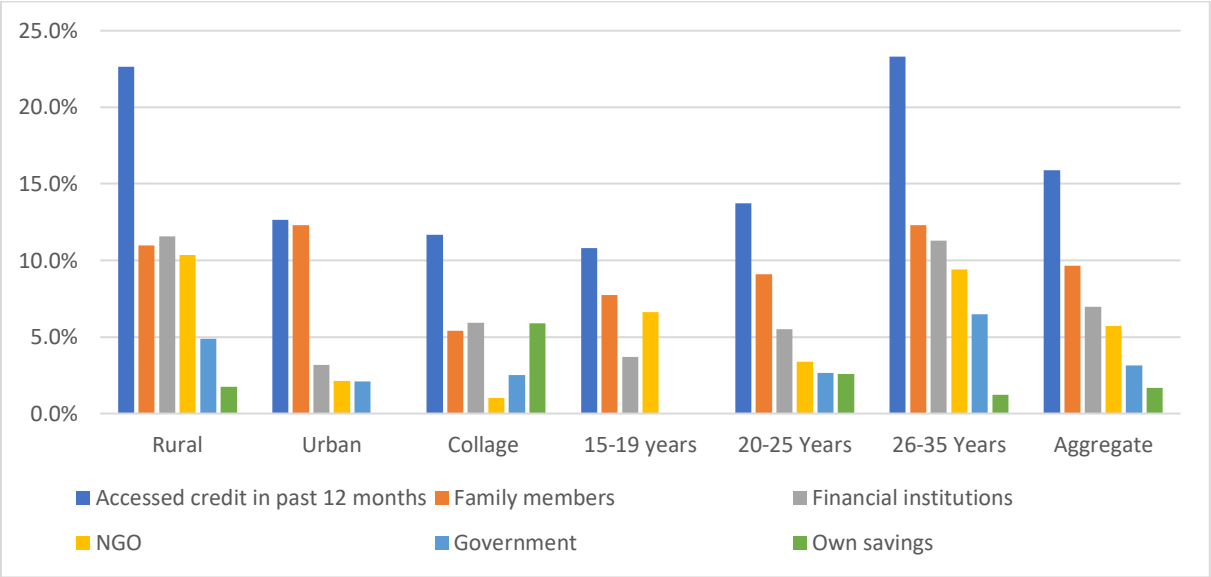

Figure 21: Access to credit

In the past 12 months, 11% of the youth have been able to access credit worth USD $ 101 to 500, with majority, 18% in the rural, compared to 6% in Urban. More youth, 16% in the 26-35 age cohort have accessed loans worth USD $ 101-500 in the past 12 months, compared to 8% in collage, 9% in 15-19, and 9% in 20-25 years. Majority of the youth who were able to access credit, accessed it from the family members, as mentioned by 10% of the youth, with majority, 12% in the urban compared to 11% in rural. More youth in 26-35 access loans from their family members, compared to 5% among youth in collage. 7% access credit from financial institutions, while 6% from NGO. Rural youth have a great diversity in loan sources, as they can access credit from family, financial institutions, NGO, Governments, while those in urban access from family members. The urban youths probably find it easy to get credit from their family members as compared to other sources due to lack of collaterals.

The study interrogated the youth whether access to credit can influence them to participate in agroecology interventions. We noted that 20% of the youth moderately to great extent agreed that access to credit will, influence them to participate in agroecology interventions with majority, 29% in the rural and 18% in urban areas. 30% of youth in 26-35, followed by 18% in the 20-25 age cohort are moderately to great extent, agreed that they will be influenced by access to credit to participate in agroecology practices. Increased access to credit, especially among the youths in urban, in collage and those in 15-19 age cohort have potential to influence their participation in agroecology production practices.

5.1.11 Challenges in accessing credit among the youth.

The study noted that high cost of credit is the major challenges, that youth are facing when accessing credit, as mentioned by 63% of the youth, with majority, 68% in the urban areas compared to 57% in the rural areas. This could be due to high interest rates of above 14% in some countries. Lack of collateral to provide security for the loan is the second most challenge affecting 49% of the youth, equally affecting youth in rural (46%) and urban (46%) in equal measure. The study also noted that more women, (52%) face the challenge of lack of collateral compared to 49% among men. Most households have been using land as a collateral which mainly under men name, therefore women lack the opportunity to use it as a collateral. Complex process to acquire the credit is a major deterrent to 32% of the youth,

with majority, 32% in urban compared to 30% in the rural areas. Limited credit providers are affecting 29%, with the most affected being in the rural areas, as reported by 33%, compared to 25% in urban areas. This shows that in the urban areas, there are several credit providers, with the major challenge being the high cost of credit and lack of collateral. Inadequate credit available is affecting 20% of the youth. They feel that the money available in most of the credit provider are not enough to solve their problem. This was a major challenge affecting youth in the rural (21%) and urban (21%). 18% felt that they are not credit worth to access the credit, with majority in rural (23%) compared to 14% in the urban areas. Probably in the urban areas, due to diversity in income sources, they can justify to the bank their ability to pay compared to the youth in rural areas.

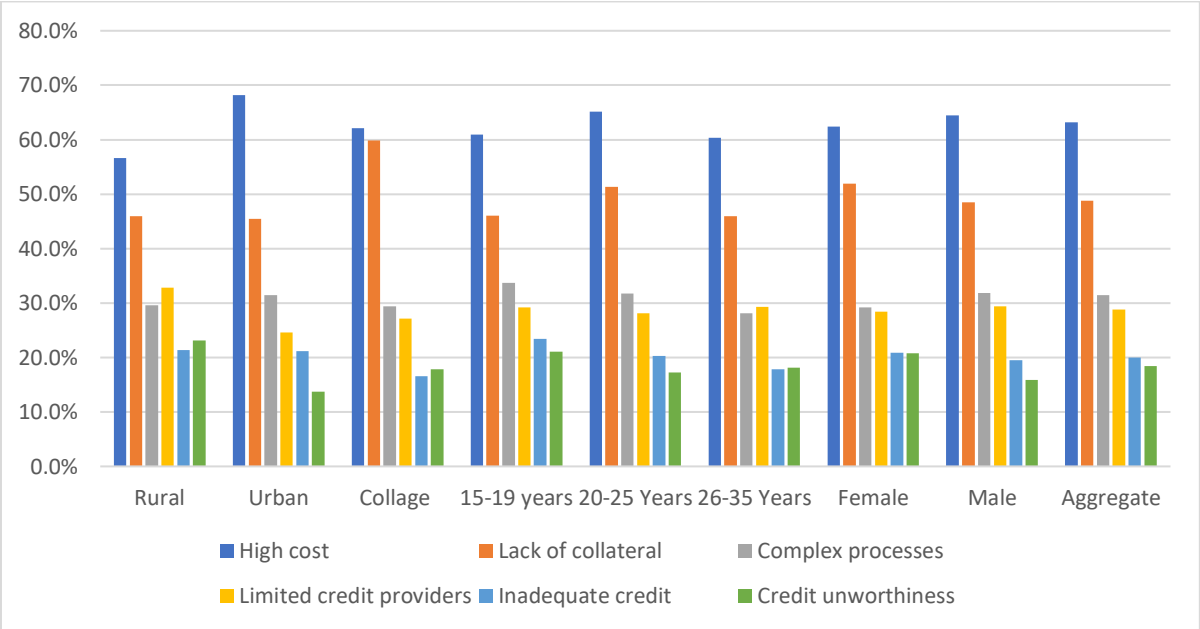

Figure 22: Challenges in accessing credit among the youth

5.1.12 Access to land and ownership

The study assessed the level of land ownership among the youths, in Africa. 33% of the youth own at least land that they call their own (means that land has a title under their name), with majority, 45% in rural compared to 31% in urban areas. The land ownership is higher among the elderly youths, with 52% in 26-35 years, compared to 28% within the 20-25 age cohort. 18% of youth who are in collage and 17% who are 15-19 years also own land.

On average, majority of those who own land own between 1-3 acres as mentioned by 10%, while those who own less than 1 acres were 9%. The study noted that 14% of youth in 26-35 age cohort, own 1-3 acres of land, while another 14% within the same age cohort, own more than 5 acres. Those who own more than 5 acres are in the rural areas, represented by 12% compared to 3% in the urban, while those who own 4-5 acres are more, were in rural (12%), compared to urban (7%). Land is majorly acquired through inheritance from the parents as mentioned by 20%, while 10% bought land and acquired a title in their name. 6% leases land for agroecology interventions, indicating the importance of the intervention to these individuals. More youth, 25% in the rural areas, compared to 19% in the urban acquired land from their parents, which is a typical method of owning land in the rural areas, compared to the urban areas. In the urban areas, land is scarce and if available, is expensive compared to the rural areas, limiting the number of youths who can own land there. More youth in 26-35 years bought the land they own, as represented by 16%, compared to 9% among those in 20-25 age cohort. More youth in rural, 12% bought land compared to 10% in the urban, due to availability of land and lower cost compared to those in the urban. Based on age cohort,

30% of the youth in 26-35 acquired land from the parents, compared to 13% in collage, 11% in 15-19 age cohort, and 18% in 20-25 age cohort.

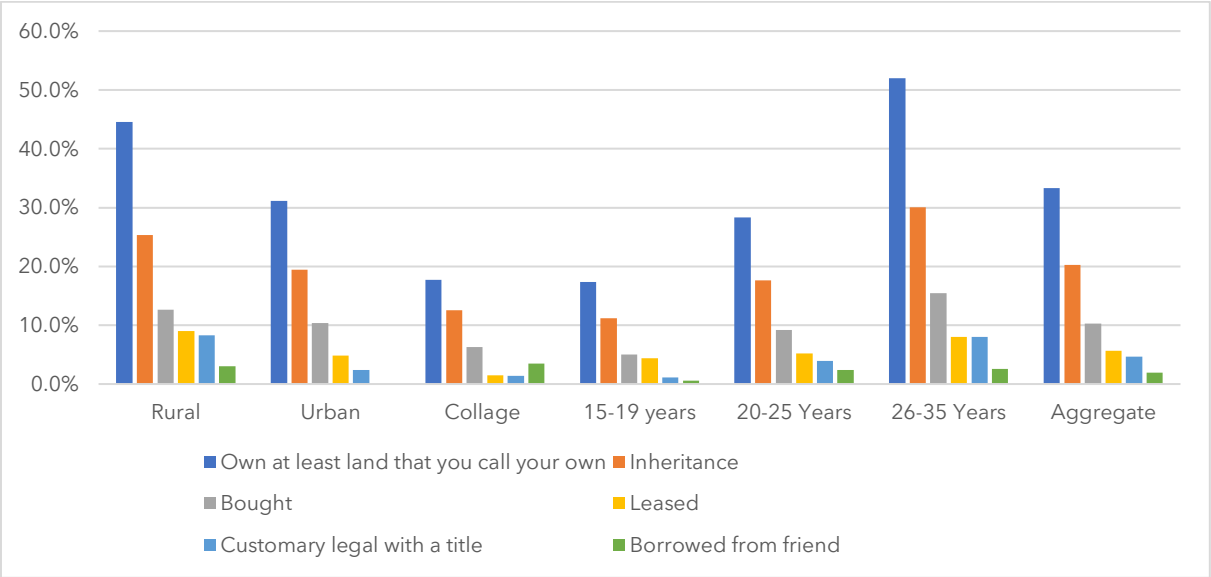

Figure 23: Access to land and ownership

5.1.13 Challenges in accessing, and acquisition of land.

The greatest challenge affecting access and acquisition of land was the high cost of land, as mentioned by 82% among the youth, followed by less land due to high population density, as mentioned by 31%, while conflict at family, clan and village affects 30% of the youth. Long tedious process of acquiring land is affecting 25%, while 24% mentioned unfavourable land tenure system on ownership. 16% mentioned culture and myths against women owning land.

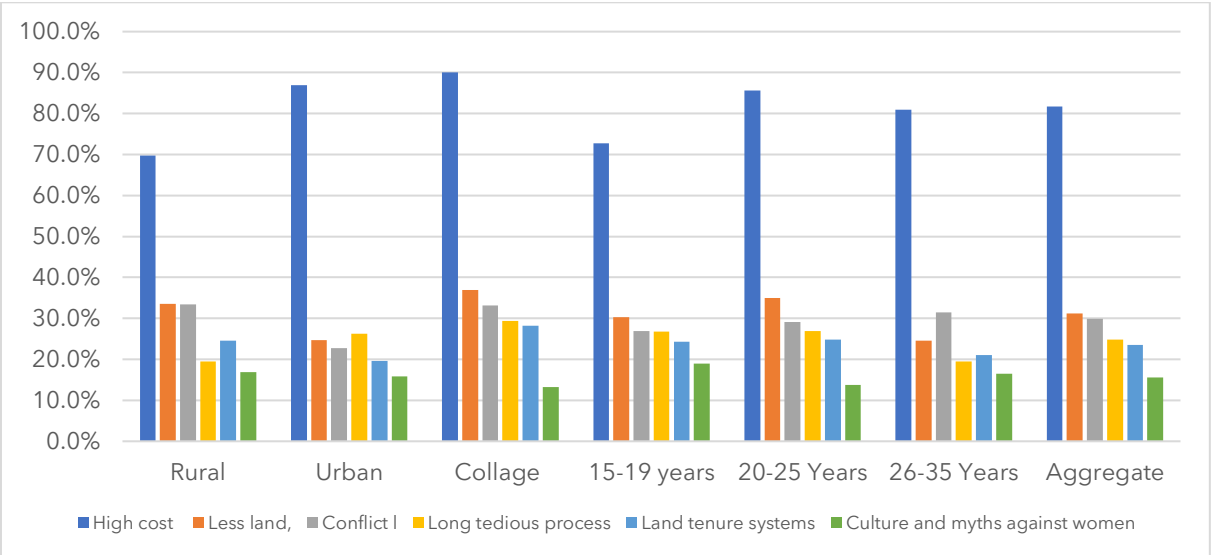

Figure 24: Challenges in accessing, and acquisition of land.

The high cost of land is mainly affecting youth in urban areas, as reported by 87% compared to 70% in the rural areas. This is due to poor access to finance to buy land. Among the age cohort, high cost of land is greatly affecting youth in collage as reported by 90% of the youth, compared to 86% in 20-25 and 81% in 26-35 years age cohort. The rural youths are affected by high cost of land (70%), less land available to acquire due to population density (34%) and conflict at family, clan, and village level, which is affecting 33% of the youth. Among

youths in urban, high costs affects 87%, followed by long tedious process of acquiring land as mentioned by 26% and less land to access as mentioned by 25%. Youth in collage face high cost of land (90%) and less land available to access as mentioned by 37% of them. Those in 15-19 years age cohort are affected by high cost of land (73%), followed by less land and conflict.

5.1.14 Access and acquisition of land as an influence on participation.

The study assessed to what extent access acquisition to land among youth influence their participation in agroecological interventions. The study noted that 87% of the youths are moderately to great extent, influenced by access to land to participate in agroecology interventions, indicating the importance of land in agroecology. Majority of those who are influenced by access to land to participate in agroecology, were youth in urban areas, as mentioned by 87% compared to 83% in the rural. It was noted that youth in urban areas are majority constraints with poor access to land due to cost and availability. Based on age cohort, 91% of youth in collage, compared to 88% in 20-25 age cohort, 85% in 26-35 age cohort, and 80% in 15-19 age cohorts are influenced by access to land to participate in agroecology interventions, indicating that all youth, regardless of their age, are influenced by land to participate in agroecology interventions. Based on gender, access to land influence both women (87%) and men (88%) in equal proportion

5.1.15 Access to market for agroecology products.

The study noted that 62% of the youth have access to market for their produce, with majority, 71% in the rural areas, compared to 63% in the urban. The low proportion of youth accessing market in urban areas could be due to competition from products from rural areas, which therefore need require investment in market development and diversification for the urban youth. The study further noted that youth in the 26-35 age cohorts are accessing markets, as mentioned by 73% compared to 48% among the youth in collage, 58% in the 15-19 age cohort and 57% in 20-35 age cohort. The youth in 26-35 age cohort could be having many customers who they have a long-term relationship developed over a period, compared to the other age cohorts, who may be just entering into the agroecology product markets.

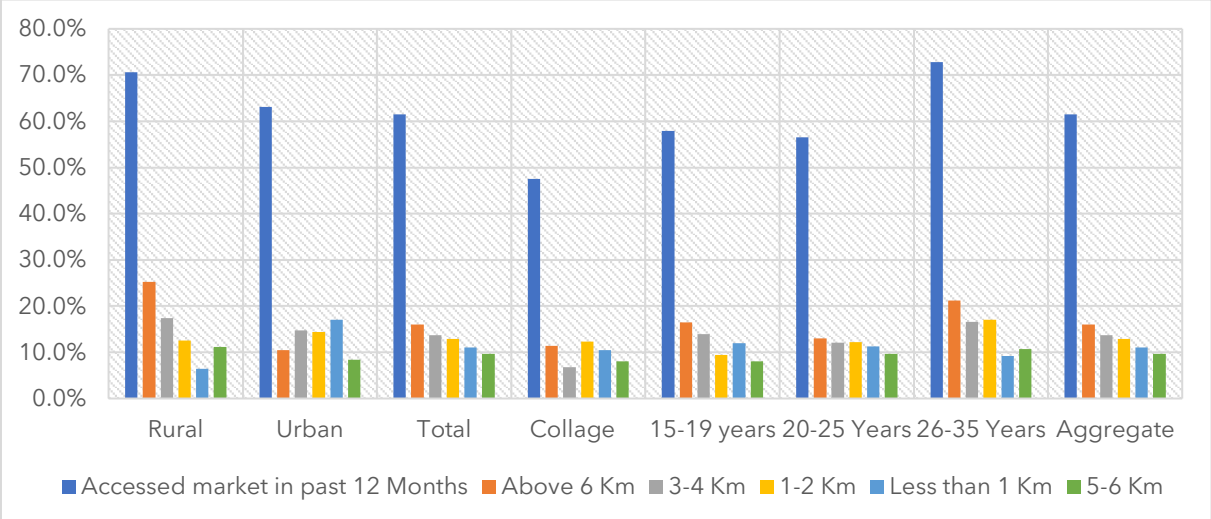

Figure 25:Access to market for agroecology products.

The study further interrogated to what extent access to market influences youth participation in agroecological interventions. It was noted that 55% of of the youth were moderately to great extent, influenced to participate in agroecology. More youth in rural, 63% compared to 57% in the urban are moderately to great extent, influenced by access to market, while among the age cohorts, more youth, 66% in the 26-35 age cohorts, compared to 44% in

collage, 51% in 15-19 age cohort, and 51% in 20-25 were influenced by access to market, to invest in agroecology interventions. Distance to the market can be seen as an impediment to market access. The study assessed the distance from the production sites to the nearest market to assess whether there is potential negative impact. Majority of the youths, 16% are located 6 KM to the nearest market, with majority, 25% in the rural areas compared to 11% in urban. This shows that majority of the youth in rural cover longer distances to the market, which has potential impact on post-harvest management, costs, and more work. 14% are within 3-4 km, with majority, 17% in rural, compared to 15% in urban. Majority of youth in urban, 17% are located within less than 1 Km, enhancing increased access to markets.

5.1.16 Challenges in accessing sustainable markets.

The study noted several challenges that affect access to market among the youths. Lack of market information to make an informed decision on when, where and at what price to sale, is affecting 56% of the youth, with majority, 64% in the urban, compared to 52% in the rural areas.

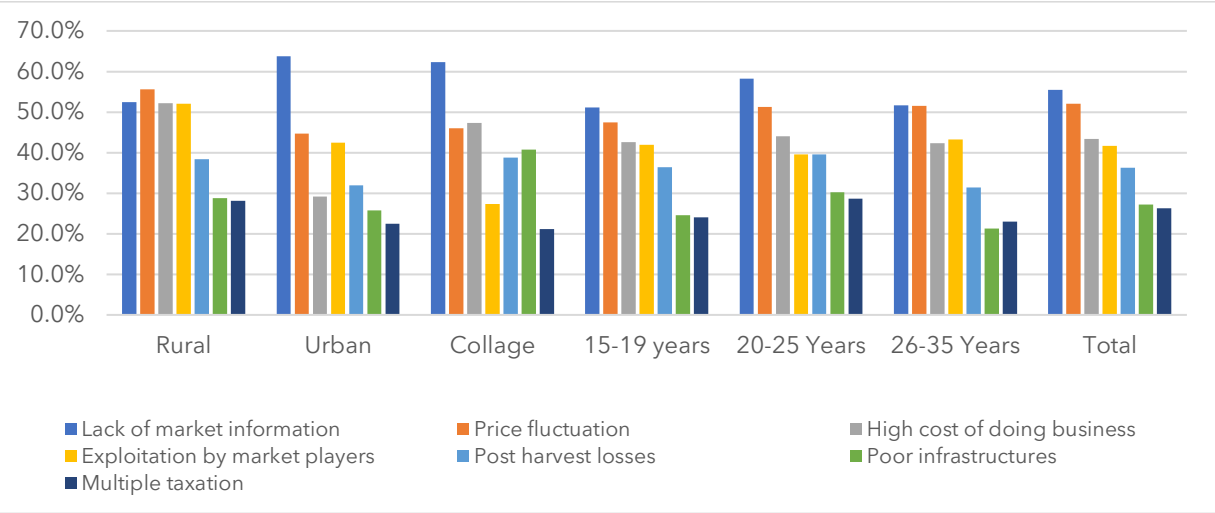

Figure 26: Challenges in accessing sustainable markets.

Product price fluctuations due to seasonality, is affecting 52% of the youth, with majority, 56% in the rural compared to 45% in the urban. High cost of doing business is affecting 43% of youth, with majority 52% in rural compared to 29% in urban. This could be related to permits, levies, and movement costs. 42% of the youth reported to be exposed to exploitation by market players, with majority, 52% in the urban, compared to 42% in the urban. Post harvest losses, poor infrastructure and multiple taxation affects 36%, 27% and 26% of the youths. The youth in the 26-35 age cohorts are affected by lack of market information and price fluctuation as reported by 52% and exploitation by market players as reported by 43% of the respondents.

6.0 Study assessment area 5: Recommendations on priority setting for youth engagement in agroecology/EOA at national, regional, and continental levels across dimensions of practice & advocacy, production, supply chains and consumption.

BIOVISION trust commissioned an assessment of the role and position of youth in Agroecology (Ae)/Ecological Organic agriculture (EOA) In Africa. The study has been able to identify the potential role of the youth in agroecology, how they can effectively be involved in agroecology interventions such as in collective action, technology integration, extension service provision, policy influencing and advocacy and what motivates them to participate in such interventions and the key challenges they are facing.

6.1 Youth as an Asset in Agroecology and intervention areas.

Farm level production and related services: Youth are currently engaged at farm level production, trade, processing, and input service provision. Their aspiration is to provide labour and input sale and distribution among young men, and trade and agro processing among young women in the rural areas, while those in urban are providing services in trade, farm production and agro processing. Against this, their efforts are being affected by lack of capital, poor skills, poor access to land and markets. Establishment of village savings and loaning schemes (VSLA) targeting rural youth and linkage to financial institutions among rural and urban youth will build the social capital among the youth.

Policy advocacy and influencing: Youth participation in policy influencing and advocacy is still low, against their capacity to engage in promotion and uptake of technologies, promote access to credit, inputs and extension, improved marketing and collective action, conflict management and peace building and gender and youth participation in agroecology. They are facing challenges with most groups being headed by older men, which intimidates most youths, limiting youth voices to put forward their concerns. They lack awareness on existence of such forums especially in rural areas, lack capacity. Designing interventions targeting capacity and mentorship programs will expose the youth and enhance their capacity to engage effectively.

Technology in agroecology: Youth, especially those in urban and those in collage, have a high awareness level of existing technologies. Youths are using technologies in finance transactions, drones, post-harvest management, soil testing and farm mechanization. The high levels of literacy among the youth in collage and those in the urban areas, provides an opportunity for youth to participate in agroecology. Interventions around exposing the youths to more technologies, establishment of incubation centres for youth to nature new technologies, while at the same time improving access to finance, improving skills through training on usage and mentorship programs will be important.

Extension service provision: While the delivery of information and training services are mainly driven by the neighbours, social media and extension staff through the NGO, youth currently in collage would prefer providing extension service due to their trainings. The youth in the 15-19 age cohort trust their peers as compared to the older generations, as source of information. Against this, majority of the youths lack finance to invest in communication gadgets such as smartphones, they lack skills and technical knowhow to manage and use these technologies. Investment in digital extension delivery, increased access and exposure to new technologies and Promotion of peer-to-peer extension system especially for 15-19 years will be impactful.

Marketing and agro- processing: Resale of agroecology products were seen to be the major source of income for youth in both rural and urban areas. Women and youth in urban areas are more engaged in trade and agro processing, which need to be promoted through access to products, influencing policies that create a conducive environment for trade and processing. Access to finance, capacity development on financial management and record keeping will be relevant to youths in urban and young women. Increasing their capacity will create a pull for products from the rural areas, enhancing access to market for the rural youth.

6.2 Recommendations and conclusions

Strengthen inclusive agroecological production system for increased incomes among the youth: Youth in rural areas are participating in farm level production, input provision and delivery of extension services. They have been motivated by their guardians, parents and sibling, to participate in agroecology production practices. Career choice among the youth is mainly determined by potential to get high income, high living standard, become

respected in the society and acquire high material possessions such as houses and cars. Agroecology production interventions should be attractive to the youths. Against this, youth involvement in agroecology interventions is limited by poor access to capital, low levels of skills and limited access to land. There is need to develop financial models targeting the youth, around access to finance. Promotion of agroecology technologies in crops, livestock and soil and water conservations through participatory, inclusive and practical training will be important, as part of social behavioral change. Establishment of a functional and sustainable youth led extension service provision through peer-to-peer learning through establishment of a local service provider network will be impactful. Digital inclusion to facilitate extension service provision will be attractive to youth, especially those in urban areas.

Entry point: The study recommends that strengthen inclusive agroecological production system for increased incomes among the youth interventions should target rural youths, of all age cohorts.

Institutional capacity development of youth owned groups and associations, policy engagement and knowledge management: The study noted the potential of youth group and association as a platform for market access, advocacy and policy influencing. Creation of these association in the rural and urban will increase the youth negotiation power and ability to agitate for change. Against these, fewer youth are participating in advocacy and policy influencing, while existing associations and groups are not trusted by its members due to poor leadership, poor governance, corruption and are mainly led by older men and women, which demotivate youth participation. Understanding the capacity of existing groups will be key in development of capacity development plan. Investment in governance and financial management trainings for improved capacity and competitiveness of these institutions will be important. There will be need to create youth Policy Advocacy Forums and or youth councils, to serve as an advisory or advocacy body to stakeholders, through which they will be able to engage with the local and national stakeholders. They will be involved in identifying priorities, craft policies that support these priorities, and contribute to the implementation of these policies through public services. Policy areas that need keen intrest should be on promotion and uptake of technologies, promote access to credit, inputs and extension, improved marketing and collective action, conflict management and peace building and gender and youth participation in agroecology.

Entry point: The study recommends that Institutional capacity development of youth owned groups and associations, policy engagement and knowledge management need to target youths in both rural and urban areas, across all the age cohorts.

Leverage technology and digital solutions for efficiency and scaling up impact in extension, and access to markets and financial services: Youths, especially those in the urban areas and in collage are aware and are using some of the technologies that can support agroecology interventions. Mobile phones in financial transaction, mechanization in land preparation soil testing and drones are some of the technologies known by the youths. Access and exposure to technologies is affected by poor access to finance to purchase and maintain the technologies and lack of skills to manage and use the technologies. There is potential for integration of digital extension systems within the production systems in rural and urban areas. This will need an investment in a Human-Centered digital study, that will prioritize users' needs in development or adoption of an extension digital system. At market level, especially with the urban youths, there is need for investment in strengthening the market systems through a digitalized marketplace system for market access, to facilitate online transactions. Investment in women in value addition and cottage processing will reduce post-harvest losses and earn value chain actors more revenues and increased opportunities for market penetration.

Entry point: The study recommends that Leverage technology and digital solutions for efficiency and scaling up impact in extension, and access to markets and financial services need to be implemented both in rural and urban. While in rural it needs to focus on digitisation of extension, access to mechanization, soil testing, in the urban need establishment a marketplace digital system that will bring together the buyers and producers on the same platform to enhance trade. Investment in value addition in urban also need consideration.

Strengthen market systems that respond to consumer and Market demand: The farm level production need to be linked to the market to provide incentive for the producers to adopt improved agroecology production practices. Development of a strong agroecology Marketing Hubs to facilitate consistent supply of quality agroecologically produced products from producers to end markets. To achieve this, the producers will be organized into marketing Hubs and supported to become business units. Functional agroecology product marketing hubs owned by the producer will form a structure through which agroecology producers' ownership of the value chain and positioning in the marketplace will be anchored. The hubs need to be supported to develop systems for aggregating demand for essential services like extensions services and thereafter enter business partnerships with the off takers. Consumers are demanding increasing levels of transparency and traceability and would be willing to pay for it. There is need for putting in place quality assurance mechanism at the agroecology marketing hub that will imposes a set of standards and procedures, and specifies data to be recorded, so that quality can be assured.

Entry point: The study recommends that strengthening of market systems that respond to consumer and Market demand should target youths in urban areas, while at the same time sensitizing the youth in rural areas on producing quality products that meet the market and consumer demands.