



Mwita Igayi, a young farmer from the Serengeti-Mara region in Tanzania. Photo: Joy Kivata.

Agroforestry Network

FOUNDED BY VI-SKOGEN

AGROFORESTRY AND YOUTH: POSSIBILITIES AND BARRIERS

Youth are in a transitional phase between being a child and becoming an adult. Young farmers living in rural areas today face additional challenges such as mounting unemployment, combined with the effects of the COVID-19 pandemic, increasing food insecurity and aggravating climate change impacts. Agroforestry – a farming technique that combines cultivating crops, pasture and trees – can address these challenges while contributing to several Sustainable Development Goals (SDGs). This policy brief shows the role of agroforestry for young farmers' livelihoods in several sub-Saharan African countries. It also outlines concrete recommendations for policymakers on using agroforestry as an inclusive approach that creates new opportunities for youth in food systems.

Young people are at the frontline of global challenges related to the effects of environmental and climate change, unemployment, increasing hunger and recovery from the COVID-19 pandemic (Glover and Sumberg, 2020; FAO et al., 2021; ILO, n.d.; International Food Policy Research Institute, 2020; Glassco and Holguin, 2016). Global challenges are not necessarily specific to youth; however, inequalities between young and old are increasing and young smallholder farmers and their livelihoods are particularly vulnerable to these crises since they more often lack networks, capital and long-term access to land. Furthermore, these challenges contribute to young people being increasingly forced to seek opportunities in urban areas due to the limited livelihood opportunities in rural areas (United Nations, 2019).

To enable young people to remain in rural areas and sustain their livelihoods in food systems, the agriculture sector must be more resilient to economic and environmental shocks as well as become more inclusive and concerned with the specific needs of this group. Agroforestry can address multiple challenges that young farmers face as actors in food systems and simultaneously enable their greater participation in the management of, and decision-making for food systems and rural development.

SURVEY RESPONDENTS FROM 21 COUNTRIES

This brief builds on two sources of information: previous research about youth and agroforestry, and a survey conducted uniquely for this brief. The survey targeted people in sub-Saharan Africa that are older than 15 and younger than 35 years old, in alignment with the African Union's definition of youth (African Union, 2006). The survey was answered by 209 respondents (46 female and 164 male). The survey was distributed in English, French and Swahili through the Agroforestry Network and partners, and through social media during April and May 2021. People from 21 countries replied, with most respondents from Kenya, Uganda, and Nigeria. The majority (65%) of them were practicing farmers or worked in food systems with a close connection to farming. The respondents answered the same eighteen questions, with some as multiple choice and others requiring free-text answers. Survey questions focused on respondents' views of agroforestry, the possibilities for young people to engage in agroforestry, the rewards if the respondent were already practicing agroforestry, and the obstacles hindering youth engagement. Based on analysis of survey responses, this brief maintains there is significant interest in agroforestry and sustainable agriculture among young people, but lack of knowledge, limited access to land and shortages in capital are major barriers to pursuing such interests.

YOUTH

The African Union defines youth or being a young person as someone between 15 – 35 years old (African Union, 2006). This brief will follow this age span as a definition for a young person. However, at the same time, we acknowledge that youth is a transitional phase between being a child and becoming an adult (Glover and Sumberg, 2020) and that there may be people within this age span not identifying as being a youth. It is also important to note that the concept of youth also correlates with gender, class, and location. Understanding youth as a transitional phase enables us to understand the specifics of being a young person with certain expectations of finding secure employment, forming your own life, and perhaps starting a family. This phase generally correlates with becoming more independent, autonomous, and having more agency in making choices, including those related to the production and consumption of food (Glover and Sumberg, 2020). This transition phase can create unique challenges to achieving sustainable livelihoods and development, especially in low-income circumstances.

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Today's generation of young people is the largest in history. Africa is the continent with the world's youngest population (African Union, 2019), where many also live in rural areas (FAO, 2020). In sub-Saharan Africa specifically, the number of young people is still growing rapidly in most countries and the slow demographic transition could lower those countries' long-term development and economic growth (IFAD, 2019). However, the large young populations can also be an asset for development if they are reached by efforts such as capacity building and financial investments.



Rachael Namutebi holds a honeycomb briquette, Photo: Vivi Mellegård.

CHALLENGES AND SOLUTIONS FOR ENGAGING YOUTH IN AGROFORESTRY

The engagement of youth in agriculture and food systems is well recognised for our future food production. The sector also holds untapped employment and livelihood opportunities (HLPE, 2021). Moreover, as will be shown, agroforestry can be a particularly sustainable and attractive approach for young people. However, because the agricultural sector has failed to provide long-term opportunities, in addition to the added uncertainties from global challenges, young people often do not consider agriculture as their first career choice (HLPE, 2021; International Food Policy Research Institute, 2020; Bezu and Holden, 2014; Kosec et al., 2017). Youth leave agriculture due to the hard work needed to achieve even low yields and the high risk of poor yield from irregular rainfall patterns (Sinare, forthcoming). The disincentives for engaging in agriculture also correlate to perceptions that agribusinesses are not valued or socially accepted (Ephrem et al., 2021). Previous studies established that insufficient information, lack of access to land, limited financial support

and gaps in infrastructure provision and development create significant barriers to youth in agriculture generally and agroforestry specifically (Ahmed et al., 2021; Barzola et al., 2019; Piselli et al., 2019). Addressing issues such as access to land, finance, infrastructure, and possibilities for storage of produce and access to water and markets is necessary, not only to create inclusive and fair labour opportunities within the sector but also for youth to see a future in agriculture. Today, some young people find jobs in other parts of agribusiness, such as retailing, processing and markets, rather than working as producers. However, they often still seek opportunities outside of food systems (Sinare, forthcoming).

The respondents also mention these barriers in our survey, where approximately 51% list access to land or access to money as the top barriers to practicing agroforestry. When asked about what is needed to engage in agroforestry, one of the respondents highlights land ownership in particular: "Most farming practices are done on land that does not



Aulelia Leonidas, Tanzania. Photo: Wilfred Mikomangwa.

belong to the farmers, and you can only use it for less than 5 years. It is difficult to even think of agroforestry on rented land” (Survey, 2021). We note that such barriers might be the same for many smallholder farmers, and not specific to youth. However, the HLPE (2021) presents data indicating that young people – who more often live in rented accommodation or have lower incomes - feel more insecure about access to land compared to older generations. Young women are especially disadvantaged when it comes to land rights (HLPE, 2021).

The survey responses propose areas of opportunities for improvements as well. The most common free text reply (approximately 50%) was that education or networks could improve the situation for rural youth and engage them in agroforestry (Survey, 2021). Farmers’ associations can be one mechanism to support young farmers. Through strengthened associations and networks, young people can mobilize a collective voice and gain easier access to loans and find financing directed towards farmers groups (SIANI, 2021). In free text replies, at least 13 % of the

survey respondents also say governments to be the main responsible entity for improving young peoples’ situation (Survey, 2021). Furthermore, the survey indicates a lack of knowledge about combining crops, pasture and trees in the same area and that there must be incentives for capacity building among young farmers. One respondent suggests a need for training that includes “access to financial support, infrastructure and technological awareness, ... mentorships where youths can learn new farming ideas and diversification methods” (Survey, 2021). Moreover, changing the perception of work in agriculture as well as creating sustainable and inclusive opportunities could incentivize young people to engage in agriculture for their living (Ephrem et al., 2021).

AGROFORESTRY CAN MAKE AGRICULTURE MORE INCLUSIVE, PROFITABLE AND ATTRACTIVE

Transformative action is urgently needed for sustainable and effective food systems that are equitable, profitable and attractive to youth in rural areas (HLPE, 2021). In its

approach to integrate trees into the agricultural landscape, agroforestry provides systematic pathways to a more inclusive and profitable farming method that can be attractive to young people, offering incentives to commit to farming that is more resilient in meeting challenges from climate-related disruptions and economic shocks. For our food systems to become sustainable and inclusive, we need improved diets, reduced risk, increased equality, and fine-tuned focus on addressing the most vulnerable groups and regions (von Braun et al., 2021; Queiroz et al., 2021). Specifically, investing in young people can provide spill-over effects for poverty reduction, employment generation, political stability and peace (HLPE, 2021).

When systemic barriers are addressed, agroforestry can provide direct livelihood opportunities through increased and diversified yields with interlinked social, economic, and environmental benefits for the farmer (Dawson et al., 2013; FAO, 2015). Diversifying income sources and food staples serve as safety nets for poor farmers when the harvest is poor or food prices are too high (Mattsson et al., 2017; FAO, 2018). Agroforestry also makes the farmer more resilient to climate stressors, such as irregular rainfalls, rising temperatures and water shortages (FAO, 2015; Mbow et al., 2014). Trees give shade, provide windbreaks and manage water flows, leading to cooler temperatures that protect crops and animals (FAO, 2015; de Leeuw et al., 2014). The roots of the trees stabilize the soils and support beneficial soil organisms. Finally, agroforestry practices also enable farmers to be less dependent on pesticides – reducing costs for agricultural inputs, decreasing the risk of vulnerability in economic shocks, and preserving the integrity of healthy ecosystems (Ratnadass et al., 2012; FAO, 2018).

The results from the survey confirm that agroforestry can be part of the solution to the uncertainties and risks young farmers face. According to 70% of the respondents, the benefits of engaging in agroforestry are that it is nature-based, eco-friendly and sustainable. It can simultaneously diversify food and income sources, increase production and generate higher income compared to other farming practices, which was mentioned by 23% of the respondents. As one of the respondents explains it, thanks to agroforestry, "you're able to feed yourself and your family with the nutrition that you need. You're also able to be in business throughout the year according to what is in season for planting and harvesting. You have endless options and opportunities" (Survey, 2021).

Agroforestry
can diversify food and income sources, increase production and generate higher income compared to other farming practices

UGANDAN YOUTH GROUPS BRING LIFE BACK INTO THE SOIL

In Uganda, unemployment is a challenge. Another challenge is farming on depleted lands. The organization Vi Agroforestry empowers members of youth groups, like the Kiwazi Nkobazambogo youth group in Wakiso, to be entrepreneurs and make small businesses from producing and selling briquettes and biochar fertilizer and building better cooking stoves. Men and women between 18–35 have received equipment, training, and technical assistance to help them become self-reliant in food production, resilient to the effects of climate change, and generate income.

Reviving depleted lands is urgent to make crops grow well, but buying chemical fertilizers can be a significant expense for a farmer. Hence the business opportunity for biochar fertilizer. With biochar application, less fertilizer is needed because biochar absorbs and slowly releases nutrients to plants, securing the crops against drought. Farmers spend less on seeds as germination rates increase.

Jimmy Zziwa, chairperson of the Kiwazi Nkobazambogo youth group, can see with his own eyes on the land he farms that plants receiving biochar grow tall twice as fast. He exudes optimism for the future.

"Group members are encouraged to work because they earn some money from these products."

Jimmy Zziwa, chairperson of the Kiwazi Nkobazambogo youth group

The youth groups have acquired skills in agroforestry, organic farming, business planning, marketing, financial literacy, and entrepreneurship. They are also more aware of legal structures related to the value chain and have learned how to organize themselves to advocate for their needs and their rights.

Kiwazi Nkobazambogo and the other groups have created new job opportunities and improved their food production and revenues. At the same time, they have improved their local environment through responsible management of resources, and they stand better equipped against climate change.

RECOMMENDATIONS AND CONCLUSIONS

1. Include agroforestry in agricultural extension programmes and target young people as a key group of participants

The focus and acknowledgment of agroforestry's possibilities and spill-over developmental effects should be increased. To enable young people to engage in agroforestry and release the potential of agroforestry practices, policymakers need to take a holistic approach to rural development and the multiple needs that exist. This includes access to capital and land, targeted education, enhanced capacity development, and providing space and influence for youth in policy and decision-making processes. Young people need access to long-term financing opportunities and long-term land agreements. Agroforestry is a long-term investment that can create sustainable and resilient food systems, but policymakers need to acknowledge that it takes time to start up. Long-term funding, loans and long-term access to land are critical factors for youth to engage in agroforestry. For example, IFAD, together with local NGOs, can play a crucial role to build capacity, provide training and coaching on how to access financial services and start saving accounts, as well as provide loans where banks are unable to do so (IFAD, 2015).

2. Youth are a diverse and multifaceted group

We must acknowledge that everyone's needs are different, and that young people are not one group but

many. An intersectional and youth-sensitive lens must be adopted to recognize and act upon rights and needs specific to young farmers and related social-equity dimensions. The situation for young people differs a lot depending on factors such as class, gender, and location. However, young people have in common that they are often vulnerable and marginalised without the same opportunities as older generations, making them more exposed to the effects of climate change, economic instability and lack of job opportunities.

3. Bottom-up inclusion is critical for young people in agroforestry

There needs to be increased incentives and possibilities for young people to create networks to meet, discuss and drive agroforestry development themselves. They need to be given space in participatory decision- and policymaking processes about their future and development. For this to occur, existing networks and farmers' associations need to receive targeted funding for youth activities (SIANI, 2021). It is also vital to ensure the transfer of knowledge and mentorship between older and younger generations - youth have a lot to learn from past experiences, and from traditional and indigenous knowledge sources. Networks and mentorship programmes can help spread knowledge and information about the opportunities of agroforestry and be a space for youth to discuss and learn from each other and from those who are fluent in cultural traditions to support the shift agroforestry.



Students from St Joseph's Secondary School, Kocholia raise trees from their tree nursery
Photo: Vivi Mellegård.

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Beans and avocado are grown on the terraces that farmers have constructed after training from Vi Agroforestry's partner organisation, Unicoopagi in Nyamagabe District, Rwanda. Photo: Vivi Mellegård.



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