Youth Engagement in Climate-Smart Agriculture in Africa

Opportunities and Challenges

Catherine Mungai, Tabitha Muchaba, Lili Szilagyi, Maren Radeny, Vivian Atakos and Divine Ntiokam

















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CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

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Abstract

Engaging youth in agriculture is increasingly being recognized as a critical component of the sustainable development pathway. Worldwide, there is growing concern that young people have become disenchanted with agriculture. About 85% of the young people live in developing countries, where agriculture is likely to provide the main source of income. It is, therefore, vital that young people are actively engaged in agriculture. In order to understand the challenges and opportunities for young people in agriculture, especially in the context of a changing climate, CCAFS East Africa, CSAYN, ACLYP, ICCO Cooperation, AgriProfocus and the CGIAR Research Program on Livestock hosted a series of events and discussions in 2016 and 2017. These included three online discussion forums focusing on different themes including youth, climate-smart agriculture, agribusiness, information communication technology (ICT) and the Sustainable Development Goals (SDGs), which were hosted on the Climate and Agriculture Network for Africa (CANA) platform. Building on the online discussions, a webinar was also organized in 2017. In 2016, the youth engagement efforts culminated in a side event at the United Nations Framework Convention on Climate Change twenty-second session of the Conference of the Parties (COP22) in November, in Marrakech in Morocco.

This report summarizes the outcomes of the online discussions, webinar and side event, focusing on the challenges and opportunities of youth engagement in climate-smart agriculture.

Keywords

Youth; Climate-smart agriculture; Agribusiness; SDGs; Online discussion; COP22; Africa

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Acronyms

ACLYP CLIMDEV-Africa Youth Platform

ASARECA Association for Strengthening Agricultural Research in Eastern and Central

Africa

AYICCC African Youth Initiative on Climate Change

CANA Climate and Agriculture Network for Africa

CCAFS CGIAR Research Program on Climate Change, Agriculture and Food

Security

CSA Climate-smart agriculture

CSAYN Climate Smart Agriculture Youth Network

CTA The Technical Centre for Agricultural and Rural Cooperation

FAO Food and Agriculture Organization of the United Nations

GHG Greenhouse gas

NEPAD New Partnership for Africa's Development

SDGs Sustainable Development Goals

YPARD Young Professionals for Agricultural Development

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Introduction

Prolonged droughts, increased flooding, reducing agricultural productivity and other environmental challenges threaten to slow the pace of economic development and poverty reduction in Africa. In 2015, two global policy agreements relating to climate change and sustainable development were made—the 2015 Paris Agreement and the 2030 Agenda for Sustainable Development (UNFCCC 2015, United Nations 2015). For countries to succeed in achieving the Sustainable Development Goals (SDGs) and addressing the impacts of climate change, governments and development partners must actively engage young women and men from diverse backgrounds in planning, implementation, and monitoring of policies and programs. The youth play an active role in protecting the environment, and identifying and implementing innovative climate change solutions such as climate-smart agriculture (CSA). CSA is an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA aims to tackle three main objectives—sustainably increasing agricultural productivity and incomes, adapting and building resilience to climate change, and reducing and/or removing greenhouse gas (GHG) emissions where possible. CSA, therefore has great potential to contribute to achieving the 2030 Agenda for Sustainable Development.

Engaging youth in agriculture is increasingly being recognized as a critical component of the sustainable development pathway. There is growing concern worldwide that a lot of young people have become disenchanted with agriculture (FAO 2014). About 85% of the young people live in developing countries, where agriculture is likely to provide the main source of income (FAO 2014). It is, therefore, vital that young people are connected with agriculture as a source of income.

Why focus on youth in climate-smart agriculture in Africa?

Africa's economy is heavily dependent on agriculture. In many countries, agriculture still contributes significantly to the gross domestic product (GDP) and provides livelihood and employment opportunities.

Sub-Saharan Africa has the world's youngest population, with over 200 million young people (AGRA 2015). About two-thirds of the inhabitants are under 25 years of age and 44% of its population is under the age of 15 (UNDESA 2015). About 70% of the youth reside in rural areas and employed African youth work primarily in the agricultural sector, where they account for 65% of the workforce. Young African men and women are critical to the development of agriculture in Africa and for efforts to ensure food security. However, Africa's youth unemployment rates are high.

Engaging more young people in the agricultural sector is one of the approaches to addressing the unemployment crisis among African youth. Moreover, Africa holds half of the world's uncultivated arable land, with agriculture set to create stable employment for up to eight million people by 2020 (World Bank 2013). Greater investments in agriculture value chain could potentially add an additional six million jobs (AfDB 2018). Therefore economically empowering more of Africa's youth is growing ever more urgent given that 11 million youth are expected to join the Africa labor market each year. Ensuring they have the tools and experience to lead productive, independent lives—and thus help build a strong middle class—is one of our greatest development challenges. However, there is hope. For instance, climate-smart agriculture has the potential to sustainably increase agricultural productivity and incomes while enhancing adaptation and resilience to climate change. It is anticipated that through a combination of investments, innovation, and ingenuity, growth areas like agriculture could become a driving force across Africa and help to address problems of food insecurity, inequitable economic growth and unemployment among others

In order to understand the challenges and opportunities for young people in agriculture in the context of a changing climate, CCAFS East Africa, CSAYN, ACLYP, ICCO Cooperation, AgriProfocus and the CGIAR Research Program on Livestock hosted a series of events and discussions in 2016 and 2017. These included three online discussion forums focusing on different themes including youth, climate-smart agriculture, agribusiness, information communication technology (ICT), were hosted on the Climate and Agriculture Network for Africa (CANA) platform. In 2016, the youth engagement efforts culminated in a side event at the United Nations Framework Convention on Climate Change twenty-second session of the Conference of the Parties (COP22) in November, in Marrakech in Morocco. Building on the online discussions, a webinar on Engaging African Youth in Agribusiness in a Changing

Climate was also organized in 2017. This report summarizes emerging opportunities and challenges facing youth in Africa, with a focus on climate-smart agriculture.

Engaging African youth in CSA

Between 2016 and 2017, CCAFS East Africa in collaboration with different partners organized three online discussions, a webinar and a side event at COP22, to stimulate discussions on developing a framework for concrete youth engagement in agriculture in a changing climate. The discussions were held alongside key global and continental events and hosted on the Climate and Agriculture Network for Africa (CANA) website.

To commemorate World Youth Skills Day (15th July) and International Youth Day (12th August) two online discussions were held as follows:

- Youth Engagement in CSA and the 2030 Agenda (2016)
- Engaging African Youth in Agribusiness in a Changing Climate (2017)

Prior to the African Forum for Agricultural Advisory Service (AFAAS) Africa-Wide Agricultural Extension Week conference "Scaling up Climate-Smart Agriculture (CSA): Integrating Youth, Women and the Digital Revolution" on 30 October to 3 November 2017, and the request of the CSAYN, CCAFS East Africa hosted an online discussion: Scaling Up Climate Smart Agriculture: Integrating Youth and The Digital Revolution. The conference was organized by AFAAS and the South African Society for Agricultural Extension (SASAE) and the Department of Agriculture, Forestry and Fisheries (DAFF). Findings from the online discussion informed the youth sessions at the conference and were presented by Divine Ntiokam, the Founder of CSAYN in Africa.

Together, the three online discussions attracted over 200 participants drawn from diverse institutions that included NEPAD, ASARECA, FAO, CTA, CSAYN, YPARD, ACLYP, Fintrac, AYICC, AgriProFocus, ICCO Cooperation and individual experts working with the youth from all over the world. Figure 1 shows the number of participants who viewed the CANA website during the webinar on Youth Engagement in CSA and the 2030 Agenda in 2016.

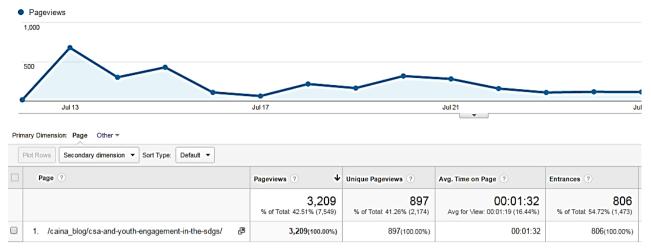


Figure 1. Number of visitors on the CANA blog on youth engagement in CSA and the 2030 Agenda, and the related online discussion

In 2016, the online discussion culminated into a side event at COP22 in Marrakesh in Morocco, where experts working on climate change, farmer and regional organizations explored the contribution of African youth to CSA, with specific examples of youth taking the lead in CSA, highlighting gaps in skills of youth and resources in the uptake and implementation of CSA, and identifying available opportunities and incentives to promote youth engagement in CSA. The online discussion and the COP22 side event focussed on four themes:

- Contribution of youth to CSA in Africa and beyond, focusing on examples from the continent;
- Sustainable Development Goals (SDGs), with a focus on youth contribution through CSA;
- Challenges youth face in CSA implementation; and
- Opportunities available to the youth to engage in CSA.

The side event included insightful presentations by experts:

- Setting the scene: welcome and opening remarks by Maren Radeny (CCAFS East Africa Regional Program Coordinator)
- Mainstreaming youth in climate-smart agriculture as an opportunity for employment by
 Divine Ntiokam (CSAYN/ACLYP Founder and member)
- Opportunities and incentives for youth to engage in CSA by Olu Ajayi (CTA Senior Programme Coordinator)

- Motivating youth through community-based adaptation by Emma Bowa (Networking and Advocacy Manager at CARE International)
- Youth in modernizing African agriculture through CSA by Martin Bwalya (NEPAD's Head of Programme Development Division)
- Challenges and opportunities of young farmers in the New Global Agenda on climate change and agriculture by Dyborn Chibonga (Chief Executive Officer, NASFAM)

The side event organized by Catherine Mungai CCAFS East Africa Partnership and policy specialist and moderated by Vivian Atakos, Regional Communications Specialist at the International Potato Center (CIP) attracted over 60 participants.

Building on the 2016 activities, CCAFS EA hosted a webinar: Engaging African youth in agribusiness in a changing climate in August 2017. The webinar was a culmination of a month-long online discussion organized from 12 July to 12 August 2017 by CCAFS, CGIAR Research Program on Livestock, CSAYN, AgriProFocus, and ICCO Cooperation. The webinar discussed new opportunities for youth, policymakers, scientists, technical experts and other stakeholders that emerged from the online discussion and provided an impetus towards developing a framework for concrete youth engagement in agribusiness in the context of a changing climate.

Opportunities and challenges of engaging African Youth in CSA

The online discussions, webinars and side events provided information which can be used to develop a strategy or roadmap to engage African youth in CSA. The next section of the report highlights the emerging issues for consideration by stakeholders interested in working on youth in agriculture in the context of a changing climate.

SDGs and the contribution of youth through CSA

The second goal of the Sustainable Development Goals (SDGs) seeks to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. To meet SDG 2 and address climate change, and for economic development, engaging youth in agriculture is critical.

At the COP22 side event in 2016, Maren Radeny, CCAFS East Africa Regional Program Coordinator made reference to SDG2: "Africa's youth are the future and a great asset for the continent. We need to equip them to realize their economic potential, drive economic growth across Africa and contribute to the SDGs. Agriculture offers an excellent opportunity for the youth, with employment opportunities along the agricultural value chain."

Opportunities for youth engagement in CSA

Climate change adaptation and mitigation, and youth empowerment are priority concerns for the African Union (AU) Commission. In fact, the AU Commission strongly encourages and supports sustainable development at the economic, environmental, social and political level, and recognizes the importance of empowering the youth and allowing them to become agents of change in societies as enshrined in the AU Agenda 2063. Some of the emerging issues affecting the youth in CSA include mentorship, training, knowledge management and financing. Given the increased focus on youth, and the increasing dependence on agriculture for economic development and food security in Africa, the youth-related events organized by CCAFS EA and partners created a platform to explore practical solutions which governments and institutions can apply to actively engage youth in CSA. Moving forward, some of the issues that need to be addressed to encourage youth engagement in CSA are summarized below.

Mentorship and role models

During the side event at COP22, Olu Ajayi of CTA argued that having access to a role model is a key success factor for youth entrepreneurs as it limits the possible negative impact of lacking experience. In order to motivate youth, there is need to demonstrate the profitability of modern agricultural and agribusiness opportunities. Youth have a lot of potential and if properly mentored, can be instrumental in changing the perception of other youth towards agriculture. This includes mentorship on how to acquire land, capital and farm inputs. Similarly, many participants from the online discussion argued that mentorship is critical to motivate youth. All professions in Africa have role models for the youth. For agriculture to stand out, individuals and groups that have made outstanding contributions in the agricultural sector should be recognized, documented and given platforms to offer mentorship. Just like how the youth look up to musicians, scientists, having a successful farmer teaching the youth

through apprenticeship, will encourage learning on the job. Mentorship will also encourage youth to become patient as agricultural returns take time to accrue.

Training and capacity development

Training on CSA is important in driving uptake. Education is central to the development and improvement of the lives of young people globally, and has been identified as a priority area in internationally agreed development goals, including the Sustainable Development Goals and the World Programme of Action for Youth. For the African youth, the challenge is dissemination of knowledge on climate change and CSA. Thus, CSA and climate change should be included in the education curriculum for primary and high schools, and at college level. Integrating CSA in the academic curriculum could increase youth awareness and action on climate change in agriculture. Eventually, it could also inform farming communities to better adapt to and help mitigate climate change. Most youth in Africa lack access to training and education on farming and agricultural skills, which is crucial for providing them with numeracy and literacy, managerial and business skills. There are several ways in which this can be explored:

- Training school teachers at primary level on climate change and CSA, who could then pass on the knowledge to students creating a 'multiplier effect'. Exposing students to climate change issues and likely future scenarios might play a key role in preparing them and ultimately influencing the thinking of the youth on CSA;
- Vocational training and extension services on agricultural skills and capacity building for the youth who no longer attend school. Agriculture could be presented as a means to fight food insecurity to youth, not necessarily as a means of doing business but a personal and voluntary commitment;
- Indigenous knowledge, where agricultural and farming knowledge is passed on from the elderly to the youth in a coordinated, systematic and effective way;
- Developing curricula on CSA for higher education such as universities and in agricultural training institutions to broaden knowledge, increase research and disseminate information and technology for agriculture and adapting to climate change;
- Awareness and capacity building workshops and seminars to ascertain youth participation and involvement in CSA and the global socio-economic and environmental agenda; and
- On job training or apprenticeship to facilitate youth with practical skills and knowledge.

Agricultural training and education should reflect the needs of the agricultural labour market, including its practical challenges and rewards.

Youth engagement in climate change and agriculture policy

Youth need to be actively engaged in climate change and agriculture-related decision making and policy processes across scales at local, national and global levels. It is clear that young people must be part of the solution as they are facing the challenges that policies seek to address. In Africa, the youth are often not included in agricultural policy-making processes, which is essential for social and economic development of youth. For an increased understanding of the challenges youth face in the agricultural sector, data on youth aspirations, needs and concerns should be taken into account in order to come up with policies that make agriculture attractive to them. For example, youth are often relegated to the background when it comes to discussions on land tenure and the inherent natural assets.

Advocacy activities should address the challenges faced by youth as they try to establish themselves in farming. Access to land remains one of the greatest challenge. While a number of studies have demonstrated the benefits of CSA, slow uptake of CSA is hindering development in Africa. Meeting the SDGs targets requires availability of adequate financing, partnerships, cohesion and promotion of Public-Private Partnerships. Governments need to speed up the process of developing their national SDG indicators and targets that reflect the national circumstances. For CSA to support economic growth and livelihoods, some tradeoffs are essential, especially, in the short term. Government policies including productive and strategic subsidies become necessary to mitigate the trade-off in the interest of the greater public good. So, within the political-economy framework, we need to examine and support those measures which will ensure CSA is key pillar to sustaining economic growth and inclusive development.

Peer to peer influence

Youth are keen to belong to a community that supports their development and where they can share ideas and learn from others. Those lacking experience find it hard to share ideas with senior professionals, but may feel more comfortable sharing with their peers. The success of youth in CSA has to be championed by the youth themselves so that they can own it.

Involving them in early steps, will help them to learn and appreciate CSA thus leading them to share and train other youths on CSA. It is anticipated that youth would give a better

listening ear to their fellow youth who are already involved in CSA and making a living from agriculture and agribusiness.

Youth networks can provide freedom and space to obtain feedback on ideas on CSA. There are numerous opportunities for youth to benefit from CSA especially on the African continent and to achieve this, youth must be ready to network.

Participation of youth at all levels

One of the challenges the youth face in CSA implementation, is the lack of recognition of their role and potential. Young farmers have great initiatives on CSA practices such as zero tillage and ICT tools, which often lack support from government and other development partners because they do not really trust youth initiatives. The participation of youth in decision making across scales (international, national, community and household) will further empower them to use their voice and education as well as benefit from all information and capacity development related to opportunities of CSA-sensitive practices. The youth should participate in the entire agricultural value chain (production, value addition and marketing).

Access to land and financial resources

Land access is not only the number one requirement for starting farming, but it can also contribute to household food security and is a means for employment creation and income generation. Land is scarce and sometimes difficult to access, and without collateral for credit a young farmer can't afford it.

Even if the youth have access to land, they need access to finance and insurance schemes. The youth face limited financial capabilities, limited financial products and reluctance from development practitioners to invest in youth-related enterprises because of lack of security. Given the initial investments needed for farming, young farmers are financially vulnerable and unable to deal with potential losses, which often occur during the first few crop cycles. Appropriate and inclusive financial services can equip youth with the resources and support to become productive and economically active, and make the transition from childhood to adulthood.

At the COP22 event, in his closing remarks, Martin Bwalya, Head of the Programme

Development Division, New Partnership for Africa's Development (NEPAD), informed

participants that NEPAD has established a catalytic fund to encourage women and youth from

Africa to engage in CSA. He also added that initiatives such as Global Alliance for Climate-Smart Agriculture (GACSA) have been established to share knowledge and generate creative solutions regarding food security and climate change.

Other agricultural inputs are equally important and have a fundamental role in agricultural production, thus the availability and accessibility of farm inputs affects the involvement of youth in agriculture. Promoting policies such as tax waivers that help the youth to access inputs (like foot pumps for irrigation or mechanical processing equipment), will take away the drudgery they see their parents and grandparents struggling with (hand hoes, etc.).

Challenges youth face in CSA implementation

Despite the interest in agriculture as a career, few young farmers work in agriculture all over Africa. To encourage more youth to join the agricultural sector; farmers, businesses, policy-makers, and educators need to promote agriculture as an intellectually stimulating and economically sustainable career—and make jobs in the agriculture and food system "cool" for young people. The "get rich quick" notion which has been used to entice youth participation in agri-business, has encouraged unethical agricultural practices. It is important to point out that wealth creation requires patience and hard work. Agriculture means more than subsistence or small-scale farming. The young people can explore career options in agriculture by applying new technologies and new thinking thus stimulating and making jobs in agriculture 'cool' for them.

Over the years, African youth have proved their potential in promoting and implementing climate change adaptation projects. These innovations are largely driven by climate change impacts. However, the youth face various challenges that include low technical capacity and education, high rates of poverty and lack of financial resources. Within the context of agriculture, African youth continue to battle challenges associated with the negative perception of agriculture as a "difficult" job with little returns and also lack of access to land and markets.

Entry points for youth engagement in CSA

CCAFS is already working with youth groups in East Africa to undertake several CSA initiatives. For instance, smart farms to test a combination of CSA practices such as greenhouse production of tomatoes and green beans for better disease and pest control,

continuous production to meet market demand and water efficiency; rainwater harvesting irrigation and fish farming for improved nutrition and uptake of resilient breeds of goats (Galla) and sheep (Red Maasai). Other youth groups are also involved in Agroforestry which entails integrating fruit trees and multipurpose trees for fodder and fuelwood, and tree nurseries whereby they sell their seedlings. A key activity is also participation in initiatives on Climate Information Service (CIS) for informed farm decisions.

Conclusion

Engaging more young people in the agricultural sector is one of the approaches to addressing the unemployment crisis among African youth. Through the online discussion forums focusing on different themes including youth, climate-smart agriculture, agribusiness, information communication technology (ICT) and the Sustainable Development Goals (SDGs), it is clear that a lot still needs to be done to engage young people in agriculture.

From their experiences, young farmers acknowledge that copy-paste ideas never really work and before making any investment a thorough cost-benefit analysis ought to be conducted. They emphasized the need to consult experts in order to make informed decisions. Going forward, there is need for youth empowerment, moral and financial support to enable them to shift their perceptions towards agriculture. A key message from the online discussions is that governments and other stakeholders need to actively engage with the youth on matters relating to agriculture. Governments, with support from non-governmental organizations, international agencies and research institutions, need to establish enabling environments, including incentives, to support young population's initiatives to take up agriculture. Issues such as perception regarding agriculture across generations need to be addressed in order for the older generation to encourage young people to take up agriculture as a source of livelihood. In conclusion, the youth in Africa can play an important role in achieving the sustainable development goals, especially addressing the challenge of food security through CSA. CCAFS will continue to engage with partners to identify concrete ways to engage with the youth in CSA.

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