

Adaptation Action through Green Jobs for Youth

Key messages:

- The agricultural sector employs an estimated 1.3 billion workers worldwide. With **71 million unemployed youth** globally, agriculture and related agri-food sectors must be revitalized to address climate change and the environmental impacts.
- Youth engagement in agricultural sectors is key to transforming antiquated agricultural practices and to avoid food production and supply issues in the future. Young people have a comparative advantage in their use of new technologies and promotion of innovation, which is key to advancing **new opportunities in emerging food value chains while increasing adaptation capacities and resilience**.
- Access to the right information, integrated training approaches, modern information and communication technologies, youth focussed programmes and more targeted and integrated policies can address the existing challenges and constraints hindering youth engagement in agriculture and to create green jobs for rural youth.

Climate Change, Agriculture and Youth – an untapped potential for green jobs and sustainable development

Agriculture is responsible for about a quarter of all anthropogenic greenhouse gas (GHG) emissions, while the changing climate, itself, is taking a rapid and heavy toll on the sector in terms of socio-economic and food security impacts. Although half of the world’s labour force are employed in the agricultural sectors, employment and entrepreneurial opportunities for young women and men remain limited and of poor quality, particularly for those living in economically stagnant rural areas of developing countries. With 71 million unemployed youth globally, agriculture and related agri-food sectors must be revitalized to address the cycle of cause of climate change and effect on the environment.

With global drive towards transition to Green Economy, green jobs in agricultural sector are expected to yield an increase of 52 to 59 percent in primary-sector employment and a 20 percent increase in global gross domestic product by 2050.

The transition to the Green Economy will provide an opportunity to reduce youth unemployment, as well as to transform agricultural sectors towards more sustainable practices that reduce GHG emissions and increase adaptation and resilience capacities. Furthermore, re-engaging youth in agricultural sectors has multiple co benefits, including the following:

- reducing youth migration to urban areas;
- allowing smoother farmers’ generational change, with higher potential skills to adopt new technologies and more sustainable agricultural practices; and
- stimulating innovative entrepreneurship in rural areas.

However, youth engagement in agriculture face numerous constraints. Likely, investments from government and private sector in green technologies, sustainable solutions, innovations and new businesses are necessary towards a path for a transition to the Green Economy that is just and fair.

Box 1

Challenges for youth engagement in agricultural sectors

- Rural smallholders are extremely vulnerable vis-à-vis climate change, informal and unstable employment, with limited means to cope with risks;
- The majority of rural workers hold precarious, gender-imbalanced and poorly remunerated jobs in the informal rural economy, which tend to turn youth away from the sector or to forced migration, causing the aging of farmers and the reduction in food security along with over-crowding of urban areas¹;
- Rural job opportunities often do not meet the needs or aspirations of the youth;
- Poor access to quality education and adequate training in agricultural sectors, productive resources and assets, financial services and social protection hinder youth access to decent employment in agricultural sectors; and
- Insufficient involvement in the decision making of youth-led associations and cooperatives, that are likely to bring innovating approaches to agriculture.

Source: 1) FAO 2020. Rural youth and the COVID-19 pandemic. (also available at <http://www.fao.org/documents/card/en/c/ca9531en>)

How resilient and sustainable are the current food value chains?

The economic, social, and environmental sustainability of food value chains depends on minimizing negative impacts on the non-renewable natural resources which the food value chains critically depend on. Recent events showed that food value chains are not as resilient and sustainable as it was thought, rather being fragile towards climate change and also other external impacts such as Covid-19¹.

Evidence:

- Agriculture absorbs 26 percent of the economic impact of climate disasters, rising to 83 percent for drought in developing countries².
- World food commodity prices have been declining, as the economic and logistical impacts of the COVID-19 pandemic resulted in

significant contractions in demand for many commodities.

- Disruptions in supply chains due to the Covid-19 quarantine measures are resulting in significant increases of food loss and waste, especially of perishable agricultural products such as fruits and vegetables, fish, meat and dairy products³.

Food value chains are extremely vulnerable to external factors, such as impacts of climate change as well as global pandemics, both in terms of environmental and socio-economic impacts. Without proper social and economic security measures as well as recovery responses the agricultural and food production sectors are becoming even more unattractive for youth to engage.

¹ Reardon et al. 2020. How COVID-19 may disrupt food supply chains in developing countries (also available at <https://www.ifpri.org/blog/how-covid-19-may-disrupt-food-supply-chains-developing-countries>)

² FAO 2019. FAO's work on Climate Change. (also available at <http://www.fao.org/3/ca7126en/ca7126en.pdf>)

³ FAO 2020. COVID-19 and the risk to food supply chains: How to respond? (also available at <http://www.fao.org/3/ca8388en/CA8388EN.pdf>)

Climate Action and Green Economy

Climate change mitigation and adaptation in agriculture provide key opportunities for employment to the rising youth population. The current paradigm of deforestation and biodiversity loss can be curbed by investing in sustainable solutions, and action to reduce poverty and hunger can also be achieved by investing in smallholder producers. This opportunity to combine green action with livelihoods for youth requires building a coordinated, multisector approach at local and national levels that involves youth directly to identify needs, develop sustainable opportunities, and mobilise necessary investments.

There are largely untapped potential of farm and non-farm employment opportunities in the agricultural sector and within food value chains. There is a need of a paradigm shift towards a green and circular economy, that promotes youth-led

innovation for sustainable food value chains. Youth-led green technologies, innovations and sustainable businesses in food value chains can provide a viable path for a transition that is climate resilient and adaptive as well as sustainable and socially inclusive. A reinvigorated rural economy is needed to spur agriculture to shift from being a direct (often subsistence) employer to a driver of rural development and growth. Agriculture must become attractive to the current and future generations as a sector with opportunities, not only in farming per se, but also in a rural service economy.

Under the right conditions, youth can be empowered to engage further, especially in the latter part of the food value chain, including processing, packaging, branding, and trading. Youth employment can be an innovative game changer and policy makers should consider this as a priority.

Box 2

Policy Priorities for Green Economy

- Support environmentally friendly, resilient and adaptive agronomic practices in order to reduce the risks of poverty traps. New adaptive, innovative and climate smart solutions should be tested and upscaled in agriculture and food value chains for enhancing resilience and adaptation actions²;
- Explore better and more sustainable production patterns, able to combine profitability and sustainability to reduce the risk of negative externalities, such as zoonoses' spread²;
- Promote investment in infrastructure and digital innovation along the value chains, to improve the sector's image, create jobs and attract more young people into the sectors;
- Foster more resilient and shorter food value chains that promote green and circular economy;
- Create enabling environments for greening food value chains, supporting small scale food producers and for green start-ups through financial and legislative support, and providing easier access to innovation and technology; and
- Strengthen government capacity to better develop, monitor, and mainstream green development strategies in public policy.

Sources: 1) For specific examples, please refer to Stucki M., Blignaut A. (2018) Greening Food Value Chains in Emerging Economies. In: Benetto E., Gericke K., Guiton M. (eds) Designing Sustainable Technologies, Products and Policies. Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-319-66981-6_13.

2) Such as limiting concentrated mega-farms, reduce hyper intensive productions, avoid hyper intensive use of chemical fertilizers, which risk to increase zoonotic risks and deplete soil quality.

The Role of Youth in the Green Transition

Proposed actions:

- Make agriculture more appealing to young generations, with youth-specific green job programs and investments;
- Enhance green skills development (both transferrable and sector-specific) through formal and non-formal education and training;
- Support youth involvement in financial schemes and programs able to promote youth-centred mechanisms for access to agri-finance;
- Support youth-led, innovative agri-companies and relevant collective action organizations including producer organizations and rural institutions that offer resilient and adaptive solutions;
- Identify market-driven, youth opportunities in agriculture and carry out youth-specific assessments for public agricultural projects.
- Carry out assessment for rural public employment programmes schemes (i.e. clean

energy, waste management, agroforestry); and

- Support youth involvement in local and national policy development for climate change action and sustainable development.

FAO's youth strategy

FAO contributes to youth employment and youth-tailored business models in more than 40 countries. FAO also has a comparative advantage of working in rural development and generating decent employment opportunities in rural areas to eradicate poverty and hunger. Newly established FAO Youth Committee brings together young professionals from all regions to help building more dynamic and innovative solutions to address the challenges of climate change, agriculture, employment and development, as well as how policy makers and international organizations can design more targeted approaches while also empowering youth to be agents of change.

Box 3

Opportunities Used for Youth Engagement Project in Uganda

Under the umbrella of the Integrating Agriculture in National Adaptation Plans (NAP-Ag) programme¹, jointly coordinated by FAO and UNDP, and funded by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany, the project promoted decent rural youth employment, and helped enhancing youth's resilience related to agri-business risks and uncertainties.

The project supported Junior Landscape Programme that has trained over 7800 young students to undertake technologies that can support their livelihoods after school. These technologies include tree, nursery and planting, piggery, poultry management, crop productions, and sustainable land management. This resulted in an improvement of food security in schools, as students were able to produce their own food. Furthermore, the intervention enabled youth to create green jobs and start small-scale agricultural enterprises.

Young farmers were also trained on the Songhai model of integrated farming of crops, livestock, fish, and energy generation while protecting natural resources and the environment². The training provided the necessary means for upscaling to 25 champion farmers.

The project also supported the setting up of linkages with agricultural insurance organizations and companies including government supported programmes through the Uganda Insurers Association to cushion agricultural loss and increase resilience.

Sources: 1) <http://www.fao.org/in-action/naps/en/>;

2) <http://www.songhai.org/index.php/en/home-en>

Box 4

Green Jobs for Rural Youth Employment project

In a four-year project, funded by the Korea International Cooperation Agency, in Sierra Leone, Zimbabwe and Timor-Leste, rural and urban youths are receiving the opportunity to develop skills for working in the green agriculture, energy and waste-management sectors. The training also includes transferrable soft skills, such as team work, communication, business development, information technology and financial literacy as well as sector-specific skills.

Participants are identifying a local issue that could be addressed using green solutions learned as part of their training and will submit a two-year proposal for a public employment programme or business start-up. Selected candidates will be given a job opportunity or start-up seed funding for two years, in partnership with local government or the private sector. Programme challenges and best practices will be widely disseminated to develop national strategies for youth employment.¹

Source: 1) <http://www.fao.org/3/ca3820en/CA3820EN.pdf>

Additional References

On Covid19

Covid social protection responses (World Bank related)

<https://www.ugogentilini.net/?p=936>

Global Monitoring of School Meals During COVID-19 School Closures (World Bank related)

https://cdn.wfp.org/2020/school-feeding-map/?_ga=2.38624547.1638056799.1585312246-1438041047.1585312246

Food export restriction (IFPRI/CGIAR)

<https://public.tableau.com/profile/laborde6680#!/vizhome/ExportRestrictionsTracker/FoodExportRestrictionsTracker>

FAO tweets monitor <https://datalab.review.fao.org/tweets-analysis.html#>

On FAO and Sustainable Value Chains

FAO 2013. Value Chain Analysis for Policy Making Methodological Guidelines and country cases for a Quantitative Approach. (also available at <http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/885654/>)

FAO 2014. Sustainable food value chains. Guiding principles. <http://www.fao.org/3/a-i3953e.pdf>

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FAO 2019. FAO's Sustainable Food Value Chains Knowledge Platform. (also available at <http://www.fao.org/sustainable-food-value-chains/library/keyword-search/en/>)

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FAO 2019. Towards sustainable bioeconomy: Lessons learned from case studies. (also available at <http://www.fao.org/3/ca4352en/ca4352en.pdf>)

Reardon et al. 2020. How COVID-19 may disrupt food supply chains in developing countries (also available at <https://www.ifpri.org/blog/how-covid-19-may-disrupt-food-supply-chains-developing-countries>)

Databases

Fanzo, J., Haddad, L., McLaren, R. et al. 2020. The Food Systems Dashboard is a new tool to inform better food policy. *Nat Food* 1, 243–246 (2020) (also available at <http://www.foodsystemsdashboard.org/countrydashboard>).

This policy brief is part of a series of briefs developed as part of the Technical Examination Process on Adaptation (TEP-A), which in 2020 is focusing on the topic of Education and training, public participation and youth to enhance adaptation action. The brief was developed by The Food and Agriculture Organization of the United Nations in its capacity as a volunteer expert organization contributing to the TEP-A in 2020.

The TEP-A was established under the United Nations Framework Convention on Climate Change (UNFCCC) process in 2015 and seeks to identify concrete opportunities for strengthening resilience, reducing vulnerabilities, and increasing the understanding and implementation of adaptation actions. The process is organized by the SBSTA and SBI and conducted by the Adaptation Committee. For more information see tep-a.org