german cooperation
DEUTSCHE ZUSAMMENARBEIT

Published by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

HOW TO... BOOST RURAL YOUTH EMPLOYMENT THROUGH AGROECOLOGY

A Paper Series for Rural Youth Employment

There is a need to create decent employment opportunities for rural youth on the African continent. At the same time, agricultural production in Africa needs to increase, while simultaneously increasing food system resilience to climate change and global supply chain disruptions. Agroecology is a transformative approach to food systems. This how to paper presents a theoretical basis and concrete case study examples on how agroecology can be leveraged to create jobs for rural youth in Africa, on farms and in supply chains. If systemically implemented, agroecology creates numerous co-benefits including improved food security and nutrition, increased resilience and mitigation of negative social and environmental externalities associated with conventional agricultural and food systems.

Content

THE CHALLENGE

Demographically, Africa is the youngest continent. While this represents an immense potential for economic development, youth unemployment in Africa is soaring, with only one-sixth of the population aged 15-35 being in wage employment and one-third being unemployed and discouraged (AfDB, 2016).

This drives rural to urban migration, yet rarely are urban centres capable of absorbing the growing young workforce or offering better realistic perspectives for youth. Hence, with around 25 million young people entering the labour market every year in Africa, there is a demand for more and better jobs in the agri-food sector (BMZ, 2023).

Meanwhile, to feed the rapidly growing population, agricultural production in Africa needs to double by 2050 (FAO, 2009). This challenge is exacerbated by the growing impacts on agricultural production of climate change, biodiversity loss and land degradation. Further, global supply chain disruptions associated with the COVID-19 pandemic as well as wars and conflicts with international dimension have highlighted the vulnerabilities of African food systems, which are strongly reliant on imports of agri-inputs (particularly fertilisers) and staple foods (WBG, 2022). Agroecology may offer a triple-win solution to this complex challenge by simultaneously creating decent jobs for rural youth, sustainably increasing agricultural production and enhancing resilience to environmental as well as socio-economic shocks and crises.

Back
to content

HOW TO DO IT

Agroecology is an integrated approach that combines ecological and social concepts to render agricultural and food systems more sustainable and equitable (FAO, 2018; HLPE, 2019). Elements and principles of agroecology have been elaborated to guide agroecological interventions and transitions, while highlighting the importance of applying these in a context-specific manner.

Circularity, both in natural resource management and in socio-economic terms, is a central component of agroecological approaches, providing viable entry points for the creation of jobs in the agri-food sector. Circular natural resource management like recycling water and organic matter (e.g. manure, agricultural waste and by-products to produce compost) can be a viable business model that leads to improved soil health and agricultural productivity while at the same time increasing resilience by reducing dependencies on global supply chains. In socio-economic terms, conscious efforts to increase connectivity between producers and consumers can result in higher incomes for farmers, better nutritional outcomes for consumers and the creation of jobs. This includes through the application of Information and Communications Technology (ICT) solutions (such as digital agriculture advising or local marketing platforms) enabling fair and localised value chains, food webs and markets.

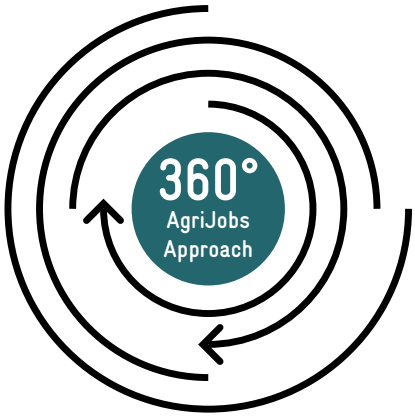
Diversification is another core aspect of agroecology. Enhanced diversity of on-farm production, in terms of crop and breed diversity but also functional agrobiodiversity (e.g. non-crop plants for improving soil health or for pest management) increases economic and environmental resilience of producers but can also result in broader economic diversification and the creation of economically viable jobs for rural youth and women. On the input side, local breeding, propagation and dissemination of a diversified set of plants and animals for farms can result in the establishment or expansion of small to medium enterprises (e.g. plant nurseries). Further, certain non-crop plants are suitable for producing organic pesticides (e.g. marigold, chrysanthemum), which – if commercialised – can provide additional income to agri-preneurs and create additional rural jobs. On the output side, diversified on-farm production is also likely to result in job opportunities in processing, marketing and catering along rural to urban corridors, particularly if linked with efforts to enhance producer-consumer connections and sensitisation on the multiple benefits of a diversified diet. Finally, the often-cited labour and knowledge intensity of agroecological farming can be a job creator for youth with diverse skill sets.

Co-creation of knowledge is a key principle of agroecology and the context specificity of agroecology implies the need for a paradigm shift in rural advisory services and agricultural schools and training centres towards a system with a stronger focus on co-designing locally relevant solutions through close engagement with communities, farmer-based organisations or youth networks. Additionally, increasing digitalisation as well as the design and production of small-scale agricultural machinery suitable for diversified farming can be a potential major job creator in developing economies to help in rendering the agricultural sector more attractive to youth.

The global project 'Rural Employment with Focus on Youth' implements the adapted integrated approach to employment promotion (360° Agri-Jobs-Approach) in Kenya, Burkina Faso, Malawi and Mozambique (**link**). The approach allows to analyse and address labour market constraints in rural areas in a holistic way. It combines the three main pillars of demand for labour (start-up promotion and private sector development), supply of labour (improving employability through qualification and skills) and matching (of demand and supply side) with interventions to create favourable framework conditions and strengthening systemic foundations.

Back to content

Integrating agroecological approaches within the 360° AgriJobs Approach can help to reach employment goals and create a win-win situation.



Integrating agroecological approaches in the 360° AgriJobs Approach

FRAMEWORK CONDITIONS

- Strengthen education and extension systems; policy frameworks to support the diversification of production systems.
- Support local producers in producing ecological products, through cross-sectoral dialogues and sensitisation.
- Improve financial and physical infrastructure suitable for decentralised markets.

DEMAND FOR LABOUR

- Engage with youth groups and farmer associations on the diverse opportunities within agroecology.
- Promotion of integrated and diverse business models with an agroecological focus.
- Support through coaching and mentoring of start-ups and existing MSMEs in the agroecological realm.

MATCHING

- Establishing digital and physical platforms that link farmers with buyers and consumers.
- Linking organic agri- input producers with local farmers.
- Strengthen rural advisory services and agricultural training centres to incorporate relevant agroecological approaches.

SUPPLY OF LABOUR

- Training on financial literacy, soft skills as well as technical know-how on agroecological farming practices.
- Qualification on integrated and diverse business models with agroecological focus.
- Focus on sharing information on agroecological processes, marketing and production.

FOUNDATIONS

- Media campaigns and awareness raising on the personal and societal benefits of diversified and localised agricultural and food systems.
- Sensitisation on the micro- and macroeconomic potentials of promoting local production of organic agri-inputs.
- Promoting societal dialogues on the risks associated with environmental crises and dependence on global value chains for food security and economic development.

Get to know youth transforming the sector through agroecolocial business models, access more tools to support them and experience the 360° AgriJobs Approach on our website:

Look for
360° AGRIJOBS (agrijobs.snrd-africa.net)

Back to content

CONCRETE ACTIVITIES

The following list of examples gives an insight into concrete project activities implemented by the global project, as well as other GIZ-implemented projects.

New training formats – Agroecological training for rural youth

Burkina Faso

Shifting away from traditional classroom-based training models can help youth to retain more knowledge and grow their soft-skills simultaneously. *AgroBootCamp* is an innovative training in Burkina Faso, implemented with the local partner **Béo-nèere** focused on agroecological knowledge combined with concrete technical and entrepreneurial skills. The training has a holistic focus and places trainees into a weeklong intensive course. During this course trainees cook, eat, work, learn and exercise together, creating inter-cultural and gender awareness. This is held all in tandem with an agroecological training focus, teaching these young entrepreneurs how to do intercropping, use organic materials for compost production or organic pesticides, sustainable and local seed replication and overall, better their local environment and create a solid business opportunity for themselves that allows them to gain a decent income. In total 262 participants have gone through this training and each trainee that adopted the practices has been able to create over two additional jobs on average.

QUI SOMMES-NOUS ? – Association Beo-Neere Agroécologie (beoneere-agroecologie.bf)

Entrepreneur mindset in rural youth employment

Back to content

Improved farming practices for additional income and sustainability

Kenya, Mozambique

Intercropping and quality seeds are vital to ensure proper soil protection, pest management, proper yields, disease resistance and overall protection of various agroecological products. In Kenya, passionfruit production is an important production system, that is often fraught with soil degradation, various pests and a lack of immediate financial return. In Kenya, the project in cooperation with **ProSoil** identified various cover crops that can be planted along with passionfruit vines in order to improve plant health, while producing supplementary income within the first few years, before the passionfruit crops become fully productive.
In Mozambique, a contract scheme was developed to improve agricultural feedstock and increase rural youths' economic resilience. Through this contracted farming scheme 269 young farmers received seeds, equipment for processing as well as technical assistance. They in turn replicate and give the seeds back to the parent company (Nhamadzi and Oruwera) who sells them. A win-win situation: For young rural farmers, it ensures a safe market to sell their seeds while the company ensures its quality seed supply to sell. Another positive result is the spread of quality local seeds throughout the regions of Mozambique. The use of these local seeds can increase the resiliency of the Mozambique agricultural system as they are adapted to the climate, possibly minimising various plant diseases. This in-turn improves rural livelihoods (financially) while growing the diversity of locally produced seeds.

Conserving and rehabilitating soil to promote food security and climate protection – giz.de

Increasing income through beekeeping and diversification

Kenya, Malawi

Agroecological principles focus not on standalone measures but creating integrated systems that diversify production systems and secure financial livelihood. This can be achieved by addressing youth both individually as well as within groups, e.g. youth organisations or women groups. Beekeeping along with passionfruit and other horticulture production systems provides a diverse and economically viable agricultural system both in Malawi and Kenya. Through integrated trainings, 50 youth organisations comprising of 200 youths were taught how to improve their beekeeping techniques using local knowledge and techniques in Malawi. This helped the youth to not only improve their beekeeping production, but also how to properly place the hives to work in tandem with their horticultural fields and improve their output both productionally and financially. While in Kenya 200 youths were taught proper passion fruit production systems and how beekeeping can improve pollination of their existing business, while providing supplementary financial gains through the production of honey and other beekeeping services, such as honey harvesting.

Back to content

Solar irrigation – creating climate-friendly jobs while increasing productivity

Malawi

Climate-friendly, local and financially viable irrigation systems are vital to sustainably increase agricultural production. In Malawi, this issue is specifically addressed through solar irrigation systems from the project **Sun4Water** that are suitable for smallholder farmers and climate-friendly as it is powered by sunlight. Through upfront payments, farmers can receive a solar irrigation system along with training on usage and repairs. These systems can be flood based, or when financially possible drip irrigation (which improves soil and crop retention). By using either system farmers are no longer dependent on rainfall, or motorised pump systems and in turn reduce their greenhouse gas emissions. Those farmers who can afford drip irrigation systems protect their cropland from further degradation, increasing their agroecological effect and creating opportunities for a higher financial return on their crops. Further job opportunities are created, as youth are trained to do maintenance on the systems and provide assistance for farmers who may have issues throughout the products' usage. Thus far 150 pumps have been installed in Malawi and 50 youths have been trained in maintenance work. Creating job opportunities, improving agricultural production and reducing climate impact at the same time.

Sun4Water – Promoting climate friendly, water- and energy efficient solar-powered irrigation systems

Compost production as a business model

Burkina Faso

In a market-oriented approach, a decentralised business model for compost production was identified and promoted in Burkina Faso. Organic waste from the industrial processing of various agricultural products (mainly mangoes, but also cashews and maize) is recycled and converted into organic high-quality compost. New jobs are created while the waste problem of processing companies is solved sustainably. This is a big innovation in the sector and a win-win situation for the processing companies, youth establishing a viable business through compost production and farmers who can buy a locally produced quality product. In total, 99 youth received technical and entrepreneurial training and support on internal group organisation to develop a system of timely pick-up of waste, processing into compost and distribution and sale to smallholder farmers or cooperatives. In cooperation with the local research institute INERA, the compost is even certified. Support was provided for the purchase of machinery (shredders) and accessories for 12 start-ups, of which three are women-owned enterprises. The costs were shared and the companies and cooperatives paid 50% of the purchase costs. A local machine service was involved in training on the safe use of the machinery and future maintenance.

Back to content

LESSONS & RECOMMENDATIONS...

Recent global supply chain disruptions highlighted the risks associated with low food sovereignty as well as excessive dependence on imported mineral fertiliser. This created enhanced interest and incentives for African stakeholders to locally produce and use ecological agricultural inputs as well as strengthening local agricultural and food value chains.

Diversified agroecological farming systems provide considerable potential for additional on-farm jobs but also create business and employment opportunities up- (input production and supply) and downstream (processing and marketing) in value chains – for individuals and groups, such as youth organisations.

In projects not specifically designed through an agroecology lens there is considerable potential to contribute to agroecological transitions by using agroecological principles and practices to leverage project objectives such as job creation. An opportunity for doing so is to analyse the projects scope and activities with relevant tools (e.g. **Agroecology Criteria Tool**) to identify entry points for agroecology. It is good to already consider it during project design, but it can also be done in an already running project which is open to often small but effectful modifications in this regard.

Agroecology is a food systems approach and should hence not be limited to a series of farming practices when considering its potential for rural youth employment. Socioeconomic dimensions of agroecology – such as co-creation of knowledge and circular and **solidarity economy** – are a viable entry point for off-farm job creation for instance in the provision of rural advisory services and in innovative marketing models that strengthen connections between producers and consumers.

To leverage rural youth employment through agroecology, agroecological practices and business models need to be evaluated particularly from an economic and financial perspective. Only when practices are economically viable, resulting in additional income and stable creation of jobs, will they be sustainably implemented.

In many African countries the youth employment potential may be a much better entry point for accelerating agroecological transitions than environmental concerns, without disregarding the co-benefits of improving climate change resilience and ecosystem integrity as key factors in creating food system sustainability. Once people's basic needs are addressed, all additional benefits (climate protection, food sovereignty, revitalisation of ecosystem services etc.) are a win-win.

Back
to content

This **series of How to Papers** has been developed by the **Global Project Rural Employment with a Focus on Youth** and aims to process and systematise the project's practical experiences. Each **How to Paper** has a thematic focus and provides a brief overview of innovative approaches and inspiration for practical implementation. The series targets implementing organisations and donor agencies working in the field of youth employment.

FURTHER RESOURCES AND CONTACTS

Harnessing the potential of the 10 Elements of Agroecology (fao.org)

360° AgriJobs Website: 360° AgriJobs (snrd-africa.net)

Green Jobs and Income Potential: Agroecology's Role in Rural Employment (agrijobs.snrd-africa.net)

CFS HLPE Report on Agroecological Approaches (fao.org)

Agroecological Business Case (agroecology-pool.org)

ACT: Agroecology Criteria Tool (agroecology-pool.org)

Job Perspectives in Agroecology (giz.de)

As a resource person, please feel free to contact: Frank Bertelmann (**frank.bertelmann@giz.de**)

IMPRINT

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Global Project Rural Employment with a Focus on Youth

Friedrich-Ebert-Allee 32 + 40
53113 Bonn, Germany
T +49 228 4460-0
F +49 228 4460-1766

E info@giz.de
I www.giz.de/en

Author:
Matthias Geck, Daria Hasse, Tessa Robinson

Design:
Agnes Weegen, Cologne

Photo credits:
Page 1, 3, 6, 7 (left): © GIZ/ Katja Weber
Page 7 (right): © GIZ/ mediahouse Timveni

URL links:
This publication contains links to websites of other organisations. These links are solely intended to enhance user-friendliness and in no way indicate an approval of the contents provided on any other website. Responsibility for content on these sites rests with the respective provider of that content and GIZ accepts no responsibility for content provided by external organisations.

GIZ is responsible for the content of this publication.

August 2024