



DEVELOPING THE KNOWLEDGE, SKILLS AND TALENT OF YOUTH TO FURTHER FOOD SECURITY AND NUTRITION



Food and Agriculture
Organization of the
United Nations



Investing in rural people



World Food
Programme

The designations employed and the presentation of material in this information product do not imply the expression of any opinion on the part of the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), and the World Food Programme (WFP). The views and opinions expressed in this information product are those of the author(s) and those who submitted case studies, and do not necessarily reflect the views or policies of FAO, IFAD and WFP. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO, IFAD, or WFP.

This publication contains links and references to third-party web sites. The linked sites are not under the control of FAO, IFAD, or WFP and FAO, IFAD, and WFP are not responsible for the content of any linked site.

FAO, WFP, and IFAD encourage the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of the Committee on World Food Security (CFS) is given, and that endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be addressed to: **cfs@fao.org**.

CFS information products are available on the CFS website: **www.fao.org/cfs**

CONTENTS

ACKNOWLEDGEMENTS	2
ACRONYMS	3
INTRODUCTION	4
CASE STUDIES	6
GLOBAL	6
01 TRAINING OF YOUTH TRAINERS	7
02 INTERNATIONAL MOVEMENT OF AGRICULTURAL AND RURAL CATHOLIC YOUTH (MIJARC)	9
03 YOUNG PROFESSIONALS FOR AGRICULTURAL DEVELOPMENT (YPARD)	11
04 ASSESSING METHODS TO TEACH KNOWLEDGE, SKILLS, AND LEARNING FOR RURAL YOUTH	13
AFRICA	15
05 SONGHAI CENTRE	16
06 NAIROBI AND ENVIRONS FOOD SECURITY, AGRICULTURE AND LIVESTOCK FORUM	18
07 MALAWI AGRIBUSINESS YOUTH PROGRAM	19
08 SOORETUL	20
09 BUILDING EDUCATION POLICY-MAKING CAPACITY	21
10 LEVY-BASED FUNDING MECHANISM	23
11 AUDIO CONFERENCING FOR AGRICULTURAL EXTENSION SERVICE	24
12 COASTAL YOUTH FRUITS, NUTS, AND LIVESTOCK	26
EUROPE	28
13 INTERNATIONAL CENTRE FOR ADVANCED MEDITERRANEAN AGRONOMIC STUDIES	29
NEAR EAST	30
14 ENTERPRISE YOUR LIFE	31
15 UPDATE UNDERGRADUATE COURSE AND DEVELOP GRADUATE COURSE AT THE NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY	33
ASIA AND PACIFIC ISLANDS	34
16 GIRLS' GROUPS	35
17 INFOMEDIARY CAMPAIGN	36
18 VILLAGE CONCEPT PROJECT	37
19 ICT NEPAL	39
20 CATALYSING RURAL LEADERSHIP	40
21 PACIFIC YOUTH IN AGRICULTURE STRATEGY	41
LATIN AMERICA AND THE CARIBBEAN	43
22 STRENGTHENING AGRO-ECOLOGICAL FARMING ADVOCACY THROUGH ICT	44
23 FARM EXPERIENCE INTERNSHIP	45
24 HELPING OUT OUR PRIMARY AND SECONDARY SCHOOLS (HOOPSS)	47
CONCLUSIONS	49
ANNEXES	52

ACKNOWLEDGEMENTS

This document was prepared under the overall supervision of the CFS Secretariat, with expert technical supervision from FAO and IFAD, provided by David Suttie, Francesca dalla Valle, Cristina Rapone, Andrew Nadeau, Cristina Petracchi, Reuben Sessa, Lorna Scott, and Isabella Rodriguez y Baena. We would like to thank all CFS stakeholders who contributed case studies, including member countries, civil society organizations, private sector entities, and others, particularly YPARD, CTA, and the e-agriculture Community of Practice, without whom the compilation of the diverse case studies presented herein would not have been possible. In addition, we would like to thank Fynvola Le Hunte Ward for the editorial input and Maria Cappadozzi for her assistance in the finalization of this document.

ACRONYMS

ACE	Audio Conferencing for Agriculture Extension
AEWS	Agricultural extension workers
AIDS	Acquired immunodeficiency syndrome
ANPE	National Ecological Producers Association of Peru
CAFY	The Caribbean Agricultural Forum for Youth
CIFOR	Center for International Forestry Research
CIHEAM	International Center for Advanced Mediterranean Studies
CTA	Technical Center for Agricultural and Rural Cooperation
DHET	Department of Higher Education and Training (SA)
FAFOTRAJ	Farmers Forum for Trade and Social Justice
FAO	Food and Agriculture Organization of the United Nations
FFL	Farmer Field School
FOFT	Future Farmers of Tonga
HIV	Human immunodeficiency virus
HOOPSS	Helping out our primary and secondary schools
IAAS	International Association of Students in Agriculture and Related Sciences
ICT	Information and communication technology
ICTAN	ICT in Agriculture Nepal
IFAD	International Fund for Agricultural Development
IICA	International Institute for Cooperation in Agriculture
IICD	Institute for Communication and Development
IPM	Integrated Pest Management
JFFLS	Junior Farmer Field and Life Schools
MAYOP	Malawi Agribusiness Youth Program
MIJARC	International Movement of Agricultural and Rural Catholic Youth
MORDI	The Mainstreaming of Rural Development Innovations
NAYA	National Association for Youth in Agriculture
NEFSALF	Nairobi and Environs Food Security, Agriculture and Livestock Forum
NUST	National University of Science and Technology
PTC	PhilRice Text Center
SARS	South African Revenue Services
SAQA	South African Quality Assurance
SETA	Sector Education Training Authority
SLA	Songhai Leadership Academy
SLAFY	Saint Lucia Agricultural Forum for Youth
SMS	Short message service
SPC	Secretariat of the Pacific Community
TRTC	Tutu Rural Training Center
UNESCO	United Nations Educational, Scientific and Cultural Organization
VCP	Village Concept Project
WOSM	World Organization of the Scout Movement
YFC	Young Farmers Course
YSG	Youth Savings Groups
YUNGA	Youth and United Nations Global Alliance

INTRODUCTION

The global context

The landscape surrounding agriculture has undergone significant changes in recent years. Higher food prices, the consequent world food price crisis in the late 2000s, along with a projected 60 percent expansion in demand for agricultural products by 2050, has driven a resurgent interest in the sector – among policy-makers, development practitioners, and private actors. As rural and agricultural markets are transforming, with higher demand and prices, more integrated supply chains, greater rural-urban connectivity in many areas and exponential growth in urban markets, new opportunities are emerging for young people to start up and run profitable agrobusinesses. To do this, however, they need a range of skills and knowledge – agricultural, financial, entrepreneurial – as well as a broader environment of youth targeted policies and investments.

These trends are of particular significance when viewed in the context of burgeoning youth populations in many of today's developing countries and regions. Children under the age of 15 account for around a quarter of the population in developing countries¹ while youth² comprise up to a further one fifth of the population in many of these countries.³ In Africa, the demographic structure is particularly youthful, with over 60 percent of the population currently below the age of 25.⁴ A large proportion of these young people live and work in rural towns and settlements. It is significant that even under the most optimistic scenarios there are doubts about the potential of the urban sector to absorb these young people into wage-earning employment. Clearly, the role of agriculture – and smallholder family farming in particular – in providing decent livelihood opportunities for rural youth in the years ahead will be an important one. At the same time, the majority of youth do not currently see agriculture as a viable career path given the low productivity rates and the difficulties they know previous generations have faced. If smallholders cannot achieve a viable income, it is likely that their children and their children's children will head for the cities. Developing the knowledge, skills, and talent of youth will also require investing in smallholder agriculture in order to provide successful examples and viable livelihoods for all future generations.

The potential returns of capturing the opportunity to engage today's young people in the challenge of raising agricultural production by 60 percent by 2050 – in terms of food security, poverty reduction, employment generation, as well as peace and political stability – are enormous, but so too are the challenges. Key natural resources, biodiversity and ecosystems upon which agriculture is reliant have been degraded or lost – in some cases irreversibly. Meanwhile, climate change is already leaving its mark on rural landscapes, and will do so on a much greater scale in years to come. At the same time, in some regions rural-urban connectivity remains poor, particularly in terms of infrastructure, but so do the services and institutions required to facilitate flows of goods, information, money and people. These gaps can increase the transaction costs associated with investing in agriculture, or in financial institutions operating in rural areas. These realities all call for specific responses at the policy level in order to create an environment where the potential and talent of young people can be used as an engine to drive change in agriculture and food systems that can provide food security and nutrition for everyone.

Developing the capacity of youth in agriculture

Investing in the education and training of young rural people is becoming ever more important as the challenges associated with adopting sustainable, climate-smart production methods and linking up with marketing opportunities in modern value chains are growing. The increasing engagement of multinational and national companies in food value chains – along with increased consumer sensitivity to global issues of sustainability and poverty reduction – means that opportunities for young people to engage in agriculture today and in the future are arguably greater than was the case for their parents. At the same time, however, greater competition and more demanding quality standards at the market side – and more competition over scarce natural resources, including land, from the production side – imply the need for these young people to develop a range of skills and knowledge that have not always been readily accessible in rural areas.

Given these realities, it is unfortunate that the training needs of young rural people – in particular those needed to develop capacities to engage in productive, profitable and sustainable agriculture – have rarely been systematically addressed in education and training agendas. Even today, many national training plans contain no specific acknowledgement of the particular requirements of youth.⁵ In such a scenario, it is not surprising that many young people do not see agriculture as a viable and attractive career.

Nonetheless, what is encouraging is that in recent years many examples have emerged of initiatives targeted at young rural people which have highlighted new approaches and methodologies to developing the capacity of youth to engage in agriculture. Many of these initiatives have considerable potential to be adapted to different contexts, and scaled up. It is important to ensure that lessons learned from these initiatives are documented and integrated into planning and policy agendas. This background paper will contribute to the realization of this goal by providing a description and analysis of some of the most successful initiatives and approaches in developing knowledge and skills of youth to engage in agriculture.

Recognizing heterogeneous needs among rural youth

The United Nations defines youth as those aged between 15 and 24. Definitions, however, vary across countries and regions, with many definitions encompassing people aged up to 35 (for instance, the African Union Youth Charter defines youth as those aged between 15 and 35). Whichever definition one refers to, it is important to highlight the different groups that are encompassed within the term “youth.” Different age categories within the definitions of youth can be expected to imply different needs and opportunities. For younger age categories – for instance those aged between 15 and 18 – priorities may relate to completing secondary education and making the transition to productive work, eliminating all forms of hazardous work. In contrast, those in older categories, who may already be working and supporting families, may benefit from initiatives to upgrade and learn new skills relevant to their specific areas of work. Members of this age group are also likely to be confronted with different temporal and economic constraints which influence their ability to participate in different capacity development programmes.

Gender is an important dimension that influences opportunities to build and utilize capacities of youth in agriculture. The challenges of reaching young women – who are frequently constrained by heavy household workloads, traditional customs and beliefs, and even constraints on their mobility in some societies – with education and training initiatives, may be – in many cases – greater than those related to reaching young men in many cases. Dynamics such as high rates of teenage pregnancy and early marriage also prevent many young women from participating in education and training and considerably limit the livelihood options available to them. Persistent gender biases in access to productive resources – especially land – must be addressed in conjunction with targeted capacity development initiatives in order to ensure young women have the opportunity to use their knowledge and skills productively. Too often it has been found that in areas where young women are denied any prospects of owning land, migration is considered the most viable option among many female youth.⁶

Socio-economic contexts also obviously shape opportunities open to rural youth in different countries and regions, intersecting with gender and age dynamics. These multiple heterogeneities must inform the design and implementation of approaches and methodologies aiming to develop capacities among youth in agriculture.

Purpose and scope

This document will provide case studies from different regions, that set out the challenges, successes and lessons learned relating to the development of knowledge, skills and capacity for youth in agriculture. Bearing in mind the necessity of addressing various approaches for targeting youth, case studies cover the areas of peer-to-peer knowledge transfer, vocational training and skills development, and education systems and research. Specific issues concerned with how to integrate traditional or intergenerational knowledge and the use of new technologies will be interwoven throughout the various case studies. The conclusion will offer insights into how learning from these initiatives can inform the broader policy environment as well as the design of youth targeted policies, projects and programmes - with the overarching objective of providing attractive, remunerative and sustainable livelihoods for youth in agriculture to further food security and nutrition.

Methodology

The case studies presented herein are the result of a call put forth by the CFS Secretariat for cases focused on developing the knowledge, skills, and talent of youth to further food security and nutrition. The call was circulated among CFS stakeholders and also further advertised on the e-agriculture platform. Over 60 cases were received and reviewed for inclusion in the document, based on: i) coverage of the areas outlined in the concept note such as traditional knowledge transfer, new technologies and innovation, agricultural education systems, and research; ii) maturity of the cases and subsequent lessons; iii) scalability; and iv) specific relevance to food security and nutrition. Attention has been given to regional, gender, and stakeholder diversity in the cases presented herein. All cases are available on the CFS website at: www.fao.org/cfs/youth



CASE STUDIES /GLOBAL

- 01 | TRAINING OF YOUTH TRAINERS
- 02 | INTERNATIONAL MOVEMENT OF AGRICULTURAL AND RURAL CATHOLIC YOUTH (MIJARC)
- 03 | YOUNG PROFESSIONALS FOR AGRICULTURAL DEVELOPMENT (YPARD)
- 04 | ASSESSING METHODS TO TEACH KNOWLEDGE, SKILLS, AND LEARNING FOR RURAL YOUTH

TRAINING OF YOUTH TRAINERS

LOCATION: Africa, Asia, Middle East

PARTNERS: FAO, WOSM

KEY CHALLENGES

- Lack of entrepreneurial skills and access to training.

APPROACHES

- | | |
|--|--|
| ☒ Peer-to-peer | ☒ Vocational Training |
| ☐ Traditional knowledge | ☐ New technologies and innovation |
| ☐ Agricultural education | ☐ Research |

KEY OUTCOMES AND LESSONS LEARNED

- Peer-to-peer learning can be more effective and influential in sharing knowledge and encouraging the adoption of new practices among youth, particularly when attention is paid to selecting appropriate facilitators.
- Creating a highly adaptable approach improves the ability to scale up while also addressing context specificities.

Since 2004, the Food and Agriculture Organization of the United Nations (FAO) provides training to young people using the Junior Farmer Field and Life School (JFFLS) methodology. To date, thanks to its adaptability, this methodology has been used in various countries in Africa, Asia and the Middle East. The goal of JFFLS is to empower disadvantaged and vulnerable youth, in particular rural youth, and provide them with employment and livelihood options. The JFFLS programme enhances the participants' agricultural, life and entrepreneurial skills through various topics, including agro-ecosystem analysis (AESA), integrated pest management (IPM), agriculture as a business (e.g. entrepreneurship, marketing, accounting, reporting), hygiene and sanitation, nutrition, HIV and AIDS, child labour prevention and personal development. The topics are addressed through small group discussions, observation, role-playing and experimentation. The subjects of the training are chosen together with the youth from a variety of modules and in collaboration with the partners, on the basis of the local needs. The high adaptability of the learning approach enables the modular methodology to address different socio-economic contexts.

For example, the Food For Life (FFL) programme of the World Organization of the Scout Movement (WOSM) has been designed as a response mechanism to the food crisis facing many countries in Africa, using the JFFLS methodology. The aim has been to tackle food insecurity through education, training and knowledge dissemination. The training focused on agricultural strategies to promote food security and nutrition in the face of natural and human-induced risks (including specifically climate change), and also conveyed communication and teaching methods to ensure the trained scouts may become efficient trainers themselves.

Recently, FAO has initiated a new form of JFFLS training of trainers, by training youth facilitators and encouraging peer-to-peer learning. Once they have returned to their communities, trained youth are actively involved in mobilizing and sensitizing their peers regarding the opportunities offered by the agro sector, using the same techniques learned during the training of trainers. In some cases, trained youth have organized a second cascade of JFFLS trainings for peers in their youth groups or associations. On average, it has been estimated that each graduate re-trained an average of 20 other rural youth in his/ her district, with an important spillover effect.

Increasingly used in areas such as health education or HIV and AIDS prevention and lately also in the Ebola virus disease contexts, peer education through trained and motivated young people has demonstrated its potential for and adaptability to agricultural vocational training. Young people have a great influence on their peers, and are often in a better position to share knowledge and encourage the adoption of new practices. Youth tend to be more comfortable and more proactive when there are other youth involved. Furthermore, this process contributes towards strengthening youth-led initiatives and associations. JFFLS peer training is also a great way to empower young people, as it offers the opportunity to participate in interactive experiential learning and then share the acquired knowledge and skills with their peers in their community/district. By bringing together youth from different associations or communities, FAO also encourages sharing of experience and challenges among the youth trained.

Among the success stories, in Tanzania one FAO-trained youth (Adam) was able to mobilize and train 150 peers in his home district. After organizing the group, Adam and his peers managed to secure 300 acres of land from the regional commissioner to start up their commercial agro activities. In Ghana, by training 12 representatives from six youth groups (6 young women and 6 young men) and supporting them in re-training their peers in their respective groups, the project was able to reach an estimated 150 youth in the West Gonja District. As emerged in Ghana, especially when beneficiary communities are close to each other, benefits increase as group members exchange visits to each other's fields, and increase mutual learning.

The selection of facilitators is a crucial element in determining the quality of the JFFLS trainings. Problems in recruiting and training appropriate facilitators could greatly undermine the results by impeding the sustainable diffusion and adoption of knowledge among non-participating youth and the scale-up of programmes. Therefore, careful attention is paid from the very beginning to achieving greater sustainability throughout the process and beyond.

Effective education and knowledge dissemination can help fight food insecurity, and provide young people in those areas where they face natural and human-induced risks to their food security, with the means to be self-sufficient and the ability to provide for their families and communities. ■

INTERNATIONAL MOVEMENT OF AGRICULTURAL AND RURAL CATHOLIC YOUTH (MIJARC)

LOCATION: Global	PARTNERS: N/A
------------------	---------------

KEY CHALLENGES

- Motivating youth to remain in rural areas to build viable livelihoods.

APPROACHES

- | | |
|---|--|
| ☒ Peer-to-peer | ☒ Vocational Training |
| ☒ Traditional knowledge | ☐ New technologies and innovation |
| ☐ Agricultural education | ☐ Research |

KEY OUTCOMES AND LESSONS LEARNED

- It is important to promote both formal and informal education and to value local traditional knowledge and skills.
- Empowering youth to identify solutions to their own problems, such as food insecurity and undernutrition, can result in more targeted and longer-lasting solutions.

MIJARC (International Movement of Rural and Agriculture Catholic Youth) was founded in 1954. MIJARC gathers more than 1 million young people in 4 continents (Asia, Africa, Latin America and West Indies, Europe). It was created in a period when the rural exodus was emptying villages of youth. MIJARC works with youth in rural areas to help develop their capacity to become critical actors, and to transform their communities and countries. By means of “training in action” and the methodology “to see-judge-act”, young people are able to improve their living conditions and to generate income through engagement in rural agriculture and food systems.

Informal knowledge and skills have become less important in some cases. In many cultures, youth are not trusted and their initiatives are not given importance. They are considered as “an empty bowl to fill”, rather than a source of creativity and innovation. Young women and men living in rural areas often lack access to formal education, resulting in a brain drain of the most promising and skilled youth away from rural areas, thus creating greater challenges for the future of rural communities.

MIJARC believes that empowering young people to find solutions to their own problems is the best way to answer the challenges faced by rural societies. Concretely, MIJARC empowers youth by: i) creating youth-led peer groups in rural villages where young people can share experiences; ii) following a methodology of ‘see-judge-act’ which includes looking at each experience and analysing it to ascertain how to work together to come up with solutions; iii) developing capacity in many life skills such as on how to work in a group, organize planning, manage a budget, conduct research and take democratic decisions. Each local team is a local “think tank” to develop strategies to foster food security and nutrition. This ensures that the solution will be culturally, socially and economically adapted to the specific context.



An example from a recent project in Northern Benin, where most young farmers work in the field of agriculture growing mainly vegetables, illustrates how empowering youth can result in innovative solutions. Due to climate change, they face rainfall variations that disturb the agricultural calendar. As a consequence, the poor farmers who, historically, have focused on growing vegetables, are strongly affected by rainfall variability. Within JAC Bénin (national MIJARC group), youth developed new skills to implement other less rain dependent, income-generating activities. Therefore, in past years, many young people were trained in the following fields: poultry, sheep and goat breeding, soap and syrup making, etc. In 2014, the youth decided to focus on beekeeping.

MIJARC is based on voluntary peer-to-peer empowerment of the youth. This methodology is challenged by the changes in youth sociology and expectations: social organizations have to adapt to new youth lifestyles and expectations. Informal and non-formal education should be recognized and promoted. Formal education policies that aim at empowering citizens give importance to the knowledge of the people including the practical knowledge of rural youth. ■

YOUNG PROFESSIONALS FOR AGRICULTURAL DEVELOPMENT (YPARD)

LOCATION: Global	PARTNERS: Swiss Agency for Development
------------------	--

KEY CHALLENGES

→ Lack of interest in agriculture among youth.

→ Lack of youth inclusion in decisions concerning them.

APPROACHES	☒ Peer-to-peer ☐ Traditional knowledge ☐ Agricultural education	☒ Vocational Training ☒ New technologies and innovation ☒ Research
------------	--	---

KEY OUTCOMES AND LESSONS LEARNED

→ Policy development processes need clear and formal avenues for integrating youth input into discussions and decision-making processes.

→ Sharing success stories can help to mobilize further engagement and provide youth with a network from which to learn.

YPARD, the Young Professionals for Agricultural Development¹, was created in 2005 as a response to an observed relative absence of young professionals in the agricultural research for development debate at global, regional and national levels. Young people are very reluctant to enter into the agricultural development sector, despite the potential for jobs and the high unemployment rates among youth, also evident in agriculture-oriented economies. Agriculture does not attract youth, and they have few examples of success stories from which to learn. Young professionals have fresh ideas, a strong grasp of emerging trends and are up for the challenge of trying new approaches. To mobilize greater innovation in the agricultural sector, insight from today’s youth is needed; young people must be instrumental in creating their own future.

Mobilizing youth for agricultural careers and using their potential to find innovative and future- oriented agricultural approaches is crucial. Networks can play an important role to assure effective exchange of information, experience and knowledge among stakeholders, and in finding innovative solutions for agricultural development. YPARD is just such a network, offering a global platform for youth, but also national and regional representations to exchange and enhance knowledge and experience.

¹ In order to reflect the wider stakeholder group YPARD targets, the Association changed its name to “Young Professionals in Agricultural Development”, dropping ‘research’ so as not to be perceived as focusing on academics only.

YPARD focuses on the following approaches to make the voice of the youth better heard:

1. **Mentoring:** Mentoring relationships enable youth to develop relevant skills and competencies for agricultural development.
2. **Inclusion of youth voice in policy debates:** YPARD designed a strong youth programme for capacity development and youth involvement in policy debates, in collaboration with CIFOR. The model was successfully developed and applied at the Global Landscapes Forum (GLF) in 2013 and 2014, with 20 on-site participants and over 450 participating online. It is based on three steps: capacity development of young professionals prior to the event through Masterclasses, youth sessions feeding into panel discussions and an active role for youth in the core conference session as moderators, MCs and speakers.
3. **Identifying skills and competencies required:** Research undertaken revealed that skills and competencies of today's young professionals in agricultural development often do not match those required by employers. Adapting the educational curriculum to acquire the relevant skills and competences for the job market is therefore crucial.
4. **Sharing success stories of youth in agriculture:** YPARD profiles the stories of successful young professionals in the agricultural development sector. It posts these on its website and shares them with partners to disseminate more broadly. Furthermore, the association partnered with the GAP initiative to share stories on young women in the sector.

Today, YPARD is a global network supporting youth in agricultural development and has 10 000 members as of 2015, and 41 national representatives.

Institutionalizing youth mentoring programmes in relevant organizations and demonstrating the reciprocal benefits for both mentees and mentors reinforces the value of engaging with youth. Sharing relevant success stories on a local level can be very powerful, and relatively easy to scale up.

For networks to become powerful instruments in influencing perceptions requires a long-term commitment from all sides, including financial support. Operating in an increasingly short-term, result-oriented frame can become counter-productive to such efforts and investments, and risks absorbing resources for demonstrating results and mobilizing funds instead of achieving objectives.

Capacity development programmes require a clear youth focused needs assessment in order to meet the objectives of young professionals. Youth inputs into curricula reforms are needed. Policy development processes need clear and formal avenues for integrating youth input into discussions and decision-making processes. ■

ASSESSING METHODS TO TEACH KNOWLEDGE, SKILLS, AND LEARNING FOR RURAL YOUTH

LOCATION: Cambodia, Egypt, Ethiopia

PARTNERS: IFAD, UNESCO

KEY CHALLENGES

→ Understanding current methods in order to identify innovations and improvements.

APPROACHES	☐ Peer-to-peer	☐ Vocational Training
	☐ Traditional knowledge	☒ New technologies and innovation
	☒ Agricultural education	☒ Research

KEY OUTCOMES AND LESSONS LEARNED

→ Facilitating learning outside formal institutions, such as informal learning from parents and peers, for rural youth to acquire both traditional and new knowledge and skills is key to long-term inputs.

→ There is a need for strengthened linkages between informal, non-formal and formal learning as part of lifelong learning.

This IFAD-UNESCO research project (completed in 2014) aimed at deepening the understanding of how teaching and learning for agriculture and rural livelihoods takes place in rural communities, and what kinds of knowledge and skills are communicated to rural youth. Particular attention was given to the views of young people on the education and training they receive, how they apprise knowledge and skills, the way gender influences the acquisition of knowledge and skills, and their aspirations and perceptions of agriculture and rural livelihoods.

The knowledge gained through this project is expected to contribute to adapting and scaling up innovative teaching and learning methodologies, as well as to new ways of promoting youth engagement in agriculture. It is also expected to help reinforce and stimulate policy dialogue on the role of education for rural development, and to dismantle the prevailing negative image of the agricultural sector – one of the reasons young people often view farming as a last resort occupation. In addition, the project strengthened country-level research capacities on the topic.

The project focused on learning in the context of rural communities in three selected countries: Cambodia, Egypt and Ethiopia. The research collected the voices of young rural women and men –usually hidden behind statistical data and policy-focused research – revealing their realities and aspirations. The research activities obtained a comprehensive picture and insights for better understanding the learning of knowledge and skills for agriculture and rural livelihoods in several key elements, such as lessons learned from existing policies and programmes, relevant institutional arrangements and gender dynamics of learning based on desk and field studies. These provided the groundwork to assess the implications for future policies and programmes.

The desk study – consisting of a literature review and the identification of current knowledge and information – was followed by an ethnographic field study.

The latter allowed description and analysis of the content and variety of teaching and learning processes for knowledge and skills relevant to agriculture and beyond (e.g. literacy skills and skills for other rural livelihoods), including the use of ICTs.

Life history interviews were conducted with at least 15 people in each field site in each country, the majority being young women and men aged between 15 and 24, many of whom were considered to be vulnerable to food insecurity. The interviews focused on how, when and from whom they learned different skills and practices that they now use in everyday life, any ‘lost’ moments for training/learning in their lives, views of training needs in the area and their opinions about current provisions. Focus group discussions with young people were also carried out, using facilitation tools such as timelines to compare women’s and men’s activities over a typical day, seasonal calendars, mobility mapping with identification of skills used and needed in various everyday contexts and institutional diagramming based on views of providers in the area. Focus groups were organized with older adults as well, in order to compare livelihood strategies and perspectives on learning, skills and providers with those of youth.

The research findings highlighted the important roles played by learning outside formal institutions, such as informal learning from parents and peers, for rural youth to acquire both traditional and new knowledge and skills, and a need for strengthened linkages between informal, non-formal and formal learning as part of lifelong learning.

Recommendations for future policy-making and research emphasized:

- ❖ promoting a more complex view of education and learning, and farming through exploring interconnections between schooling, agriculture, rural transformation, social change and food security and nutrition;
- ❖ valuing non-formal and informal learning in policies;
- ❖ prioritizing development of soft skills among rural youth (for example, self-confidence, communication and negotiation skills);
- ❖ adopting a holistic approach to developing youth capacities in agriculture by breaking boundaries between policy and research silos; and
- ❖ taking a gendered approach to policies and research on agriculture, learning and livelihoods. ■



CASE STUDIES /AFRICA

- 05 | SONGHAI CENTRE
- 06 | NAIROBI AND ENVIRONS FOOD SECURITY, AGRICULTURE AND LIVESTOCK FORUM
- 07 | MALAWI AGRIBUSINESS YOUTH PROGRAM
- 08 | SOORETUL
- 09 | BUILDING EDUCATION POLICY-MAKING CAPACITY
- 10 | LEVY-BASED FUNDING MECHANISM
- 11 | AUDIO CONFERENCING FOR AGRICULTURAL EXTENSION SERVICE
- 12 | COASTAL YOUTH FRUITS, NUTS, AND LIVESTOCK

SONGHAI CENTRE

LOCATION: Africa	PARTNERS: IFAD
------------------	----------------

KEY CHALLENGES

- Lack of access to training and role models makes youth turn to urban centres.

APPROACHES

- | | |
|---|--|
| ☐ Peer-to-peer | ☒ Vocational Training |
| ☐ Traditional knowledge | ☐ New technologies and innovation |
| ☐ Agricultural education | ☐ Research |

KEY OUTCOMES AND LESSONS LEARNED

- Combining traditional and modern learning methods and skills can help attract youth to see potential in agricultural employment.
- Teaching business related subjects can incentivize youth to be more entrepreneurial.

The future of farming in Africa depends on attracting the continent’s talented youth to pursue agriculture as a professional vocation. However, in the absence of access to training and technology, many young people view farming as a “dead-end” occupation and instead pursue jobs in urban areas. As a response to this reality and as a method of promoting agro-entrepreneurship, the Songhai Centre in Porto Novo, Benin, was founded in 1985.

An incubation centre for young, socio-economic entrepreneurs, Songhai is a research and training ground for young African farmers to learn aquaculture and crop and livestock production. Even more importantly, young people learn how to apply different dimensions of sustainable development to their own lives. Young people also learn how to participate in socio-economic reconstruction, and contribute to developing their own communities.

The centre is an economic as well as a social institution which carries out training, production and research by combining traditional and modern learning methods. The Songhai model presents an integrated system of production where agriculture, animal husbandry and fish farming interact with agroindustry and services. Values such as creativity, taking initiative, competitiveness and organizational capacity are stressed.

The Songhai Centre has signed a Memorandum of Understanding (MoU) with the IFAD-funded Community-Based Natural Resource Management Programme in the Niger Delta – which has also been successful in targeting young rural people with financial and technical training. The MoU builds synergies between the two initiatives – aiming to change mindsets among young people and encouraging them to enter into productive ventures across food value chains.

The Songhai model was promoted as a Centre of Excellence of Africa by the United Nations and is being replicated in 14 other African countries. An IFAD regional grant, Rural Youth Development and Agricultural Business Development, has supported the regional centre in the scaling up of activities by the centre, promoting access of young women and



men to entrepreneurial, leadership and management skills to enable them to start up viable agribusiness enterprises. Through the grant, the centre has trained about 3 000 young women and men and formed 62 youth groups and networks, and supported the replication of the Songhai model in Benin, Nigeria, Côte d'Ivoire, Liberia and Sierra Leone through franchising arrangements.

The latest Songhai youth initiative has been the foundation of the Songhai Leadership Academy (SLA), a centre where young people are provided with the skills they need to set up and run a business successfully. In the SLA, young rural people are taught business-related subjects, such as mathematics, statistics, agriculture, sociology and business administration. The aim of this initiative is to educate the young rural leaders of tomorrow and enable them to successfully lead development projects and thus enhance rural livelihoods, food security and nutrition, and literacy in rural areas.

More than 400 students are currently in training at the Porto Novo centre and at its sister branches in Savalou, Parakou and Kinwedji. Students follow 18-month curriculum and gain experience on more than 250 farms across Benin. The farms are managed by the students, under the guidance of local coordinating units. Every year, more than 300 participants from a variety of countries attend short-term courses at the centre. The Songhai Centre has over 150 permanent staff, including facilitators, technicians and administrators. It has partnered with more than 40 public and private institutions, associations, universities and international groups. ■

NAIROBI AND ENVIRONS FOOD SECURITY, AGRICULTURE AND LIVESTOCK FORUM (NEFSALF)

LOCATION: Nairobi **PARTNERS:** Mazingira Institute, a Kenyan non-profit organization

KEY CHALLENGES

- Lack of training in urban agriculture.

APPROACHES	☐ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

- The practice of urban and peri-urban agriculture is a means to advance the well-being and income opportunity for youth and it can be supported by prevailing national and local youth-centred policies.

The Nairobi and Environs Food Security, Agriculture and Livestock Forum (NEFSALF) is a multi-stakeholder platform and network (planet) for a community of practice, advancing food security and nutrition, urban and peri-urban agriculture or agri-food systems, led by the Mazingira Institute, a Kenyan non-profit organization within civil society, since 2002. The majority of the participants in NEFSALF are urban farmers and a substantial portion of these latter are youth. The NEFSALF has conducted short training courses on the practice of urban and peri-urban agriculture since 2004.

The major challenge was the capacity development of youth, among others, in the practice of agriculture in the urban and peri-urban agriculture. This approach was chosen to meet the challenges of capacity development itself, and the interventions were adapted to the urban context, which are very different to those of the rural context. The purpose of the training course was to promote well-being, work and income opportunities, and the common interest of the community. The objective was to develop the knowledge, skills and attitudes of the target farming community, composed of households, groups, organizations and enterprises, including youth, in the practice of urban and peri-urban agriculture.

A systemic approach was adopted in the design of the training model. The main focus is on agri-food systems and their social, structural and natural environments. The agri-food system is made up of three components: farming practice, farming resources and the farming community. Farming practice includes: farming management and operations, namely, production, processing, distribution and consumption. Farming resources include: farming spaces, farming capital and farming entrepreneurship. Farming community includes: farming households, groups, organizations, enterprises, platforms and networks (e.g. NEFSALF). About 1 200 individuals, including 480 youths (between the ages of 15 and 35) took the training course from 2004 to 2014. Between 2010 and 2014, there was a concrete attempt to increase the participation of youth in the training courses, which rose from 16 percent in 2006 to about 60 percent in 2014. The impact studies of the training courses have shown that youth engaged in different aspects of urban and peri-urban agriculture have seen improvements in their well-being in terms of food security and nutrition, and work and income opportunities. The first consideration is that the adoption of a systemic versus a sectorial approach is crucial for agriculture to be viewed broadly in agri-food system terms.

Adaptation, it is often pointed out, must be context-specific. Attracting the youth in cities and towns towards the practice of urban and peri-urban agriculture is a challenge but it can be met if youth view agriculture not simply in the conventional sense of ‘tilling the soil’, but broadly in agri-food system terms. This change of perception is key. The NEFSALF has demonstrated that the practice of urban and peri-urban agriculture is a means to advance the well-being and income opportunities for youth. This, or similar initiatives can be supported by prevailing national and local youth-centred policies. Scaling up can be achieved through vocational training opportunities. ■

MALAWI AGRIBUSINESS YOUTH PROGRAM

LOCATION: Malawi **PARTNERS:** The Farmers Forum for Trade and Social Justice

KEY CHALLENGES
→ Access to entrepreneurial skills and agricultural training.

APPROACHES	☒ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED
→ Helping women and young people to set up agribusinesses and join together increased their bargaining power and enabled them to tap new markets.

The Farmers Forum for Trade & Social Justice (FAFOTRAJ) was created with the aim of helping women and young people to set up agribusinesses and join together to increase their bargaining power and tap new markets. FAFOTRAJ’s Malawi Agribusiness Youth Program (MAYOP) has helped hundreds of young people to start producing and marketing raw commodities such as soya, groundnuts, beans and rice, as well as value-added products such as cooking oil, soya milk, jam and rice flour. The governments of Botswana, Ghana and Kenya have now asked FAFOTRAJ to replicate this innovative model in their countries.

MAYOP offers training in practical enterprise development and management, so that young people can set up their own agribusiness ventures. Between 2010 and 2011, the programme trained 3 380 young people and established 75 youth agro-enterprises. Future plans involve scaling up the initiative to the national level so that it reaches at least 1 million youths. In Thyolo district’s Juma village, Juma Youth Investment is one agribusiness that has benefitted from the FAFOTRAJ youth programme. Set up in 2011 by 15 young farmers, it focuses on the pig rearing value chain. The idea emerged after members carried out a feasibility study which revealed a strong demand for pork and especially sausages, in nearby towns. The group started off with two pigs, bought from members’ contributions. As the animals reproduce, their progeny are shared. The next step will be to buy a processing machine to make sausages. In nearby Matapwata, a 35-member business group has been set up to produce, buy and process tomatoes into jams, sauces and juice, using basic household equipment. Markets include local hospitals, schools, consumers and retail outlets. ■

SOORETUL

LOCATION: Senegal

PARTNERS: AwaCaba

KEY CHALLENGES

Lack of funding, complex administrative set-up and lack of confidence in the project because managed by young leaders.

APPROACHES

☐ Peer-to-peer
 ☒ Vocational Training

☐ Traditional knowledge
 ☒ New technologies and innovation

☐ Agricultural education
 ☐ Research

KEY OUTCOMES AND LESSONS LEARNED

The approach could be scaled up in agribusiness with the support of better infrastructure and political commitment of policy-makers.

The initiative took place in Dakar, Senegal where young women created an ICT solution named “SOORETUL” by which urban demand is met by rural supply, and consumers have access to the agricultural production of their own country. In Senegal, the processing of local products is dominated by women who live in rural areas. These women process agricultural products throughout the year, but the only opportunity they have to sell their products is at the international trade fairs that take place just 15 days in the year. The women do not have access to funding to set up shops, or to be able to use the internet to promote their products. It is in this context that an e-commerce platform has been created to sell agricultural products and to give visibility to these products, thus allowing Senegalese people to consume local products, and to increase agricultural production.

The challenges faced were lack of funding, the difficulty in preparing the required administrative documents and a lack of confidence due to the fact that the project leaders are very young. Actors and policy-makers have not understood the importance of ICT in sectors such as agriculture and it was a considerable challenge to make them understand that ICT can solve the problems of marketing local products and contribute to food security. SOORETUL participated in a competition to obtain funding to start the project; then identified women in agribusiness; and decided which products could best be promoted through the e-commerce platform. They chose the ICT approach to reduce the distance between farmers, women and consumers, and to allow for the possibility to order and deliver products. Over 500 youths profited from this project; some were involved with platform design and management, others worked closely with the women to obtain information about their products, others in selling the products and others in delivering them to customers. The project provided work opportunities to young people who were hitherto unemployed, and to young providers who were offered the chance to enjoy new markets.

In all, 250 young men and women benefitted from the project and were given the opportunity to cultivate, transform and package local products every day for consumers. The creation of an online shop has enabled young women to sell their products and be empowered, boosted the digital economy around agribusiness and contributed to the reduction of the digital divide. Over 300 people were able to consume healthy and natural

products and the project has improved food security and nutrition by increasing agricultural production and the consumption of local, natural and healthy agricultural products.

This project has also facilitated the development of young women’s capacities to use the platform and better understand the potential of ICT in agriculture. This approach could be scaled up in agribusiness with the support of better infrastructure and the political commitment of policy- makers. Policy-makers must accord a high priority to agriculture and agribusiness. National policies should support young people who wish to contribute to agriculture development through ICT, and provide funding for the creation of agro-industries, in order to ensure food sovereignty in Senegal. ■

DEVELOPING EDUCATION POLICY-MAKING CAPACITIES

LOCATION: Mozambique PARTNERS: FAO and Ministry of Education and Culture

KEY CHALLENGES

→ Educational sector budget constraints.

→ Lack of teachers’ knowledge and capacity to educate youth about agriculture and food security and nutrition.

→ Difficulties in reaching schools in remote rural areas.

→ E-learning methodologies not appropriate for most areas due to lack of devices and connections.

APPROACHES	☐ Peer-to-peer	☐ Vocational Training
	☒ Traditional knowledge	☐ New technologies and innovation
	☒ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

→ Creating a cadre of teacher-trainers with specific and contextualized manuals can help ensure that capacities are developed, even in remote rural areas.

→ Gender and age-sensitive materials allow to reach out to both young women and men and different age groups.

→ Traditional knowledge, crops and farming practices offer huge potential for developing resilience and adapting agriculture to climate change.

Education is one of the key sectors of the government’s action plan for the reduction of absolute poverty and hunger in Mozambique. In 2006, a directive of the Ministry of Education and Culture (MEC) introduced school agricultural production as a compulsory curriculum activity for primary, secondary and intermediate level schools in Mozambique. Later, in 2007, at a seminar held by MEC with various national partners, it was decided to integrate school agricultural production activities in the teachers’ training curriculum. The overall objective of this decision was to contribute to an improvement in the quality of teaching, while also enhancing the knowledge of food security and nutrition among young people during their compulsory school years and beyond.

The Government of Mozambique requested FAO's technical assistance to develop the specific teachers' training manuals and also to pilot-test the training in the context of the Poverty Reduction Strategy Paper (PARPA II), and the Education and Culture Strategic Plan (PEEC).

The PEEC advocates the implementation of school agricultural production activities in Mozambique as a way of improving school teaching, fighting vulnerability and ultimately eradicating extreme poverty and hunger. In this context, the MEC introduced agricultural production into the curricula of primary, secondary and intermediate level schools.

In order to improve the capacity of teachers in sustainable agricultural, entrepreneurship and nutrition, as well as to create a renewed respect and enthusiasm for agriculture in a gender and age sensitive way, FAO assisted the MEC in the following activities:

- ❖ Assessing the learning needs of students in the three subjects (agriculture, entrepreneurship and nutrition) and developing or revising a primary school curriculum for all three subject areas;
- ❖ Assessing primary and secondary teacher training needs in the various subject areas, as well as gauging the adequacy of pedagogical methodologies, and reviewing existing teaching/learning materials on the three subject areas;
- ❖ Reviewing existing M&E tools used by MEC in order to accommodate the new subjects;
- ❖ Training teacher-trainers in three provinces of Mozambique in the use of the developed (adapted) learning and teaching materials, including advanced (learner-centred) pedagogical methods.

Over 50 teacher-trainers, from all the 24 teacher-training centres in the country, have been trained using the specific manuals produced in the following five subject areas:

- 1) Agriculture
- 2) Livestock
- 3) Entrepreneurship
- 4) Nutrition, and
- 5) Food technologies.

The traditional knowledge of indigenous peoples and local communities concerning ecosystem management and sustainable use of natural resources has also been adequately integrated and adapted into the materials. The major outcome of the activities carried out by FAO has been to strengthen the capacity of Mozambique's education sector to implement effective nutrition, agricultural and entrepreneurship education in the primary and secondary schools, by providing technical inputs and learning materials to the teacher-trainers, as well as creating a pool of teacher-trainers well prepared to make good use of the new materials. The final outcome will directly impact the millions of young students in Mozambique, including the most vulnerable, and those in remote rural areas, and will increase their knowledge of agriculture in general and strengthen their food security and nutrition status. ■

LEVY-BASED FUNDING MECHANISM

LOCATION: South Africa

PARTNERS: Global Forum for Rural Advisory Service

KEY CHALLENGES

→ Poorly qualified youth.

→ High rates of unemployment.

→ Fragmented and uncoordinated training systems.

APPROACHES

☐ Peer-to-peer

☐ Vocational Training

☐ Traditional knowledge

☐ New technologies and innovation

☒ Agricultural education

☐ Research

KEY OUTCOMES AND LESSONS LEARNED

→ The levy-based funding mechanism provides a coordinated alternative skills development system to equip youth with critical and sector-specific skills, including in agriculture. More is needed to expand the AgriSETA component of the programme.

The levy-based funding mechanism provides an enabling environment and incentives for the private sector to invest in skills development for different sectors including agriculture. The case highlights a systemic intervention where different institutions (the Department of Higher Education & Training (DHET), Sector Education Training Authority (SETA), South African Quality Assurance (SAQA), South African Revenue Services (SARS), public and private training institutions, and a wide range of stakeholders (i.e. public, private and NGOs)), are coordinated towards ensuring quality and coherence in the development of skills. Most importantly, the case illustrates how the system helps to develop scarce and critical skills in the agricultural sector, and to attract and retain youth in agriculture, through the AgriSETA.

The Government of South Africa implemented two pieces of legislation to address issues of human resource development, namely the Skills Development Act (Act 97 of 1998), an attempt to boost the nation's productivity by increasing skills levels in the workplace, and the Skills Development Levies Act (Act 9 of 1999), as the means to fund the initiative. The latter regulates a compulsory levy scheme, where 1 percent of the company tax revenues paid to SARS is channelled into skills development through the SETAs (80 percent) and the National Skills Fund (20 percent). What is distinctive about this case, is its sector base (addressing sector-specific skills challenges), and broad base (with targeted programmes for the pre-employed, unemployed, underemployed, and employed), and the special attention given to rural youth.

Overall, this levy-based system has increased youth access to workplace-structured learning, with incentives to support and encourage employer participation in providing work experience for skills development. It has improved the provision of diverse and accredited skills programmes, with an increased role of public providers in the development of occupational skills, thus offering youth a wide range of training opportunities. It has resulted in better coordination and coherence in skills development planning and implementation, with accountability measures in place, thus both ensuring quality and allowing for progression.

With a total of 21 SETAs representing 21 sectors, AgriSETA is one of the smallest authorities. However, AgriSETA is particularly important given the challenges of improving food security and nutrition in the country.

The innovative skills development funding mechanisms, in addition to supplying funding for the national training system, serves as an effective model in achieving the overall skills development policy objectives. The SETAs are semi-autonomous, which is important for minimizing bureaucracy and facilitating easy flow of resources needed for skills planning. Continuous monitoring and evaluation of the implementation process, and managing of feedback loops amongst various implementing institutions is important to ensure that they all move to the same direction and at the same pace. Investing in human resource capacities to administer the implementation of the system is also crucial. The broad-based approach not only helps close the skills gap, but also plays a key role in helping marginalized and disadvantaged populations strengthen their income- generating potential. Strong political will and leadership is key to achieve this result. ■

11

AUDIO CONFERENCING FOR AGRICULTURAL EXTENSION SERVICE

LOCATION: Ghana

PARTNERS: Savannah Young Farmer’s Network

KEY CHALLENGES

→ Poor mobile network.

→ Poor access to electricity in rural communities to regularly recharge their mobile phones.

→ Inadequate funds and investing partners to upscale the initiative.

APPROACHES

☐ Peer-to-peer

☒ Vocational Training

☐ Traditional knowledge

☒ New technologies and innovation

☐ Agricultural education

☒ Research

KEY OUTCOMES AND LESSONS LEARNED

→ ICT4Ag mobile applications are an excellent tool to promote the active engagement of the young farmers in the sector. Mobile agricultural advisory services can help and support national extension officers in their daily activities even when they are unable to be physically present.

The Savannah Young Farmers Network (SavaNet) is a youth led, non-governmental organization in Ghana which aims to promote the active engagement of young women and men in agriculture. SavaNet is also strongly committed to introducing innovative ITC applications in the country as a tool to attract young farmers in the sector. It is with this aim that the network designed and implemented the Audio Conferencing for Agriculture Extension (ACE) service project.

With a surging aged farmer population of about 60 percent, Ghana’s vast and fertile agricultural land is often underutilized, and is therefore a good incentive for young women and men wishing to enter the agricultural sector.



ACE was designed to promote the active engagement of the Ghanaian young farmers as the initiative capitalized on the interest of the youth in ICT gadgets and services to offer them demand-driven agricultural advisory services. The initiative also addressed the challenge encountered by many rural young farmers – in particular young women – to freely participate in skills development and learning in the presence of elderly farmers at community meetings, to which they are rarely invited. Furthermore, the initiative also addressed the challenge faced by young farmers in developing viable farm enterprises due to poor access to markets and linkages to productive value chains, while also linking young farmers with agriculture researchers and extension officers.

The implementation of this innovative ICT4Ag mobile application benefitted a total of 5 274 young farmers during its one year of implementation. Young beneficiaries benefitted from the initiative by accessing the services both as individual farmers or in young farmers’ groups of 5 to 25 individuals. Young farmers who adopted the mobile service for the first time also received technical support from community agricultural information agents. It has been observed that young farmers who adopted ACE managed to increase production both in farming and livestock, thus increasing theirs and their families’ food security and nutrition.

This innovative ICT4Ag service was recognized as a major change-maker initiative by various organizations². The main challenges encountered during the implementation of the project can be addressed by using a mobile network with nationwide coverage so as to have a stronger reach in rural areas while promoting cost sharing to ensure sustainability. The formulation and implementation of national ICT4Ag policies can widely contribute in supporting the implementation and especially the up-scaling of ACE in order to extend the benefits to more young farmers and other potential agricultural value chain actors. ■

² Ashoka, FAO, IFAD, CTA, YALI/US State department, University of California Berkeley, Cornel University, Microsoft 4Africa

12

COASTAL YOUTH FRUITS, NUTS, AND LIVESTOCK

LOCATION: Kenya **PARTNERS:** Sustainable Agriculture Community Development Programme

KEY CHALLENGES

➡ Lack of agricultural skills.

APPROACHES	☒ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

➡ Peer-to-peer training and training of trainers can help build scale and longevity quickly.

The Coastal Region of Kenya is well known for its assets and resources that have a huge potential to contribute to the creation of wealth in the communities in the area thanks to the very vibrant tourism industry powered by the length and breath of beaches along the Indian Ocean. Despite the riches found in this region, poverty remains high. Most food products are “imported” mainly from the central region of Kenya, or are brought in from countries like Tanzania. Most of the coastal province is endowed with rich agricultural soils and a climate beneficial to crop production with particular opportunities for fruits and nuts, yet the poverty levels are alarming. The challenge is that the agriculture production skills are low.

SACDEP Kenya started a project entitled “Coastal Youth Fruits, Nuts and Livestock (CFNL) project” which was implemented during the period 2011 – 2014 in Kilifi County of the Coast Province in Kenya. The project was implemented in two project areas, Malindi and Kilifi, both covering the four districts of Bahari, Ganze, Malindi and Magarini. The overall project goal was to create employment and sustainable income for youth in the four districts in Kilifi County, by tapping into the tourism industry using agribusiness skills, through the adoption of small livestock production, value addition and marketing. After training energetic young people on how to be self-reliant, 353 youths are currently undertaking value-addition activities with fruits, nuts and small livestock rearing (chickens and rabbits) as a source of income. The products are sold to the nearby supermarkets and hotels in the region.

Key achievements include:

- ❖ Nine small cottage industries have been established processing coconuts, cashew nuts, mangoes and pineapples;
- ❖ Value-added prices are 65 percent higher than for the basic commodities;
- ❖ 212 youth are fully employed in the agri-sector;
- ❖ In the three years of the project’s implementation, the youths have made a profit of KES 4 450 500 (US\$47 834) from their sales.

Part of the funds generated is ploughed back into the group as savings for future investments. The total amount of funds saved to date is over KES1 450 600 (US\$15 591). From the savings the youth have initiated a savings and credit scheme. The other funds are shared among the group members to meet their daily needs. Youths from the Coastal Province now have the potential to emerge from their current status of poverty and to be part of a wealthy community. What is lacking are entrepreneurial skills and exposure on how to make good use of the existing infrastructure as a source of income for sustainable livelihoods. Tapping into the existing markets in the expansive coastal region, the youths and the community in general can be in a position to create wealth for current and future generations.

In many instances, youth and women have little or no collateral to be able to improve their current situation, so despite the fact they have a huge potential to grow, lack of capital and credit worthiness remains a major barrier. More attention should be given to how to facilitate access to finance in parallel to developing further capacities of youth.

By tapping into the existing markets through producer groups formed by youths not only in the coastal region but across the country in general, more young people can be trained by those who have already been trained and now serve as positive examples in their communities, leading to a cascade of change. In addition, as their income levels increase, they will become stronger and eventually will be in a position to lobby for policy change at country-level. ■



CASE STUDIES /EUROPE

13 | INTERNATIONAL CENTRE FOR ADVANCED MEDITERRANEAN
AGRONOMIC STUDIES

INTERNATIONAL CENTRE FOR ADVANCED MEDITERRANEAN AGRONOMIC STUDIES

LOCATION: Mediterranean

PARTNERS: CIHEAM

KEY CHALLENGES

➤ Lack of access to agricultural knowledge and skills.

APPROACHES	☐ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☒ Agricultural education	☒ Research

KEY OUTCOMES AND LESSONS LEARNED

➤ More than 30 000 young people trained. The approach taken by CIHEAM, which mixes research, training and education, field development projects and policy dialogue, was successful in providing qualified training to youth.

CIHEAM is an intergovernmental organization founded in 1962. To answer the needs of its 13 member states, and to carry out projects jointly with other international, national and local actors, CIHEAM deploys its expertise in specialized training, research and technical assistance, targeting in particular the youth of the Mediterranean countries and providing a supplementary higher education to more than 1 000 young people every year. CIHEAM has four Mediterranean Agronomic Institutes (MAIs), located in Bari (Italy), Chania (Greece), Montpellier (France) and Zaragoza (Spain), and a General Secretariat based in Paris (France). It pursues its mission of cooperation through specialized training, networked research, scientific diplomacy and political partnership.

This specific approach, comprising flexibility, interdisciplinarity, and partnerships with other Mediterranean institutions, is to enhance the links between training, research and cooperation, i.e. between knowledge and development needs. Its mission is at the intersection of three areas of intervention (training, research, development) geared towards the needs of the states and stakeholders of the agricultural and rural worlds, but also engaged in the economics of knowledge and youth employment. A continuum of expertise ranging from production to consumption allows for a holistic and integrated approach to issues related to agriculture, food, marine and rural areas. Thematic niches are also addressed such as organic agriculture, territorial development, geographical indications, and the Mediterranean diet.

Since its creation, CIHEAM has trained more than 30 000 young people. Some of them occupy key positions as agricultural agents, business managers, researchers, or in national and international organizations. In addition to the primary aim of teaching, CIHEAM contributes to intercultural dialogue. About two-thirds of them were trained through specialized short courses. Each year, CIHEAM grants nearly 500 scholarships to students and professionals. Moreover, a regional doctoral platform hosts or supports about 50 PhD students each year. Between 2003/2004 and 2013/2014, approximately 4 400 persons participated in the MSc., 3 300 of whom came from 13 member states of CIHEAM – 70 percent of them received a mobility grant. Concerning specialized training, between 2003/2004 and 2012/2013, nearly 8 200 persons participated in courses offered by CIHEAM; 2 300 came from non-member countries.

This model allows for the training of young people who will become future decision-makers in the field of food security and nutrition with the sense of a collective future and an interesting openness about the regional realities, working towards a sustainable and equitable development. This model could be replicated in other (sub) regional contexts where countries share this vision. Long-standing financial support is also needed in order to fund education and training, grants, mobilities and scholarships and to give access to the most motivated and skilled young people. ■



CASE STUDIES /NEAR EAST

14 | ENTERPRISE YOUR LIFE

15 | UPDATE UNDERGRADUATE COURSE AND DEVELOP GRADUATE COURSE
AT THE NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

ENTERPRISE YOUR LIFE

LOCATION: Egypt PARTNERS: Make Cents International, Silatech, Plan Egypt, IFAD

KEY CHALLENGES

➡ Lack of confidence and lack of business related skills.

APPROACHES	☒ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

- ➡ Young people learned from their mentors, and appreciated ongoing support.
- ➡ Capacity development is also required for financing institutions so that they better understand the needs and constraints involved in the process of offering loans to the youth.



The Near East and North Africa has a population of approximately 350 million people. This number is expected to reach 700 million by 2050. More than 60 percent of the population is under the age of 30 and the region is faced with a significant gap in the youth and adult unemployment rates. The youth unemployment rate across the region is almost 30 percent, while in Egypt the rate is over 40 percent. The declining number of jobs in the urban public and formal private sectors underlines the need to promote pro-youth entrepreneurship in agricultural value chains.

To respond to this situation, a pilot project has been funded through an IFAD grant to Making Cents International - a social enterprise based in Washington, D.C. - and Silatech - a social initiative working to create opportunities for young people throughout the Arab world – in January 2014. Pre-design consultations with rural young rural people conducted by the local implementing agency - Plan Egypt - has indicated that this group possesses an awareness of what entrepreneurship is, and have role models who are good entrepreneurs. However, in many cases young people lack the confidence to start up their own businesses and do not have the negotiation, communication, planning, or idea generation skills to successfully run an agro-enterprise. The consultations also indicated that young people learned from mentors and appreciated ongoing support.

As a result, the Enterprise Your Life curriculum – which focuses on the practical development of enterprising life skills and the formation of Youth Saving Groups (YSGs) – was developed. This curriculum includes a coaching component that uses the metaphor of sports to introduce a YSG promoter as a coach whose job is to provide advice on the utilization of training content. The curriculum was designed as short, targeted drills that enable practice and hands-on learning for continual development of skills, allowing young people to experiment, and then seek coaching advice from other members, as well as the YSG promoter. In all, 580 YSGs have been formed, comprising almost 8 000 members, of which 72 percent are young women.

The project promotes capacity development – among both youth and micro-finance institutions – to create effective lender-borrower relations between young rural people and formal financial institutions. This is achieved, first, by building YSG member financial capability to prepare them to access formal financial services. The project anticipates that YSG members will be both more ready and more willing to access formal financial services after participating in YSG groups. Secondly,



microfinance institutions are educated about the value of YSGs for developing reliable clients for their services, and of the need to develop products and services tailored to the diverse needs of rural youth – paying particular attention to gender dynamics . By discussing the programme, sharing statistics about savings and lending rates, and inviting representatives to group meetings, project staff make micro-finance institutions' staff more comfortable with extending services to younger clients who have completed the YSG project. These approaches enable project staff to actively promote the project to YSG members, recommending those whose savings and credit needs have surpassed YSG capabilities to local MFIs, and supporting them to complete applications, find guarantors, and so on.

Though it is early days yet, preliminary results from the pilot project are encouraging. Youth participants in YSGs expressed appreciation for the Enterprise Your Life curriculum, and reported that they see their coach as a “brother or sister who can help guide them” to start new income generating activities. More concretely, initial survey results substantiate the potential of this combination of capacity development and access to financial services: A survey of 1 000 participants who had finished half of the curriculum resulted in 75 percent reporting that they had increased their knowledge, 25 percent indicating that they have applied their knowledge, and on average 20 percent noting that they used the information to start or improve an income generating activity. Much more will be known as groups finish their first cycle and an impact evaluation which is scheduled for the summer of 2015 has been completed. It is expected that if the pilot proves sufficiently cost-effective, government agencies and/or local community development associations may adopt the model as part of their youth development strategy. ■

UPDATE UNDERGRADUATE COURSE AND DEVELOP GRADUATE COURSE AT THE NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY (NUST)

LOCATION: Pakistan

PARTNERS: YUNGA, FAO, NUST

KEY CHALLENGES

➤ Lack of confidence and lack of business related skills.

APPROACHES

☐ Peer-to-peer

☒ Vocational Training

☐ Traditional knowledge

☐ New technologies and innovation

☒ Agricultural education

☐ Research

KEY OUTCOMES AND LESSONS LEARNED

➤ Establishing a network of universities to allow for the standardization of courses facilitates greater uptake and continuity at the national level.

➤ Sharing of material produced with agricultural policy-making institutions furthers the ability to integrate course material in extensions services.

The importance of providing up-to-date, relevant and practical courses at universities, particularly those in developing countries on agricultural subjects, is essential in fighting poverty, achieving food security and implementing effective climate change adaptation practices.

FAO/YUNGA supported the National University of Science and Technology (NUST) in Pakistan in updating its undergraduate course on irrigation and in developing a new graduate course on the subject. A set of 26 lectures was developed for each course, designed to match modern needs for natural resources management in the context of climate change and in line with the principles of Climate-Smart Agriculture. This update was completed in order to enhance understanding, learning and training in the University, with the ultimate goal of enabling the students to effectively put their learning into practice, aiding climate change adaptation and increasing the food security of their country.

The undergraduate course received very high ratings from its students during evaluation. Course materials have now been shared with the University of Agriculture, Peshawar and Mehran University of Engineering and Technology, Hyderabad. In addition, a network of 16 universities has been established to allow for the standardization of MSc level courses on irrigation in Pakistan. Once completed, these courses will be endorsed by the Higher Education Commission of Pakistan. The material that is produced will ultimately be shared with the International Commission on Irrigation and Drainage (ICID), which will be able to offer the course to students studying irrigation/civil engineering around the world, through its national committees.

The ability of the course and the course materials to continue to adapt, as understanding of climate change adaptation practices improve, and technology aimed at tackling climate change in the agricultural sector, evolves, is fundamental to its ongoing success. The course, when implemented, was fully up to date and must remain so to ensure that youth participating in the courses developed have the best chance of effecting change at home. ■



CASE STUDIES /ASIA AND PACIFIC ISLANDS

- 16 | GIRLS' GROUPS
- 17 | INFOMEDIARY CAMPAIGN
- 18 | VILLAGE CONCEPT PROJECT
- 19 | ICT NEPAL
- 20 | CATALYSING RURAL LEADERSHIP
- 21 | PACIFIC YOUTH IN AGRICULTURE STRATEGY

GIRLS’ GROUPS

LOCATION: India

PARTNERS: Landesa

KEY CHALLENGES

→ Access to entrepreneurial skills and agricultural training.

APPROACHES	☒ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

→ Providing girls with information about land rights and skills to engage in land-based livelihoods empowers them to contribute to their own food security and nutrition and that of their communities.

→ Establishing and communicating through a network of youth can create further opportunities for employment, and integrating youth perspectives in decision-making.

Poor rural girls in West Bengal are often perceived as burdens by their families, as they are not seen as financial contributors and because their families must pay a dowry to see them married. The cost of a dowry can devastate a family financially, so many families do what they can to avoid paying a large dowry. In many cases, this means marrying a girl off very young, even at 12 or 14 years old, since the dowry is sometimes reduced or not required for very young brides. Once married, girls usually have to drop out of school.

In order to provide opportunities for young women to earn livelihoods in agriculture, promote food security and nutrition among vulnerable groups, and enable girls to become confident, independent adults, Landesa – a rural development institute specializing in securing land rights for the world’s poorest people – has developed The Girls Project. The project enables young rural women in the West Bengal region to realize their land rights and to produce and sell their own food. This improves their long-term economic and social prospects and reduces their vulnerability to hazards such as child marriage, lack of education and malnutrition. Increasing understanding of land-related rights among girls and their communities - and helping girls to use land to create assets and demonstrate their potential - allows this group to gain some control over their futures. It also makes them more likely to enjoy secure land rights as adults.

The project’s main component is the organization of girls’ groups, which meet regularly, facilitated by peer leaders with support from community health workers. They engage in interactive discussions and teach girls about land rights, assets, land-based livelihoods, the benefits of having control over land and the importance of equal inheritance rights for girls and boys. These groups also provide the girls with land-based livelihood skills and practical knowledge of how to reach government institutions that can help them claim their inheritance and secure their land rights in the future.

Practical activities focus on teaching the girls to cultivate small kitchen gardens, in which they raise nutritious produce to add to their family’s food supply or sell for income. Many girls use their gardens to earn money for the first time, and their families are beginning to see them as assets rather than burdens. Another component is boys’ education and community engagement. This involves sensitizing boys and communities to girls’ vulnerabilities and rights and the benefits of their connection to land. The Girls Project has already reached more than 40 000 girls in more than 1 000 villages in the Cooch Behar district of West Bengal. Girls who participated in the programme for one year were found more likely to continue their studies, to have an asset in their name, and less likely to become child brides. ■

INFOMEDIARY CAMPAIGN

LOCATION: Philippines

PARTNERS: Philippine Rice Research Institute, Technical Vocational Unit of the Bureau of Secondary Schools of the Department of Education

KEY CHALLENGES

- Lack of familiarity with ICTs and lack of good ICT infrastructure.

APPROACHES

☐ Peer-to-peer

☒ Vocational Training

☒ Traditional knowledge

☒ New technologies and innovation

☒ Agricultural education

☐ Research

KEY OUTCOMES AND LESSONS LEARNED

- Online and offline strategies should always complement each other.
- Identifying champions will help to maximize impact and increase uptake, especially where people are wary of new approaches.
- Continuous dialogue with national institutions and the Department of Education will ensure sustainability.

The Infomediary Campaign is a national initiative to mobilize high school students, approximately 13-16 years old, to serve as infomediaries: they are expected to serve as information providers in their rice-farming communities. The campaign, which started in 2012, is being implemented in over a hundred schools nationwide. The objective of this campaign is to address the lack of information in remote rice-farming communities in the Philippines and fill the gap in agricultural extension: the country has only 13 285 agricultural extension workers (AEWs) to serve more than 2 million rice farmers.

This initiative is designed as action research, with online and offline strategies. Online initiatives include the introduction to the PhilRice Text Center (PTC) and the PinoyRice. PTC is an SMS platform that replies to all queries on rice farming. PinoyRice is a website that contains a huge amount of information on rice-farming in the Philippines. These two platforms were developed under the auspices of the Open Academy for Philippine Agriculture, a consortium of agricultural research centres in the Philippines that ended in 2010. All participating students are encouraged to register with the PTC. The Team classifies the SMSs sent by the students. The Team does regular call rounds and random visits to follow up on the implementation of the project.

Offline initiatives include the establishment of rice gardens, conducting the Infomediary Quiz Bee, providing information materials in participating schools, random conduct of Field Days, and capacity enhancement for teachers. The project also carries out national training on rice production among teachers from the participating schools. The teachers are the force multipliers of this initiative; hence, they are required to integrate the lessons they have learned into their curricula.

There are now thousands of Infomediary texters to the PTC. For instance, from June to December 2014, PTC received more than 3 000 messages from the infomediaries related to rice varieties and integrated pest and water management. The Department of Education circulated the report published in 2014 to agricultural TecVoc schools nationwide. The report contains recommendations to improve offerings of agriculture-related courses such as rice farming.

Many teachers have also downloaded teaching materials from the PinoyRice, which they are now using to teach about rice production. The campaign has also documented cases of successful pesticide reduction and improvements in information-seeking behaviour among farmers and communities.

In over two years of campaign implementation, one obvious conclusion is that the initiative cannot be fully digital. What works best is the combination of these two approaches, online and offline. More students send texts when there are ongoing activities on the ground. ICT infrastructure in the rural areas must be a priority for governments. As this is all about youth engagement in agriculture, ‘edutainment’ (education and entertainment) approaches must be well factored-in when coming up with the communication strategies to engage them. Conventional strategies might not work with young people. ■

VILLAGE CONCEPT PROJECT

LOCATION: Indonesia

PARTNERS: IAAS

KEY CHALLENGES

➤ Lack of confidence and lack of business related skills.

APPROACHES

☒ Peer-to-peer

☐ Vocational Training

☐ Traditional knowledge

☐ New technologies and innovation

☒ Agricultural education

☒ Research

KEY OUTCOMES AND LESSONS LEARNED

➤ Engaging youth in leadership roles in local communities facilitates greater field-level learning and incentive to be an agent of change.

➤ Teaching students interpersonal relationship skills, such as how to build trust and respect, facilitates leadership opportunities and a greater possibility of uptake of new ideas.

In 2010, the International Association of Students in Agriculture and Related Sciences (IAAS) in Indonesia launched an innovative programme called Village Concept Project (VCP) to enhance Indonesian students’ knowledge of applied agricultural extension services. VCP is now present in eight Indonesian universities. The project aims at improving food security and nutrition in eight Indonesian rural regions³ by offering extension services delivered by students in agricultural and related fields to local producers. Through the VCP, rural communities have the opportunity to benefit from training in a range of areas including marketing, food processing, post-harvesting,

³ Bogor, Malang, Semarang, Bandung, Yogyakarta, Solo, Banjarbaru, Mataram

organic farming, and nutrition. In addition to benefits to participating producers, capacity development of the young students is a significant advantage of the initiative. These young people are given the opportunity to learn about the real conditions and common problems in rural areas and apply their educational background to addressing local challenges related to increasing food security and nutrition among vulnerable groups.

Most of the young people participating are undergraduate students who possess mainly theoretical knowledge from university. The biggest challenge for these students is not having enough experience at field level, which is exactly why the VCP benefits Indonesian students. The students are stimulated beyond their capacities by trying to solve real problems of rural communities, which enhances their skills and capacity to work with farmers to find solutions to boosting food security and nutrition.

The VCP has an innovative approach that focuses on building a close personal relationship between the students and the local communities to increase trust and credibility. Students build up a strong relationship with the communities through weekly visits, which not only focus on agricultural discussions but also on daily life. This strategy has proved to be effective in winning the trust of local producers and has facilitated the implementation of extension services. At the same time, students learn about the realities of the daily life of rural communities, which will influence their future study and career paths.

More than 150 students across Indonesia benefitted in 2014 from the VCP by being given the chance to work as extensionists in local communities and share their knowledge with producers. VCP enables those students interested in pursuing a career in the extension or development field to gather practical experience and build up technical and soft skills. The experience gathered by the students will have a future impact on the quality of agricultural development and extension at country level.

The IAAS is currently the largest international student organization specialized in agriculture with around 10 000 members worldwide, and there is great potential to attract more participants to the VCP from partner universities. Obtaining university credits for the participation in the VCP would definitely increase the number of students working as extensionists. There is also the possibility to expand the VCP to other countries where IAAS is present, in this respect, countries in West Africa have shown a special interest to date.

Future agricultural experts should have the chance to learn under real conditions from an early stage in their studies and agricultural students should be recognized and used as a key resource for agricultural development. Both universities and governmental institutions should support the efforts of youth to gain hands-on experience in agriculture. The inclusion of similar projects into the study curriculum of universities would enable a large scaling-up by giving the students credit points for their community work at local level. Through collaboration between universities, youth and public extension institutions, the students would benefit even more from this learning experience by obtaining first-hand advice from professional extensionists. The promotion and financial support to volunteer in the rural development context would enhance the quality of students in relevant fields finishing their studies in Indonesia, hence the whole food and agricultural sector would benefit. ■

ICT NEPAL

LOCATION: Nepal

PARTNERS: ICTAN

KEY CHALLENGES

→ Inadequate information for farmers and lack of available media.

→ Weak training and extension including lack of dissemination of ICTs.

APPROACHES

☐ Peer-to-peer

☐ Traditional knowledge

☐ Agricultural education

☒ Vocational Training

☒ New technologies and innovation

☐ Research

KEY OUTCOMES AND LESSONS LEARNED

→ Need to incorporate ICT into extension and advisory services for farmers.

→ Public policies and investment to support dissemination of ICTs in rural areas.

In 2011, the project ICT in Agriculture Nepal (ICTAN) was initiated by a group of college students.

ICTAN works to address a range of challenges in agriculture in Nepal brought about by the difficulties faced by farmers in accessing information, as well as technological constraints limiting the reach and effectiveness of advisory and extension services. Since its establishment, ICTAN has been working on using diverse ICT tools to strengthen agriculture extension services in Nepal. The organization has taken various ICT initiatives in agriculture such as ‘Video conferencing for training’, distributing agriculture videos, SMS systems for information dissemination and the establishment of agricultural libraries. The organization has developed an e-agriculture application “Krishi Ghar” that uses mobile and web technology in an innovative way to complement the role of the extension services in the country. “Krishi Ghar” emphasizes the importance of enabling agriculture offices to send relevant and timely information to farmers.

Agricultural information influences agricultural productivity in a variety of ways. It can help inform decisions regarding land, labour, livestock, capital and management. Agricultural information dissemination at the right time to the right people can help to improve agricultural productivity. One of the major challenges is to disseminate relevant agriculture information to young people, who are often not connected to traditional networks and informal systems of information flow. Crucially, most young people in Nepal are connected to ICTs, which poses a compelling opportunity to access them in ways that have not traditionally been possible.

Nepal is divided into three different physiographic regions—mountains, hills and terrain, with different climates in different regions. As a result of its diverse topography and climate, Nepal is home to a wide variety of flora and fauna. The variegated nature of the climate greatly influences local agriculture and the heterogeneity of farmers’ information needs in the different geographical regions. “Krishi Ghar” allows the different government offices to send agriculture-related information to farmers according to their specific local needs.

Since its launch in December 2014, the android-based application is estimated as being used by more than 1 500 farmers. In addition, more than forty governmental offices are using the system. “Krishi Ghar” also uses social media to disseminate agriculture information, with around 13 000 farmers having benefitted, of which 80 to 90 percent are estimated to be youth. Information disseminated has covered fields such as improved land management practices, agriculture planning, seed varieties, disease control, and the provision of contact details of qualified specialists. This information plays an important role in spreading best practices, selecting suitable seeds on the basis of climate and environment, and raising awareness of market locations and prices. Timely information dissemination reduces farmers’ production costs and increases their productivity; thus playing an important role in improving food security and nutrition. ■

CATALYSING RURAL LEADERSHIP

LOCATION: India

KEY CHALLENGES

- Lack of youth groups and organizations resulting in poor support from the banks and financial institutions.
- Low levels of literacy among youth.
- Lack of interest in agriculture among youth.

APPROACHES

- | | |
|--|--|
| ☒ Peer-to-peer | ☒ Vocational Training |
| ☐ Traditional knowledge | ☐ New technologies and innovation |
| ☒ Agricultural education | ☒ Research |

KEY OUTCOMES AND LESSONS LEARNED

- Engaging youth in leadership roles in local communities facilitates greater field-level learning and the incentive to be an agent of change.

The state-funded project “Catalyzing Rural Leadership for accelerated dissemination of information: an action research” was initiated in December 2012 at Bihar Agricultural University, Sabour, India. Under the project, youth leaders were selected from local regions with the help of farm science centres at district level. The youth leaders were trained in various agricultural innovations in sub-sectors including mushroom cultivation, high-value floriculture, and poultry.

The approach used was to develop youth clubs to allow young women and men to collaborate with people of similar mindset and income level. This helped in claiming loans from banks and other financial institutions as well as overcoming illiteracy, as more educated group members were given responsibility for training those with lower literacy levels. Youth clubs were also used to share success stories, and role-models in agriculture were used to encourage young people to understand that farming is a potentially viable profession.

A total of 152 young women and men benefitted from the project. Agricultural initiatives in areas including mushroom production, floriculture, poultry and honey production were initiated through the clubs. The income generated resulted in better food security and nutrition for families. In particular, nutrition was improved through activities such as mushroom cultivation which provides a particularly rich source of nutrients. The project has also enabled better per capita income as well as round-the-year employment for youth in their own enterprises.

The approach has significant potential for scaling up and adoption in other locations. It is especially important that youth clubs be documented and share real-life examples of successful cases which will encourage young people to create change for the better. Further, university policies in which scientists at agricultural universities adopt a village in order to promote leadership skills in a group of youths, along with the formation of an agricultural enterprise headed by a youth leader, should be pursued wherever feasible. ■

PACIFIC YOUTH IN AGRICULTURE STRATEGY

LOCATION: Pacific Islands

PARTNERS: Tutu Rural Training Centre, CTA

KEY CHALLENGES

➤ Making agriculture attractive and remunerative for youth.

APPROACHES	☒ Peer-to-peer	☒ Vocational Training
	☐ Traditional knowledge	☐ New technologies and innovation
	☐ Agricultural education	☐ Research

KEY OUTCOMES AND LESSONS LEARNED

➤ Value of overarching youth strategy to reflect a wide range of approaches/initiatives that develop the capacity of young people to engage in agriculture and contribute to national food security and nutrition.

➤ Benefits of ICT and social media training integrated with capacity development in farming for young people.



Several targeted initiatives form a model for the Pacific Youth in Agriculture Strategy, which was drawn up in response to a call by Pacific Ministers of Agriculture in 2008 to “explore ways in which more young people could be supported to take up careers in agriculture.”

The Strategy – developed by the Secretariat of the Pacific Community (SPC) in partnership with CTA, and implemented by the Pacific Agricultural and Forestry Policy Network (PAFPNet) – is a policy instrument that recommends actions and initiatives likely to engage youth in agriculture in the region.

For example, the Tutu Rural Training Centre (TRTC) has a long-standing experience in offering training for youths in agriculture and has attracted considerable attention from other Pacific Island Countries. The model is seen as offering valuable solutions to some of the region’s most pressing problems, including youth unemployment, rising crime levels and alcohol abuse, and high levels of food imports. The Tutu formula has been highly successful in equipping young people to become successful farmers on their own land, showing that rural youth can earn decent livelihoods from farming. Virtually all those who completed the centre’s Young Farmers Course (YFC) are still farming as their primary source of income. In a region described as the most impoverished in Fiji, TRTC training has boosted food security among young graduates and enabled them to contribute meaningfully to their communities.

As part of its endorsement of the Tutu approach, SPC has provided technical support, training of trainers, farming equipment and information on taro diseases to the training centre. ICTs are also an important component of the Pacific Youth in Agriculture Strategy, recognized as an effective way of attracting young people to the sector. SPC- PAFPN has developed a Facebook page for Youths in Agriculture, which encourages young people to discuss policies and strategies. In 2012, SPC and partners, including CTA, organized a social media and web 2.0 training workshop for youths in Fiji. One of the participants, 24-year-old agriculture graduate Elenoa Salele, has created a blog called *Finding me in the agricultural world* to share thoughts and experiences with other young people interested in initiatives related to agriculture. Another graduate is involved in a youth farming initiative in Fiji launched in 2012, in an effort to give productive openings to unemployed youths. Helped with gifts of seedlings, tools and transportation to get them started, the young farmers now have 15 000 taro plants, a fish pond, ginger and cassava plots, seven cows and two bullocks.

The Mainstreaming of Rural Development Innovations (MORDI) Programme, set up by the Foundation of the Peoples of the South Pacific International, is making progress in helping youths in isolated rural areas of eight Pacific countries to pursue innovative and sustainable livelihood opportunities. Importantly, youths are the main drivers of the process, and are deliberately given a prominent role in various interventions designed by young people themselves. The Future Farmers of Tonga (FOFT) programme and the Zai Na Tina Centre for Organic Systems in the Solomon Islands are both helping young people to become involved in organic farming as an effective and sustainable way of providing jobs and income.

Many of these approaches have significant potential for scaling up and adaptation to different contexts. “These initiatives are just some of the successful developments happening around the Pacific, but there are still more stories to be documented,” said Miriama Kunawave Brown of the SPC Land Resources Division. “It shows there is a growing awareness of the need to engage youth in agriculture in the region. But there is still plenty more to be done.” ■



CASE STUDIES /LATIN AMERICA AND THE CARIBBEAN

22 | STRENGTHENING AGRO-ECOLOGICAL FARMING ADVOCACY THROUGH ICT

23 | FARM EXPERIENCE INTERNSHIP

24 | HELPING OUT OUR PRIMARY AND SECONDARY SCHOOLS (HOOPSS)

STRENGTHENING AGRO-ECOLOGICAL FARMING ADVOCACY THROUGH ICT

LOCATION: Peru

PARTNERS: IICD & ANPE

KEY CHALLENGES

→ Lack of access to markets and entrepreneurial skills to advance agro-ecological farming.

APPROACHES

- | | |
|---|---|
| ☐ Peer-to-peer | ☒ Vocational Training |
| ☒ Traditional knowledge | ☒ New technologies and innovation |
| ☐ Agricultural education | ☐ Research |

KEY OUTCOMES AND LESSONS LEARNED

→ Use of ICTs enabled youth to make their voice heard among policy-makers and the private sector.

In the Andean and Amazon regions most families live in poverty, often without even basic services such as electricity and water. They have limited access to mobile communication and the internet, and as a result, many young men and women produce small quantities of food crops and have minimal access to the market. In spite of these difficulties, youth have the potential to drive socio-economic change in their communities when they are engaged on family farms, organized in youth groups and connected to markets.

In response to this situation, in 2011, the National Ecological Producers Association of Peru (ANPE Perú), an association of ecological farmers that aims to protect agro-biodiversity and to promote food security and environmental preservation, and the International Institute for Communication and Development (IICD) joined forces to strengthen the capabilities of the ANPE agro-ecological youth network through ICTs. Activities are aimed at strengthening participants' entrepreneurial, agro-ecological farming and financial skills in order to create better socio-economic opportunities for themselves and their communities. Additionally, the network is supported by strengthening the young people's organizational and leadership capacities to advocate for agro-ecological production and become serious interlocutors in policy dialogue with public and private sector decision-makers.

Capacity development activities provided include:

- **Strengthening** the institutional and technical capacities of ANPE and the youth networks to integrate ICT solutions in their day-to-day work in order to claim their rights in development and promote youth participation in relevant public policy processes.
- **Training** ANPE networks to gather undisputable evidence and accurate data with ICT in order to lobby policy-makers more effectively.
- **Coaching** rural young people and farmers' associations on ICT-enhanced leadership and policy participation skills.
- **Guiding and assisting** ANPE in building resilient youth knowledge-sharing and advocacy platforms in order to engage public, private and not-for-profit decision-makers in ICT-enabled social change.

Promoting youth business ventures with the collective brand “Frutos de la Tierra” motivated young farmers to pursue new economic opportunities. In 2013, the rural ANPE youth directly contributed to an increase of ANPE’s agro-ecological sales volumes by 10 percent. The youth network therefore contributes to the direct socio-economic empowerment of the 895 family units of ANPE, which in turn impact the food security and livelihoods of 66 000 people in those rural areas. This experience gives rural youth a strong sense of community spirit and leadership.

In addition, ANPE members who were trained as agro-ecological spokespersons directly used ICTs to influence decision-makers from government and the hotel and restaurant industry. In 2013, young agro-ecological promoters entered into dialogue with regional and national governments, emphasizing the quality and benefits of their products and the youth involvement in them. Significantly, participating in the ICT-enhanced lobby and advocacy programme greatly improve young people’s social recognition and self-esteem.

With increased (online and offline) media presence and enhanced communication and leadership abilities, young ANPE members were able to influence perception among local leaders and hotel and restaurant industry representatives on the importance of agro-ecological produce for consumer diet and national health. For example, their input, expertise and concerns were submitted in the legislative process regarding the law against fast food. ■

FARM EXPERIENCE INTERNSHIP

LOCATION: LAC/Europe

PARTNERS: Wageningen University

KEY CHALLENGES

Distance between science/research and farmers.

Lack of understanding of agricultural/rural professional and policy-makers of the day-to-day realities of rural life.

APPROACHES

☐ Peer-to-peer

☒ Vocational Training

☒ Traditional knowledge

☐ New technologies and innovation

☒ Agricultural education

☐ Research

KEY OUTCOMES AND LESSONS LEARNED

Benefits and opportunities in linking young students of agriculture to farmers through practical internships.

To tackle issues identified by students at Wageningen University in the Netherlands relating to the distance between science and agricultural practice and the disconnect between different organizations with similar objectives, students and partner organizations created the Farm Experience Internship (FEI) programme. The FEI was inspired by similar programmes in Brazil, in particular the Farm Internship programme at the Federal University of Vicosa, which involves a five-day preparation followed by a two-week “farm experience”, where each student works and lives with a rural family. The structure and principles of the Brazilian version were preserved, but at the same time the Dutch FEI developed its own identity, with new elements and innovations.

Participatory processes shaped the initiative and it was finally included as an official course at Wageningen University, in August 2013.

The FEI allows students, who are the researchers, policy-makers, entrepreneurs and producers of the future, to learn to understand and directly address problems perceived by rural communities and social movements. Importantly, the FEI decreases the distance between rural populations and universities.

The FEI uses an interdisciplinary approach, underpinned by the belief that students' experiences are richer when people from different fields are brought together in order to share ideas and points of view, in an effort to establish a common understanding based on a holistic approach. Another principle is partnership, as external organizations and individuals are actively approached to contribute through sharing knowledge, skills and expertise. A third principle is non-intervention. It is important to reinforce the idea of a horizontal relationship in which the students respect the customs and traditions of their hosts, and do not try to change them during their short stay on the farm. During the process a participatory approach is used as the students are encouraged to think critically, share and put into practice new ideas. This leads to innovative methodologies and creativity, which can bring new solutions and perspectives for the current educational system and for the community. New media such as Facebook and video are a central means of communication among the students participating in the internships.

In Brazil, one of the major benefits has been the development of much closer relationships between farmers and the universities, with many farmers subsequently deciding to follow courses relevant to their work. It is also noteworthy that many Brazilian students returned to the communities where they had enjoyed their EIV experience, for new extension or research projects. In Wageningen, the first FEI in 2013 was a success for students, farmers and participating organizations – a third edition will take place in August 2015. Participants acknowledged its contribution to their professional education, in the sense of feeling empowered, getting in touch with new learning methods and also getting closer to farmers' realities and needs. At the same time, farmers also expressed appreciation for the initiative.

There are many opportunities to scale up and adapt the FEI approach. However, rather than replicating a package, it should be adapted to different realities while respecting the core principles. The Dutch group created a manual with these core principles to support students wishing to organize a similar farm internship at their own university. Further scaling also requires that these initiatives become institutionally embedded in the curricula of universities and other educational institutes. This entails recognizing that farmers knowledge, practices and realities are a valuable asset for students in their future careers.

To scale up these initiatives further, political and financial support from educational institutions and the government is needed. This type of support will encourage people to start similar initiatives in their regions and can enable better documentation and systematization of experiences. With enough resources, people with specific skills could also be hired to help spread the EIV initiative further, both across and beyond Brazil and the Netherlands. All that is needed is a spark to start a bonfire. ■

HELPING OUT OUR PRIMARY AND SECONDARY SCHOOLS (HOOPSS)

LOCATION: St. Lucia PARTNERS: St. Lucia Agriculture Forum for Youth, IICA, Consolidated Foods

- KEY CHALLENGES**
- Lack of interest in agriculture among young people and unawareness of related potential business opportunities.
 - Inability of formal schooling to provide young people with relevant skills for agribusiness.

APPROACHES	☐ Peer-to-peer	☐ Vocational Training
	☐ Traditional knowledge	☒ New technologies and innovation
	☒ Agricultural education	☐ Research

- KEY OUTCOMES AND LESSONS LEARNED**
- Need to integrate agriculture into schooling at a young age and integrate with relevant business and marketing skills.

In St Lucia, the Helping Out Our Primary and Secondary Schools (HOOPSS) project is actively exposing schoolchildren to agriculture as a way of opening up career opportunities for the future, and helping to combat food insecurity and high import costs. Youth in more than a dozen schools are learning how to grow crops using sustainable food production practices. Combining theoretical and practical approaches, young people are encouraged to see their farming activity as an enterprise. The scheme, developed by the Saint Lucia Agricultural Forum for Youth (SLAFY), with support from the St Lucia office of the International Institute for Cooperation in Agriculture (IICA), creates school gardens, and teaches children techniques such as organic fertilizer use and rainwater harvesting.

The HOOPSS programme, originally designed by the National Association for Youth in Agriculture (NAYA) of Dominica and now also being implemented in St Kitts & Nevis, is just one of the initiatives promoted by SLAFY, the St Lucia branch of the regional network, the Caribbean Agricultural Forum for Youth (CAFY). Helping young people and lobbying on their behalf, this dynamic group is committed to improving the living standards and prospects of youth in St. Lucia. Among other support mechanisms, it offers mentoring, training and career guidance so that school and college leavers will have the chance to forge a future for themselves in agribusiness or other parts of the agriculture sector.

In order to boost local food security and nutrition, produce grown by schoolchildren goes into primary school feeding programmes, in an effort to tackle rising levels of hypertension, diabetes and obesity. Fruit and vegetables from the school farms are also sold to restaurants, hotels and local supermarkets.

Links between school farms and the private sector help to generate an income, ensuring sustainability for the ventures. SLAFY is pressing for a percentage of the annual profits to be shared amongst pupils. The money would be deposited in a savings account in the names of the individual students, to be accessed upon completion of their secondary schooling. The hope is that the youngsters will invest these savings in furthering their education or in starting their own agribusinesses when they leave school.



A new departure has been to brand the school farm products so as to increase national visibility and encourage parents and students to support the programme by purchasing HOOPSS items. A competition amongst students was held to design a logo for HOOPSS and by the end of 2013 it will be used on all products sold in supermarkets.

Students are also directed towards scholarship opportunities for further education in agriculture, and SLAFY works closely with IICA to help young people pursue Masters degree studies in Mexico. Regular training workshops are held on important aspects of agriculture, with past sessions focusing on leadership, proposal writing, effective speaking, business management and ICTs. Upcoming sessions are planned on fund procurement and management, agribusiness marketing and identifying entrepreneurial opportunities. SLAFY staff advise young people wishing to join the sector to identify a promising entry point, as well as the skills needed and finance options, before assembling a team and writing a business plan. The group works with finance institutions to access credit, and links young people to technical information and support with marketing and ICTs. But first and foremost SLAFY encourages youngsters to find out more about what a future in agriculture really means, exploring the marketing and business potential of such a career, thus helping to make agriculture attractive and viable for young women and men. ■

CONCLUSIONS

«TELL ME ... I FORGET, SHOW ME ... I REMEMBER, INVOLVE ME ... I UNDERSTAND.»

Ancient Proverb

Overcoming challenges, unleashing the potential

The case studies presented demonstrate the significant benefits of investing in developing the capacity of young women and men to enhance food security and nutrition. Enabling young people to realize their productive potential – thereby harnessing the innovation, energy and dynamism of youth – must be a central element to overcoming challenges related to food security and nutrition such as the rising demand for food, climate change and environmental degradation, and growing inequalities. But this can only happen in an environment where the capacity development of young people everywhere is a priority. And it can only happen in a world where policy-makers are sensitized to the need for investments, institutions and policies that create food systems which are inclusive and provide decent opportunities for all – particularly young women and men – to engage in productive, profitable activities across value chains.

In the decades ahead, food systems must respond to increased demand, higher quality standards, and the need to adopt sustainable approaches to address climatic and environmental challenges, while at the same time providing access to sufficient and nutritious food for a projected world population of over 9 billion by 2050. The young people of today and tomorrow must play a central role in helping the world meet these challenges. To do this they need relevant education and skills - as well as a broader institutional and policy environment that makes agricultural livelihoods an attractive proposition for talented youth. This means ensuring smallholder farmers are connected to markets, are able to bargain for their interests through producer organizations, and that gender inequality is eliminated and rural women are empowered, and access modern technologies, land and financial services is provided in rural communities.

The cases presented describe a range of challenges that must be overcome in order to enable young women and men to acquire the skills they need to help create a thriving global agriculture sector capable of ensuring food security and nutrition for all. Rural-urban gaps in education participation – as well as between females and males - are significant and persistent, even among countries which have made notable progress towards MDG 2 on universal primary education. Equally worrying is the general absence of agriculture from rural curricula – an absence that is at odds with the centrality of the sector to rural livelihoods, as well as to wider national and global food security and nutrition challenges. Rural deficits in basic education constrain the productive potential of young women and men and underline the need to enhance the access and relevance of basic rural education. It is notable that dynamics such as traditional prioritization of boys' schooling at household level, gender patterns in household workloads, norms on early marriage and childbearing, and restrictions on the mobility of young women in some societies continue to lead to alarmingly low rates of education among young rural women in many regions and sub-regions.

These challenges are in many ways reflected in vocational training systems. It is striking that in many countries where food systems face severe difficulties in enabling access to sufficient safe and nutritious food for all, vocational training relevant to agricultural livelihoods is absent or inadequate. Existing agricultural training systems rarely target or are tailored to youth and do little to reach out to young women, whose contribution to agricultural systems in many sub-regions and countries is restricted to contributing unpaid household labour on their husbands' farms. Further, linkages with research agendas – or with systems of informal and traditional knowledge transfer security – are not generally strong, with the result that technologies developed may not be relevant or available for use on smallholder family farms.

While these realities, alongside age-specific constraints that young people face in accessing finance and land – again particularly stark amongst young women – paint a bleak picture, it should be recognized that the potential returns of addressing them are enormous. Skilled young women and men have shown that when they are given opportunities across inclusive value-chains – from input supply, to production, processing, storage and marketing – not only can they find solutions to feeding themselves and their families, but they can also contribute to helping their countries achieve food security and nutrition.

Learning and policy implications

The cases described in this document point to important lessons for capturing opportunities for promoting food security and nutrition by developing the capacities of young women and men. It is important to note that the lessons learned can be put to particularly fruitful use under broader conditions where inclusive policies and investments reduce spatial inequalities between rural and urban areas, eliminate gender discrimination and empower women, and promote inclusive and fair food value chains and markets.

At the broadest level, the implication is of the need to adopt a holistic, integrated view of the different means by which young rural people gain knowledge. This means paying attention to the way knowledge acquired in formal schooling influences vocational learning, and how each of these systems of learning interacts with informal means of knowledge transfer such as peer-to-peer exchanges and traditional intergenerational transfers of knowledge and skills. This suggests the need for awareness of, and coordination between, different learning systems and consideration on how to promote synergistic approaches to developing the capacity of youth.

Bearing in mind the need for holistic, integrated approaches, the cases highlight important lessons within the different formal and informal systems where young people acquire knowledge and skills. With respect to formal schooling, attention might be given to how rural curricula can be adapted to address key areas relating to food systems such as, *inter alia*, sustainable agriculture, natural resource management, agricultural marketing and nutrition. This could be complemented by vocational training systems that are targeted to young people, geared towards key emerging opportunities in local value chains, and address important gender dimensions related to agricultural production and marketing, such as household work distribution, access to productive resources and inputs, and land rights. The importance of developing business and soft skills such as self-confidence, negotiating and communication has also been highlighted in many cases.

Facilitating and supporting learning outside formal institutions, such as informal learning from parents and peers, to enable young rural women and men to acquire both traditional and new knowledge and skills is also key. Mentorship and peer-to-peer knowledge transfer has demonstrated benefits in terms of capacity development among both trainers and trainees, as well as being potentially cost-effective. Linking these systems of learning with partnerships – especially involving private sector actors – has created opportunities for young trainees to access land, inputs, and finance, thereby enabling young people to build sustainable agricultural enterprises. It will be important to ensure that gender dimensions – for example restrictions on women's land rights (either through formal laws or gender-discriminatory social norms) in some societies – are incorporated into training and sensitization activities.

Another effective system of knowledge exchange highlighted in the case studies is that of building links between agricultural universities and farming families. Where these links have been made – in many cases by requiring agricultural students to undertake a period of field learning where they live and work with a rural farming family or in a rural community – both young students and the farming families themselves have expressed appreciation for the skills and knowledge it has enabled them to acquire. From the side of the students – many of whom will go on to work as agricultural extensionists, policy-makers or as farmers themselves – these types of exchanges are important in developing sensitivities to the day-to-day realities and challenges associated with agricultural livelihoods. From the side of smallholder family farmers, the young students represent an invaluable source of up-to-date knowledge in fields of agriculture related to their livelihoods, and the exchanges offer an opportunity to benefit from this knowledge and adapt it to the realities of their work.

Supporting youth organizations and networks to participate in policy and planning debates has also emerged as a major challenge and necessity. Some of the featured cases highlighted how, in various countries or through various actions, creating direct links with policy-makers enhanced uptake and defined the nature of youth capacity development interventions. Integrating youth in the policy dialogue, paying particular attention to vulnerable and marginalized youth sub-groups, and in the subsequent design of the national rural youth (employment) policy, has resulted in a policy designed for youth by youth.

ICTs can also play a major role in developing young people's capacities, while improving communication and easing access to information and decision-making processes. Investing in extending these technologies to rural areas, in particular targeting young people – who are particularly adaptable to their use – has created opportunities for especially young farmers to keep themselves up-to-date with market information, new opportunities, and has provided an important avenue of upgrading and extending the outreach of existing training programmes.

Closing gaps

The cases presented in this paper present an impressive and diverse array of approaches to developing the capacity of youth to further food security and nutrition, and it is hoped that the lessons they bring to the fore will be useful to inform future debates and planning around relevant issues. However, it must be recognized that much more needs to be done. While the potential of enabling young people to contribute towards furthering food security and nutrition and achieving a world where hunger is eradicated is huge, so too are the costs of failure. The world cannot afford a future where young people have limited opportunities to access attractive and remunerative opportunities in a modern, knowledge-intensive agriculture sector that is linked to wider inclusive value chains. This is the reality for too many young people today and underpins the exodus of young people from agriculture and rural areas in many countries.

Successful cases and lessons learned must form part of integrated, orderly systems at all levels that reach out to all young people – including rural youth, indigenous youth, young women, young people from ethnic minorities, young people fleeing from conflicts, youth migrants etc. – and listen to their voices in debates, while ensuring they have opportunities to develop the skills they need to contribute to the future of their societies. In particular, much more needs to be done to target young women, who in many rural areas have little prospect of developing their capacities, despite their demonstrated potential to contribute to enhancing food security and nutrition. Challenging social norms on early marriage, inheritance and household work distribution will be a key aspect of this. Much evidence already indicates that removing barriers faced by young women would significantly boost agricultural output and further global food security and nutrition.

Another gap emerging from case reviews relates to the need for rigorous evaluations to understand the impacts of initiatives on food security and nutrition. This will be needed to inform the adaptation, systematization and scaling-up of successful approaches and to feed into policy-making and planning processes. More and better evaluations will also be important to assess the cost-effectiveness of the different interventions and to analyse the institutionalization processes in support of more effective policy-making processes.

Building on successes

This paper has highlighted that in order to respond to food security and nutrition challenges in the coming decades, developing the capacity of young rural people to engage in modern and inclusive food value chains will be indispensable. Indeed, given the challenges the world is facing – in terms of food security and nutrition as well as youth employment – it can be argued that it will not be possible to transform to sustainable food systems and eradicate hunger without this happening.

Cases presented herein offer valuable learning and insights into key entry-points for success. At the same time, it has been acknowledged that not enough is being done, and that the issue of youth capacity development for food security and nutrition needs more attention and more systematic, integrated responses at all levels. While the challenges are significant, the potential returns are enormous. A future where young rural people are able to reach their potential and help deliver a world where sufficient safe and nutritious food is available to all is a scenario everyone can look forward to. Though much needs to be done before this vision becomes a reality, its achievement is within our grasp.

ENDNOTES

- ¹ UNDESA. 2013. Cross-national comparisons of internal migration: An update on global patterns and trends. Population Division Technical Paper No. 2013/1. New York: United Nations Department of Economic and Social Affairs.
- ² Defined by the United Nations as people aged 15-24.
- ³ Proctor F and Lucchesi V. 2012. Small-scale farming and youth in an era of rapid rural change. London and The Hague: International Institute for Environment and Development and Hivos.
- ⁴ Jayne T.S, Meyer F, and Traub L.N. 2014. Drivers of change in African food systems: Distinguishing between what is inevitable and what can be influenced by policy makers. London: International Institute for Environment and Development.
- ⁵ UNESCO. 2012. Youth and skills: Putting education to work. EFA Global Monitoring Report 2012, chapter 7: Skills for rural youth – an escape route from poverty. Paris: UNESCO.
- ⁶ Tacoli, C and Mabala, R. 2010. Exploring mobility and migration in the context of rural-urban linkages: why gender and generation matter. Environment and Urbanization 2010 22: 389. London: IIED.

ANNEXES

ANNEX 1. CHALLENGES ADDRESSED IN CASE STUDIES

CHALLENGES COVERED BY THE CASE STUDIES*	
Lack of entrepreneurial skills and/or agricultural skills	9
Making agriculture attractive and remunerative	6
Lack of access to infrastructure and services	5
Lack of access to training	5
Targeting agriculture curricula to youth challenges	3
Lack of youth inclusion in policymaking	2
Lack of access to funding	2
Lack of access to land or equal rights	1
Lack of mentors/role models	1

* Some case studies referenced more than one challenge

Lack of entrepreneurial skills and/or agricultural skills

Case	Title	Region
1	Training of Youth Trainers	Global
7	Malawi Agribusiness Youth Program	Africa
8	SOORETUL	Africa
10	Levy based funding mechanism	Africa
12	Coastal Youth Fruits, Nuts, and Livestock	Africa
13	International Center for Advanced Mediterranean Agronomic Studies	Europe
14	Enterprise your life	Near East
17	Infomediary Campaign	Asia
18	Village Concept Project	Asia
22	Strengthening agro-ecological farming advocacy through ICT	LAC

Making agriculture attractive and remunerative

Case	Title	Region
2	International Movement of Agricultural and Rural Catholic Youth	LAC
5	Songhai Center	Africa
20	Catalyzing Rural Leadership	Asia
24	Helping Out Our Primary and Secondary Schools (HOOPSS)	LAC
21	Pacific Youth in Agriculture Strategy	Pacific

Lack of youth inclusion in policymaking

Case	Title	Region
3	Young Professionals' Platform for Agricultural Research for Development	Global
22	Strengthening agro-ecological farming advocacy through ICT	LAC
22	Farm Experience Internship	LAC

Lack of mentors/role models

Case	Title	Region
2	International Movement of Agricultural and Rural Catholic Youth	LAC
3	Young Professionals' Platform for Agricultural Research for Development	Global
18	Village Concept Project	Asia
20	Catalysing Rural Leadership	Asia

Targeting agriculture curricula to youth challenges

Case	Title	Region
4	Assessing methods to teach knowledge, skills, and learning for rural youth	Global
9	Building education policymaking capacity	Africa
13	International Center for Advanced Mediterranean Agronomic Studies	Europe
15	Update undergraduate course and develop graduate course at the National University of Science and Technology (NUST)	Near East
23	Farm Experience Internship	LAC
24	Helping Out Our Primary and Secondary Schools (HOOPSS)	LAC

Lack of access to training

Case	Title	Region
6	Nairobi and Environs Food Security, Agriculture and Livestock Forum (NEFSALF)	Africa
10	Levy based funding mechanism	Africa
19	ICT Nepal	Asia
21	Pacific Youth in Agriculture Strategy	LAC

Lack of access to funding

Case	Title	Region
8	SOORETUL	Africa
9	Building education policymaking capacity	Africa
11	Audio Conferencing for Agricultural Extension Service	Africa
20	Catalysing Rural Leadership	Asia

Lack of access to infrastructure and services

Case	Title	Region
11	Audio Conferencing for Agricultural Extension Service	Africa
17	Infomediary Campaign	Asia
19	ICT Nepal	Asia

Lack of access to land or equal rights

Case	Title	Region
16	Girls' groups	Asia

ANNEX 2. ADDITIONAL CASE STUDIES AVAILABLE ONLINE

IN ORIGINAL LANGUAGE ONLY, UNEDITED AT: www.fao.org/cfs/cfs-home/cfsevents/youth/special/en/

GLOBAL

MONSANTO'S BEACHELL BORLAUG
4-H GLOBAL NETWORK SUMMIT
NUFFIELD INTERNATIONAL FARMING SCHOLARSHIPS
MINI GRANTS
FACTS FOR LIFE
AGREENIUM ONLINE UNIVERSITY

AFRICA

NATIONAL SMALLHOLDER FARMERS' ASSOCIATION, Malawi
THE FRENCH-AFRICAN FOUNDATION FOR GROWTH
ABSL KOUADY, Cote d'Ivoire
BUNGOKHO, Uganda
BURUNDI JUICE, Burundi
CAGED POULTRY, Uganda
NDIANGAANE, Senegal
ROPPA, West Africa
DIMITRA CLUBS, Niger
JEUNES AIZO, Benin
E-AGRIBUSINESS, Ghana
FARMERLINE, Ghana
FEDERAL CAPITAL TERRITORY, Nigeria
MKULIMA YOUNG, Kenya
FARM QUEST, Mali
DIGITAL SKILLS, Kenya
KWAKWA BAKUNDU, Cameroon
ABOUBACAR SIDY SONKO, Senegal
YOUTH TECH AND ENVIRO RESEARCH, Zimbabwe

EUROPE

FARNET, Cornwall
FARNET, Finland,
FARNET, Sweden
TORTH Y TIR, United Kingdom
COMMON AGRICULTURE POLICY, EU
MILAN PROTOCOL

ASIA AND THE PACIFIC ISLAND

SYNGENTA FOUNDATION, India
KERALA HORTICULTURAL DEVELOPMENT PROGRAM, India
SHARED HARVEST, China
ZERO BUDGET NATURAL FARMING, India

LATIN AMERICA AND THE CARIBBEAN

AGRICULTORES DEL BARRIO, Mexico
APPTASTIC AGRI ASSISTANT, Suriname

ANNEX 3. ADDITIONAL RESOURCES

- DallaValle, F. 2012. *Exploring opportunities and constraints for young agro entrepreneurs in Africa*. Conference abridged version. Rome, FAO.
- FAO. 2014. Youth and agriculture: Key challenges and concrete solutions. Published by the Food and Agriculture Organization of the United Nations in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA) and the International Fund for Agriculture Development (IFAD). Available at: <http://www.cta.int/en/article/2014-08-27/youth-and-agriculture-key-challenges-and-concrete-solutions.html>
- FAO. 2013. *Promoting decent employment opportunities for rural youth: News from the web*. Rome, Italy. Available at: <http://www.fao.org/docrep/018/i2976e/i2976e.pdf>
- FAO. 2010. *Rural Youth Employment in Developing Countries: A Global View*. Rome, Italy. Available at: http://www.fao.org/fileadmin/user_upload/fao_ilo/pdf/Vandergeest_2010_RurYouthEmpl_150_ppi.pdf
- IFAD. 2014. Investing in young rural people for sustainable and equitable development. Rome, Italy. Available at: <http://www.ifad.org/pub/ruralyouth/investing.pdf>
- IFAD. 2013. Youth Policy Brief: Improving young rural women's and men's livelihoods – The most sustainable means of moving to a brighter future. Rome, Italy. Available at: http://www.ifad.org/pub/ruralyouth/youth_policybrief.pdf
- IFAD. 2013. A Guidance Note: Designing programmes that improve young rural people's livelihoods. Rome, Italy. Available at: http://www.ifad.org/pub/ruralyouth/youth_guidancenote.pdf

PHOTO CREDITS: Front cover: IFAD Madagascar; page 4: ©IFAD/Susan Beccio; page 6: ©IFAD/ Susan Beccio; page 10: ©FAO/ Proto Antonello 2011 Pakistan; page 15: ©IFAD/R. Ramasomanana; page 17: ©Vivuuus Ltd; page 25: ©SYFN Moses Nganwani Tia; page 28: ©FAO/Vasily Maksima; page 30: ©IFAD West Noubaria Rural Development Project; page 32: ©Nabil Mahaini; page 34: ©CEDAC Cambodia; page 41: ©SPC; page 43: ©CIAT/Colombia; page 48: ©FAO/Razuri.

In order to face the food security and nutrition challenges of the future – including feeding the estimated 9 billion people by 2050 with adequate, safe, diversified, and nutrient-rich food – there is a need to develop the capacities of the next generation of agricultural producers, by identifying ways to engage and empower youth – both women and men. Approximately 90 percent of young people between the ages of 15 and 24 live in developing countries, where agriculture employs as much as 60 percent of the labour force, and yet the majority of youth do not currently see agriculture as a viable career path given the low productivity rates and the difficulties they know to have been faced by previous generations. Part of the challenge of capacity development is about establishing an enabling environment that makes working in agriculture rewarding and attractive for youth. Another key component is upskilling and training youth already engaged or interested in agriculture to respond to new demands for skills or competencies, e.g. by adapting curricula in agricultural education, or through the approaches of extension services. Research institutions and academia will play a key role in identifying which approaches are having a measurable impact on food security and nutrition. This publication includes a synthesis of a broad range of approaches and initiatives for developing capacities, knowledge, and skills among youth – both women and men, to engage and empower them to further food security and nutrition.