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Opportunities for education and employment
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Cover photos: Rikolto, SAKALA, Mandel & Sesam, Urban Growers Collective Chicago, Roman Jabon, Camp Green Uganda and Airin Stephens of Roots to Harvest.
Opinion

Youth, Employment and Migration: Urban opportunities, with a focus on Africa

Ton Dietz

Demographically, Africa has become the big exception. On a continental scale, Asia, Oceania and Latin America – like Europe, and North America before it – reached demographic stability between 2000 and 2015. Average fertility rates on these continents plunged from more than five or six children per woman in the 1960s to an average of around two in recent years, and in Europe considerably lower still. Africa as well is experiencing a process of demographic transition, yet there are differences: Africa began at a higher level (more than seven children per woman in the 1960s and 1970s), and the pace of transition is much slower than, for instance, in Asia. Currently the fertility rates for Africa as a whole are still beyond four children per woman, and UN demographers expect that Africa will not reach demographic stability until around 2100.

On a world scale the consequences seem obvious: Africa’s demographic weight will increase markedly (to 40 per cent of the world population in 2100), as its population will have grown from the current 1.3 billion people to approximately four billion in 2100. The African population is and will remain very young. Median age will be around 20 for many years to come, and there will be a gradual shift from a demographic pyramid (with a wide base) to a population composition in which the 15-35 cohort will dominate, although this will probably not occur until close to 2050. Within Africa, of course, huge differences are present: South Africa, North Africa, and recently even Kenya have reached demographic stability or are rapidly moving in that direction, while the highest fertility levels can be found in a belt from Mali via Niger and Northern Nigeria to Central Africa to Ethiopia. There is a strong correlation between high fertility rates and low education participation for women, and between generally low urbanisation rates and high fertility rates.

Since about 2000, Africa has experienced three major additional “revolutions” (like those in many other parts of the world): relatively high economic growth (in some years the economic growth figures for Africa as a whole have even been higher than those for Asia as a whole), relatively large increases in participation in education and in the effectiveness of health care (partly triggered by the Millennium Development Goals and, currently, the Sustainable Development Goals), and rapid increases in the use of mobile phones as well as internet access and use. As a result, young people’s aspirations have grown, and many African rural youngsters have attended urban education facilities (nearby and further away) and are trying to get jobs in the rapidly expanding cities. Urban expansion (in absolute and relative terms; soon Africa will have more urban than rural people) has already been impressive. In 1960 Africa had an urbanisation rate of 20 per cent, with 65 million people in urban agglomerations. Currently the urbanisation rate is between 40 and 45 per cent, with around 500 million urbanites, and is expected to exceed 1.2 billion by 2050. Urban people need food, shelter, water, energy, clothing and many other things. It is already clear that urban hinterlands are being revolutionised to turn from basically self-supporting agricultural economies, with enclaves of mining and agriculture for export to the world market (and with a recent shift from Europe and North America to Asia), to commercial producers of a host of goods and services for the urban population. Although rural supply to urban demand is mainly an intra-national affair, increasingly urban hinterlands also expand to neighbouring countries; in some regions, urban built-up areas become part of megacities, sometimes across borders. Kinshasa-Brazzaville currently has more than 13 million inhabitants. Lagos, already at more than 20 million, is becoming part of a huge African Atlantic city belt from Abidjan to Lagos in which there will probably be more than 150 million people in 2050.

African youngsters are on the move. Growing aspirations paired with growing capabilities (individually and as a result of family investments) lead to growing migration: from rural areas to small and intermediate cities, and to megacities. Young people also move within cities, trying to escape from the most risky environments and moving to more well-to-do (and better protected) environments. With increasing wealth, as recent data about international migration shows,
the percentage of Africans going abroad is increasing as well: half of the travel is to neighbouring countries and the other half to destinations further away. Within Africa this leads, for instance, to migration to South Africa. As well, intercontinental migration has recently increased, with Europe still dominating but Asia growing in importance. Currently, intercontinental migration from Africa as a whole is in the range of one per cent of its population. With increasing wealth this could grow to what can be seen as the world average for intercontinental migration: between two and three per cent. In absolute numbers this is a change from the 12 million Africans currently elsewhere to more than 50 million in 2050. In relative terms, however, the intra-African migration of Africa’s youth is and will remain much more significant.

Although youth migration in its various forms poses many challenges, it proves to have many advantages as well. Migrants invest in their new environments, and bring with them lots of new ideas. We are seeing hybridisation of lifestyles, consumption patterns, and production and service initiatives everywhere. Migrants also influence their areas of rural or urban origin, and invest in opportunities they see in these “home areas”, in agriculture and in the service or other industries of the small urban centres near their former rural homes. For many urban and periurban agriculture is worth trying, in these home regions as well as in their new urban environments. This form of agriculture can be for home consumption within families but also in the form of more commercial ventures, particularly for relatively high-value products like chicken, eggs, milk, meat and many types of vegetables and fruits. Some of these products also feed an agro-industrial sector, and an agro-service industry, and offer opportunities for youth and adult entrepreneurs and workers. The supermarkets, fast-food restaurants and bars-with-food increasing in number in African cities provide ample opportunities for additional employment and business ventures, frequently for workers and entrepreneurs who are women. The downsides are visible as well, though: in many cities obesity is rapidly becoming a more serious health problem than hunger. And even with very sharp increases in urban-demand related employment creation for Africa’s youth, the numbers of employment seekers (and their aspirations for a better life) are rising so rapidly that local employment creation will never be enough. This will continually lead to aspirations among Africa’s youth to try their luck elsewhere, even if many lack the financial and social means to do so effectively. Add to this the likely direct and indirect effects of climate change….

The CityVeg project supported direct selling by young farmers in Accra. Photo by IWMI

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Documentation for further reading
Africa in the 21st-century
Africa population dynamics
Africa: international migration, emigration 2015
Africa’s international trade 2001–2016: boom and bust
Agricultural consumption and production, 1961-2009
Editorial

Youth in Food: Opportunities for education and employment

Migration is a shared global challenge, instigated by rapidly growing town and city populations in Africa and southeast Asia coupled with improved mobility and technology. Many countries have a bottom-heavy population pyramid; an extreme example is Sierra Leone, with (2015) 80% of the population under 35 years of age and just over 40% under 15 (page 35). Young and Rodriguez report in this issue an estimated global total of 1.8 billion people 10 to 24 years old, with youth as the majority population in cities in the Global South.

Youth are on the move: from rural spaces to cities, within countries, between neighbouring countries, and globally as they seek out better lives (see article by Dietz on page 3). What they are moving from includes agriculture – a livelihood broadly stigmatised as backwards and unprofitable. Cities and city jobs, on the other hand, are seen as progressive, with opportunities to prosper. However, the reality is often quite different where cities are expensive to live in, where food and housing are of poor quality, where access to safe water and hygiene are not guaranteed, where personal security can be difficult and there are not enough fairly waged opportunities for many, especially youth and women.

This issue of UA Magazine explores challenges and solutions raised by these migration pressures, with a focus on youth employment in city region food systems. Articles cover Brazil, Canada, China, Indonesia, Liberia, Mali, Nepal, Peru, Philippines, Rwanda, Sierra Leone, Tanzania, Uganda and the United States, and small to mega-cities, urban, periurban and rural spaces. This collection explores opportunities for and barriers to youth employment along the entire food system. Discussions often focus on developing rural agriculture or rural food value chains to keep youth from moving. This is not only a limited vision of the nature of migration and the potential of rural agriculture; it also leaves out city region food system opportunities in larger cities, and especially in smaller ones.

Urban, periurban and rural agriculture, as part of broader food systems, offer place-based, practice-centred solutions to common problems in the face of globalisation. Food production and food systems work provide livelihood possibilities with multiple benefits, including improved meaning and self-esteem, personal and food security through job and food access for youth – who often are under- or unemployed, facing substance abuse, experiencing violence, and/or single parenting.

In a study for Food and Business Knowledge Platform (F&BKP) (2017), RUAF showed that increased recognition of the role of food in responding to various urban sustainability concerns provides new market and engagement opportunities for the private sector and other actors. New players, such as ICT providers and housing agents, have also started to support production innovations such as commercial greenhouse production, vertical farming and food waste reduction.

Horticulture and small animal production, as leverage points for closed-loop multifaceted sustainable change, respond to the need for youth training and meaningful employment in the face of migration and pressures including climate change. This issue of the magazine documents people and communities growing food, building self-sufficiency and food security, and generating income opportunities and empowerment. Among these are collective initiatives such as cooperatives and producer organisations that can help to rehabilitate and join up food producers and people along the food web from seed to eating and beyond. Excellent examples of the potential for co-ops as a platform for youth training and employment in Africa are described in the study in Rwanda, Tanzania and Uganda emphasising the importance of youth involvement in decision making and peer-to-peer training in general, and in agri-cooperatives in particular (page 40). And in Haiti, of a community centre that transformed vacant land in a stressful environment into a productive space, building community and youth opportunities at the same time (page 19). There, as in many cases reported in this magazine, agriculture is seen as a low-threshold opportunity for young people.

Yet many challenges remain. Fortunately, as reported throughout this issue, these can be tackled. In Rwanda, Tanzania and Uganda, difficult relations between youth and more senior farmers were addressed through mentorship models (page 40) or farmer training centres. More attention is also needed for profitability, which depends in part on how food is valued. If food availability and improved health through better nutrition and traditional food systems (e.g., erva-mate in Brazil, page 38 and muña in Peru, page 26) are considered, and the definition of “value” is widened to a social economy vision, then working in agriculture and along
the food chain could be framed differently for youth and recognised as a vital part of society. To confront perceptions and realities about agriculture, including the stigma of food production as “backwards” and unprofitable, youth are enabled to value traditional food and shown how its cultivation positively impacts urban centres (page 38).

We see, then, that food production needs to be viewed as part of a larger food system connecting urban and rural spaces. Reinforcing such city region food systems is a strategic and effective entry point for achieving food security, social inclusion, employment opportunities, natural resource management and ecosystem services (see earlier issues of UA Magazine). Roots to Harvest in northern Ontario, Canada, is a great example of youth empowerment and building confidence and skills through food and farming, with indigenous and immigrant youth, using a whole person approach. The programme enables learning skills and lessons that are valuable throughout life and in finding employment in food and farming or elsewhere (page 24).

Also pervasive and pressing is the need to invest in youth and provide resources to run programmes and make secure land and credit available. Transportation routes are also needed for connecting rural, periurban and urban spaces to enable access to markets. Illustrated by experiences in Liberia and Mali, the article by Van Soelen and Van Hoolwerff (page 8) unpacks how to start a business and be an entrepreneur and identifies context-specific projects with high success potential. The article explores what it takes, and the kinds of support young entrepreneurs need. In the box on page 7, F&BKP also reports on experiences that emphasise the need for education, training and coaching of young entrepreneurs, beyond providing them access to finance and infrastructure.

Training programmes such as the Community Food Works for Newcomer Settlement in Toronto deploy food as a tool to enable settlement, integration and employment (page 12). In documenting the interlinkages between unemployment, low income, food insecurity and poor health, the Toronto programme provides an award-winning example of how credentials help immigrants find meaningful employment. It shows that the food sector is part of the solution and equally relevant for young migrants (see also article from Norway, page 15).

Champions play key roles in raising the profile of youth. In the Philippines, a Schools Division Superintendent leads the agri-preneur training initiative with courses focused on practice-based vegetable and crop production and animal production and marketing (page 21). In Uganda, Nakabaale champions the Camp Green agriculture training programme (page 18), also supported through policies and extension services by Kampala City Corporation. In Chicago, Erica Allen leads efforts (page 22) where urban food initiatives provide youth empowerment, motivation and training to create opportunities in difficult urban environments. This achieves real impact: jobs for youth, formerly incarcerated people and new farmers via training, and food access through mobile markets, school nutrition programmes, and public education. These initiatives all produce remarkable results – yet reliance on a champion can make programmes precarious in the long term.

Policy is needed to support various forms of agriculture so land is available and protected for food (page 32). An FAO consultation (see Resources, page 42) pointed to the need for appropriate innovation as well as building awareness that the food system includes not just growing but also processing, distribution, marketing and food waste management. Policy and programmes must also enable appropriate mentoring, training and knowledge sharing so youth can enter the food sector. Work in Quito emphasises that policy makers must understand youth as a heterogeneous group facing different types of challenges with different needs (Young and Rodriguez, page 28).

Together, these opportunities can be transformative. The articles underscore the importance of valuing youth input into multi-stakeholder processes, to make space for youth to be leaders and active participants and to foster informed risk-taking. As one person interviewed for the article on Sierra Leone explained, “Thanks to my new work as a young urban farmer, my dignity is restored and I now have a future.”
How should organisations working to improve food security via employment and education programmes relate to the political agenda of mitigating (international) migration? This was discussed during a “Youth in food systems” community of practice meetup in Utrecht, the Netherlands.

Drivers of youth migration
Roughly one third of all international migrants are 15 to 34 years of age. The context for youth migration includes high youth unemployment rates in countries of origin. Lack of meaningful work contributes to frustration which can lead to social unrest or irregular migration (without authorisation or documents required under immigration regulations). Rural youth, especially, seem more likely to migrate in response to lack of decent employment or entrepreneurial opportunities in agriculture and related rural economic activities – though migration of rural youth is more often temporary and seasonal, and more often to urban areas in the region. Sustainable agricultural transformation, and in particular the creation of meaningful jobs, could offer opportunities for addressing several of the drivers of youth migration.

The migration paradox: economic development increases aspirations and capabilities
It is increasingly recognised that policies that help young people fulfil their potential can help drive economic development. It is popularly believed that this growth could prevent young people in particular from migrating internationally. The migration paradox, however, illustrates that economic development in poorer countries first leads to a strong increase in domestic, international and intercontinental migration. Although the complexity of interrelated factors driving migration makes it very difficult to accurately predict future migration dynamics, growing aspirations paired with growing capabilities (individually and as a result of family investments) do lead to growing migration – as Dietz describes on page 3.

Maximising positive and minimising negative migration effects on agricultural development
In funding agricultural programmes, donors increasingly focus on the assumed relation between youth employment, education and mitigating intercontinental migration, yet it remains difficult to demonstrate a direct effect of these programmes on migration decisions. Youth education and employment programmes might even contribute to more migration in the near future, but in the longer term could help reduce distress migration (forced choice) and steer youth towards safer and more regular forms of migration. Vocational training and education can connect youth to local opportunities, but training is not enough, and integrated approaches are needed which consider job/business opportunities and other factors, such as social relations and climate change. Furthermore, low unemployment rates are not necessarily a sign of better youth labour market outcomes, as these might mask rates of underemployment or informal work. True reduction in distress migration requires a focus on creating decent jobs, crucial to this area: a political enabling environment, policy interventions and regulations. Multi-stakeholder collaborations combining youth-specific programmes with youth mainstreaming efforts could increase the success of these endeavours.

Moreover, migration can also be viewed in terms of its positive effects. At destination, migrants can provide added value: extra labour force, different skill sets and new knowledge. Simultaneously, in countries of origin, migration can in some cases reduce pressure on natural resources and stimulate a more efficient allocation of labour. To harness the potential of migrants in agricultural development, these effects, and the role of remittances, should also be considered. Perhaps a shift in the framing of donor funding is needed: towards how organisations can contribute to maximising positive impacts of migration and minimising negative ones.

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Further reading
More on F&BKP thematic work on youth in agro-food systems: knowledge4food.net/theme/youth-agri-food/
Youth Employment in Developing Economies: Evidence on Policies and Interventions: http://bulletin.ids.ac.uk/idsbo/article/view/26/7/ONLINE%20ARTICLE
Young people in rural Sub-Saharan Africa (SSA) are migrating to cities in unprecedented numbers. They migrate with high expectations: dreams of big city living, making money and achieving success. In urban areas, rural youth are exposed to successful business people, traders, government officials and people working in the development sector, all of whom contribute to their aspirational ideals. These new-age role models can seemingly afford houses and cars, and have the financial stability to get married and support their families. In rural areas there are fewer examples of these types of role models. By comparison, many rural people are characterised as low-income villagers, using outdated agriculture production techniques to sustain a subsistence farming lifestyle. However, agriculture in rural areas can be much more profitable if the right knowledge and skills are acquired.

In this article we discuss dynamics of SSA’s agriculture sector, challenges faced by entrepreneurs and efforts made to improve opportunities for youth. By highlighting two case studies – a context-sensitive SME (small to medium-sized enterprises) development programme in Liberia and an innovative approach that optimises education in agriculture for youth in Mali – we outline promising approaches for spurring job creation for youth in agriculture.

The context

In Mali and Liberia, as in many parts of SSA, agriculture (both rural and urban) is the primary sector for employment and income generation. (In Mali agriculture accounted for 33% of GDP and 79% of the active population in 2016, according to the Mali Ministry of Agriculture. In Liberia agriculture accounted for 34% of GDP and 43% of employment in 2017, according to World Bank data.) Consequently, because the jobs are often relatively low-skilled, there is significant potential for youth to participate in these value chains. However, due to extreme climate conditions, poor living conditions, low levels of mechanisation, seasonality in crop cultivation, and low wages and profit margins, many youth leave rural areas in search of employment and opportunities in the city.

The jobs youth find in urban areas are mostly in the informal sector (92% in 2016 in Mali and 78% in 2010 in Liberia, according to World Bank data) and characterised by low wages and high insecurity. Despite these vulnerable circumstances, these youth are unlikely to return to rural areas after settling in an urban centre. Rural youth thus remain in “waithood”: due to the low and insecure payoffs of

1 “Waithood”: Youth Transitions and Social Change. Alcinda Honwana
working in rural areas, many are waiting until the moment they can “afford” to find a partner and begin a family. From that perspective, leaving an urban area to return to the countryside is an unattractive option for young people.

Central to disrupting this pattern is making agriculture – rural or urban – more attractive to youth so that they aspire to pursue a career in this sector. That will require an increase in the money to be made in agriculture and a makeover in the perception of the “village farmer”. This is a conundrum that many development organisations, governments and private sector actors are seeking to solve.

Development agencies have chosen to focus on increasing agricultural output by improving production methods and increasing efficiency. Increasing production results in higher turnover and can lead to higher revenues. Nonetheless, in a developing economy where the relation between supply and demand is volatile, an increase of production where demand is stagnant frequently does not lead to a significant increase in revenues. In many cases revenues remain the same because the unit price decreases in response to the increase in supply. In addition, seasonality of crops can lead to large amounts of produce entering the market in a short period of time, and the competition pushes down prices. Storing and saving products, in order to sell them when supply is low, is capital-intensive and not possible for most producers in rural areas. In response many development projects have invested in storage facilities, typically based on a shared-cost agreement. The strategy of creating an “enabling environment” includes not only storage facilities, but also better access to finance, development of value chains and markets, and more favourable regulations and policies for producers and processors. But unfortunately the time frame of donor-supported development projects is often too short to really tackle the underlying causes of market failures, so sustainable, longer-term impact is difficult to achieve. New solutions and initiatives are urgently needed.

### Youth entrepreneurship support: Business-in-a-Box

Initiatives aiming to support youth employment through entrepreneurship are increasingly popular among donors and policy makers. Often, youth entrepreneurship programmes teach young people how to write a business plan. Then, if such business plans are deemed feasible, the young entrepreneurs may be eligible for loans or grants to start or grow their business. Too often, however, support is offered to start-up businesses that, in hindsight, did not have enough potential to flourish and become successful. At SPARK we quickly realised that writing a business plan should never be the goal, but merely a step towards a much greater end.

SPARK has been working with young entrepreneurs in conflict-affected countries for over 20 years. In the eight years we have been active in Liberia we have learned many lessons about the realities of what it takes to support young entrepreneurs to become successful in such a challenging context. Identifying high-potential ventures is critical.

### Ora Barclay Keller

When Ora was introduced to the [Business-in-a-Box/E-Plus programme](www.ruaf.org), she chose to develop a packaging business with innovative ideas to improve both the design and quality of packages in the Liberian farming industry. Farmers in Liberia often lose a considerable amount of their harvest due to lack of access to proper sealed packaging that can preserve a harvest. Ora’s products, Le Mirage International, preserve farmers’ crops in vacuum-sealed plastic, which increases the shelf-life of products. The attractive design of the packages also gives a competitive edge to farmers’ goods, making them ideal candidates for export.

### Martha Wuo

Martha set up “Samatta God’s Favor Enterprise” in 2015. She transforms raw local products into healthy and tasty consumer goods. Her main products are ginger, garlic and garlic chips that can be used for medicinal purposes. Along the way, Martha was introduced to the [Business-in-a-Box/E-Plus programme](www.ruaf.org) by Single Spark and SPARK, which gave her a great opportunity to polish her management skills and expand her business. During training Martha gained a set of valuable skills, like keeping business records, developing strategies and producing marketing and produce brochures. While Samatta God’s Favor is a for-profit enterprise, its mission is not limited to keeping customers healthy and happy. It also aims to connect communities and producers to create jobs for Liberians.

Often, business concepts developed by young people, who typically lack experience, do not reflect a strong understanding of opportunities within the markets where they operate. For example, young entrepreneurs may come up with a business idea in a market that is already heavily saturated with that product or service and thus less likely to be profitable. Or they may design a product that demonstrates a weak understanding of the local customer base. Even with a business concept that is innovative and shows high potential, these entrepreneurs are operating in business environments that present significant barriers to success. They often encounter low levels of trust between market actors, low levels of contract enforcement, and a volatile market with constantly changing demand and supply. This leads to high transaction costs, which eat into profit potential. Additionally, entrepreneurs face crony capitalism, a lack of quality infrastructure, high financial costs due to high interest rates and fluctuating energy prices. This is the world of young Sub-Saharan entrepreneurs: trying to break out of poverty with ideas that are often good yet insufficiently adapted to the demands and realities of their respective economic situations.

In response to these challenges, SPARK has adapted its interventions to focus on market demand and context-appropriate business concepts. We encourage entrepreneurs to pursue a career in this sector. That will require an increase in the money to be made in agriculture and a makeover in the perception of the “village farmer”. This is a conundrum that many development organisations, governments and private sector actors are seeking to solve.
Business-in-a-Box is a programme implemented in collaboration with the developers of the intervention: the Dutch social enterprise Single Spark. The programme begins by analysing the local market using context surveys and the knowledge of local experts. After that, proven business concepts from other programmes and contexts are emulated to fit the local requirements. This gives aspiring entrepreneurs a solid base to start from with a business concept that has the merits to be successful. Using this innovative methodology, we have supported the start-up of 18 context-appropriate youth-led businesses. SPARK’s Business-in-a-Box programmes have resulted in a 60% increase in the business success rate, more profitable start-up companies and therefore higher levels of employment.

Entrepreneurial education

In a fast-changing world with ever-changing dynamics in both domestic and international markets, entrepreneurs need to respond quickly to new realities and challenges. On-going, market-relevant education is crucial to achieving this. Determining actual market demand for new products and services, and being able to quickly adapt business strategies to meet these demands, are critical skills for successful entrepreneurs. Educational programmes that are static over time with a one-size-fits-all approach often fail to address these aspects and thus fail young people. Youth who have not had sufficient support to develop these necessary entrepreneurial skills often encounter difficulties running their business successfully. As a result, they cannot repay loans used to start their business, will not feel the pride of being a successful entrepreneur, and do not have a stable source of income—leaving them incapable of escaping “waithood”.

In the current era, with mobile phones and internet in daily use, development initiatives should better adapt their interventions to the opportunities this brings. An initiative in Mali, AgroForma, is currently using these tools to create access to quality education, attaining about 4,000 unique visitors each month and 15 new subscriptions a day. Subscribers can attend free online courses, with paid practical training at a regional training centre. The price for practical training varies between 8 and 20 euros, depending on the number of attending students and tools needed for completing the practical training.

By offering continually updated training based on current market dynamics and demand, this platform provides quality training modules for open and distance learning. Because there is less need for youth to relocate to other regions to receive proper education, internal brain drain decreases. And when demand changes, so do the training modules. Using the website or the application for their mobile phones, youth have constant access and can improve their skills and adapt their business strategy to current dynamics. Various actors are actively involved to guarantee the quality of the training modules and information on offer. Researchers from national research institutes, government officials, trainers from existing training centres, and national private sector experts all continually develop the module content. Additionally, regional training centres provide practical training and support to help users master the training modules. Thanks to this cost-effective distribution of knowledge, youth are better equipped to face the challenges that come with running a successful business in agriculture, without facing major financial barriers.

Conclusion

In this article we have presented innovative initiatives that can change the “youth in agriculture” dynamics. Making use of more context-sensitive and high-potential business concepts—as well as open and distance education—facilitates support of better, more profitable businesses in agriculture; over the long term this changes the mindset of youth regarding agriculture as a business and career. We hope we have inspired other development actors to take notice and adapt their own thinking and programmes.

We will continue our work in a five-year EU-funded project in Liberia called the PARTNERS project. The value chains for cassava, plantain, legumes, moringa and pineapple will be analysed and the missing links in the chains identified. Then Business-in-a-Box and accelerator programmes will be launched to fill the gaps in the chains and support the existing businesses to create better-aligned and functional value chains, generating more revenue for all actors involved and higher values for the crops and their derived products.

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Business-in-a-Box: www.singlespark.nl
SPARK’s work: www.spark-online.org
The educational platform: www.agroforma.org

“The technical training for entrepreneurship in rice cultivation is practical training that is easy to implement afterwards. It addresses the most relevant topics in rice cultivation. The trainer is patient and attentive, and provides concrete exercises. For all beginners who want to learn about entrepreneurship, I recommend it. This training matched my expectations.”

(Vinabé Dembélé, Ségou, March 2018)
Development of economic opportunities for youth and returning migrants in Mali

“Youth Employment Creates Opportunities, here in Mali” (EJOM: L’emploi des jeunes crée des opportunités, ici au Mali) is a three-year project initiated by the Dutch organisations SNV, ICCO Corporation and WASTE (with RUAF) and the Agency for the Promotion of Youth Employment (APEJ) in Mali. The project’s objective is to contribute to the development of economic opportunities and social stability in Mali in the regions of Kayes, Koulikoro, Gao and the district of Bamako. The project seeks to foster employability of young people by strengthening their capacities in life skills, entrepreneurship and the technical fields of horticulture, waste management, agri-food and utilitarian crafts. The project will lend support to 400 small to medium-sized enterprises on these topics.

Since April 2018, over 1000 young people (of which 45% are young women) have received training in life skills and entrepreneurship. Returning migrants – most of whom are men because the culture of immigration remains largely dedicated to men – account for 8% of participants. Twenty-three business plans were selected to be supported for further employment creation for young people. An “installation kit” (including funding and coaching) was given to 121 youth, to further build their business.

Fanto Doumbia, 34 years old and living in Bamako, is a returning migrant and the married father of a little girl. He works in waste management and wants to further improve his business in household garbage collection. With EJOM support, Fanto invested in two carts, two donkeys and some equipment, which made it possible to increase his profit. He collects waste from fifty households for a monthly sum of CFA 3,000 (USD 5) per household. This will give him a monthly sum of CFA 150,000 (USD 260), which allows him to hire the services of a friend who drives the second cart. Fanto works at night, “To avoid the hot sun, to ensure my health and the well-being of my donkeys.” He is confident that he can further improve his business and is contemplating buying motorised collection equipment.

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Using food as a tool for settlement, integration and employment

Marian Yusuf
Rosie Mensah

The Toronto Food Strategy’s Community Food Works for Newcomer Settlement programme was developed in 2016 to address the needs of Arabic-speaking newcomers to the City of Toronto. Through food, it creates opportunities for social inclusion and engagement, to facilitate resettlement and integration into Canadian life. This programme was adapted from the existing Community Food Works programme that addresses barriers to accessing food handler training, nutrition information, and employment support among low-income residents in Toronto. The Community Food Works for Newcomer Settlement was recognised for its innovation and impact with a Milan Urban Food Policy Pact “highest score” award in the fall of 2017.

Toronto Food Strategy

The Toronto Food Strategy, led by Toronto Public Health, was established in 2010. The vision of the Toronto Food Strategy is to champion and support a healthy and sustainable food system for all, through research, facilitation, partnership building, and incubating and implementing specific, tangible projects. It aligns with the growing international, national and regional food movements and the increasing recognition of the important role of cities in promoting healthy sustainable food systems.

Working alongside the Toronto Food Policy Council, the Toronto Food Strategy partners with City of Toronto staff, external institutions, community agencies and the private sector to facilitate effective policy change, to develop and expand initiatives that focus on access to healthy, diverse and affordable food, and to create good food jobs.

The Toronto Food Strategy uses food through programmes like Community Food Works to improve the lives of residents, to address many of the social determinants of health (see Figure 2), and while cultivating sustainable food systems (Figure 1).

Community Food Works

In 2011, Community Food Works (CFW) was initiated by the Toronto Food Strategy as a pilot project to provide an innovative approach to public health service delivery. CFW integrates food handler training and certification, food skills and nutrition education, and employment support for low income residents through a learner-centred, adult education approach. Food handler training ensures safe food handling for restaurants and other food premises. Since 2011 it has been offered at no cost through CFW, and builds the skills, knowledge and confidence of residents hoping to work in the food sector, start their own catering business, or cook safe and healthier foods at home or in the community.

CFW uses a health equity lens which focuses on addressing the underlying causes of differences in the quality of health and healthcare across different populations. CFW collaborates with community agencies that work with marginalised communities, including those working with at-risk youth. As well, CFW addresses long-standing barriers that low-income individuals face, such as travelling to a course location and paying training fees, in accessing food services.

Figure 1: City of Toronto Food Strategy Approach

Peer leaders display their cooking talents during the visit of a Greek delegation. Photo by Food Strategy
handler training and nutrition information. As a result, CFW has been delivered successfully in partnership with a wide variety of city divisions and community agencies in neighbourhoods across Toronto.

**Community Food Works for Newcomers**

Between November 2015 and January 2017, Toronto welcomed approximately 7,000 Syrian refugees. The influx of Arabic-speaking newcomers prompted Toronto Public Health to create Community Food Works for Newcomer Settlement (CFWN) in 2016.

Newcomers to Canada tend to arrive in better health than Canadian-born individuals; however, their health tends to deteriorate rapidly over time – a phenomenon known as the “Healthy Immigrant Effect.” Numerous changes occur with the process of migration, and newcomers often face significant challenges in regards to addressing basic needs. Settlement and integration, employment and economic inclusion, and food security all pose a potential risk to the health of newcomers (Figure 2). CFWN effectively recognises the health impacts of migration and acts as an early intervention to prevent this decline in health status among newcomers. For the first time, CFWN has utilised food as a vehicle for newcomer settlement.

CFWN adapts the original CFW curriculum and training process to meet the unique needs of this group. Adaptations include cultural tailoring and translation of the food safety and food skills training course; a peer-to-peer model of programme implementation and interpretation; and strengthening the programme’s employment component.

CFWN is unique in serving multiple purposes for newcomers. Bringing participants together in a community setting interrupts social isolation, facilitates an understanding of the Canadian and local Toronto food environment, promotes health through good nutrition and food safety, and facilitates pathways to employment by offering food handler training and employment support. Participants are referred to language programmes and other settlement supports where appropriate.

**Figure 2:** Unemployment among newcomers leads to low-income households; in turn, this plays a large role in household food insecurity and poor health. Poor health presents challenges for newcomers in obtaining or maintaining employment, resulting in low-income households and food insecurity (Toronto Public Health and Access Alliance Multicultural Health and Community Services, 2011).

**Social determinants of health**

**Settlement and integration**

The term “settlement” refers to the “long-term, dynamic, two-way process through which, ideally, immigrants would achieve full equality and freedom of participation in society, and society would gain access to the full human resource potential of its immigrant communities” (OCASI, 2000). Similarly, the term “integration” is a process by which “immigrants act as fully functioning members of society” (Integration-Net, 2003).

Settlement and integration are part of a process that takes different forms depending on an individual’s unique needs and experiences (Murphy, 2010). Resettlement and integration into a new culture is a long-term process that is essential for the prosperity and health of newcomers (Munson & Ataullahjan, 2016).

**Employment**

It is well known that employment has a powerful effect on health outcomes, and many newcomers experience prolonged challenges in entering the labour market, precarious work, or unsafe working conditions. Employment
is key for addressing basic income needs and food security; all of these are important for health. As a result, addressing challenges to entering the Canadian labour market has the potential to minimise the risk of poor health among newcomers in the City of Toronto, and provide financial, social, and psychological benefits (Toronto Public Health and Access Alliance Multicultural Health and Community Services, 2011). By providing newcomer participants with food handler training and certification, CFWN supports their employability. In the first year, 208 participants graduated from the programme, and these graduates are either employed or are ready to access employment in the food sector. CFWN is currently being evaluated. This process requires a six-month follow-up survey of participants after completion of the training. The final evaluation, which includes employment outcomes, will be available in March 2019.

Food Security
Changes in newcomer food choices can be anticipated as cultural food availability may be limited or costly, and this leads to adopting the food habits of the dominant group – often referred to as dietary acculturation (Sanou et al., 2014). Dietary acculturation poses a risk to the immigrants’ health: unhealthy food choices contribute greatly to the decline in health among immigrants in Canada (Sanou et al., 2014).

Because of challenges regarding food access, availability, affordability and acceptability pose a threat to the newcomer health, CFWN offers culturally responsive nutrition education that encourages healthy consumption of cultural foods. Newcomer participants are often highly skilled, and CFWN seeks to enhance their knowledge by strengthening their food literacy and food skills.

Although the final evaluation outcomes are not yet available, programme participants, peer leaders and partners attested to the effectiveness of the CFWN model. CFWN responds to many of the barriers experienced by newcomers by integrating nutrition education, employment support, and food handler training. Through food, CFWN will continue to deepen the settlement process for newcomers arriving to the City of Toronto, and reduce health inequities among those in this group. CFWN peer leaders are recruited from the same community as the participants; they improve the cultural appropriateness of the programme in their teaching and provide services that support the participants. In the future, peer leaders will be further embedded into core programming, increasing capacity for meaningful engagement and strengthening collaboration with multiple stakeholders. Engagement with CFWN can also lead to employment or self-employment outcomes.

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References
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In-class learning session with Arabic language materials.

Photo by Arlene Moscovitch

Webhe Zeidan is a newcomer from Syria. She was a pharmacist and came to Canada in December 2015. In 2016 she joined the Community Works for Newcomer Settlement, first as a participant and now as a paid peer leader. Wehbe expressed her feeling towards the programme as follows: “I found CFWN very useful. I learned how to deal with storing food in the fridge, reading nutrition labelling, good and bad ingredients, salt, sugar and fat. We need jobs to survive. A lot of women found jobs through this programme. They work at schools, restaurants and other places.”
On the roof of an office building in East Oslo, seven storeys above passing trams and buses, 12 young adults have spent their summer growing food. Tak for Maten, Oslo’s premier rooftop garden built in 2017 in a multicultural and gentrifying area of downtown Oslo, includes over 30 raised beds, a greenhouse, bee hives, fruit trees, and laying hens. The summer of 2018 has seen the space grow and develop as local youth have taken part in a job programme over the school holidays.

The organisation
Nabolagshager (or Neighbourhood Gardens) was founded by Helene Gallis in 2013 to advance the young urban agriculture scene in Oslo. The organisation has been a key stakeholder in promoting and expanding food production in the city by challenging the status quo and establishing groundbreaking projects. Nabolagshager’s portfolio includes managing community gardens with vulnerable groups such as refugees, building Oslo’s first aquaponics system and training thousands of participants in basic gardening skills through courses and events. The organisation’s approach is centred on utilising urban agriculture as a way to create places – unique, social meeting areas where urban residents can de-stress, connect and grow. Some of the spaces utilised for this work include community gardens, rooftops, public parks and even libraries. This strategy creates a suitable climate for social cohesion, strengthening communities and reducing problems associated with urban environments.

In addition, Nabolagshager has focused significant attention on growing green employment in the belief that the global urban agriculture craze needs sustainable financial models in order to move forward. This has involved a group of consultants testing various business models around aquaponics, vertical farming, rooftop farming and academic partnerships. Nabolagshager recognises that, with looming challenges to the global food supply, expanding localised knowledge and spaces within which to share that knowledge is increasingly important.

The setting
Nabolagshager is situated in Grønland, an East Oslo neighbourhood now undergoing significant gentrification. It is a vibrant neighbourhood where ethnic restaurants, immigrant-run vegetable shops and mosques are found side by side with hipster bars. Grønland is a first haven for many refugees and immigrants; it hosts recent immigrant groups that experience low participation in the workforce and high poverty rates. In Norway, immigrants – or Norwegians born to immigrant parents – make up 17.3% of the population. In Oslo these groups constitute around 30% of residents. It is a
diverse group, spanning many decades of immigration and many cultural and religious backgrounds, with Somalis, Pakistanis and Iraqis making up the largest groups of non-western immigrants.

Through their work in East Oslo, Nabolaqshager has become increasingly aware of the challenges that young immigrants and children of immigrants face when struggling to complete high school and when seeking employment. Up to 40% of high school students in the district of Gamle Oslo, where Grønland is located, never finish their education; the dropout rate is particularly high among boys of minority background. Additionally, social connections are increasingly important when applying for a job, a trend that puts new residents at an additional disadvantage and is difficult to address.

The programme

There is a strong need for fresh thinking around how to inspire youth regarding taking charge of their future, facilitating the development of new role models and creating employment based on local skill sets. This was the motivation behind establishing a collaboration with the local high school, Hersleb Videregående Skole. The goal was to allow local youth the opportunity to build their resume and acquire positive references for gaining future employment. For the school it has been a test of collaborating with external stakeholders to seek innovative solutions to its students’ structural sociodemographic challenges.

Through various private and public grants, Nabolaqshager was able to offer 12 local youth, aged 16 to 20, a union wage for part-time work over ten weeks during the summer of 2018. Under the direction of mentors and in groups of no more than four, the youths planted, cared for and harvested food, and participated in construction projects and animal care. In addition the youths were trained through workshops in important workplace skills such as project planning and management. Theoretical training in urban agriculture connected high school science knowledge to a real-life setting. Additionally, a first job offered an important step towards adulthood, which is especially important in low-income families.

The impact

Through interviews with the 12 youth employed by the summer programme, Nabolaqshager is currently working with various academic researchers to assess the summer programme in order to shape future work. Not all of this data is yet available, but staff and mentors have already begun to reflect on the impact of the work.

1. Not all youth are familiar with or enjoy physical work. While a few of the 12 youth were interested in agriculture, the majority were simply looking to make money and build their CV. Nabolaqshager was able to adapt their summer programme: from event planning to carpentry to social media management, strengths that came to light of young individuals in the programme were utilised to promote urban agriculture in Oslo. This served as a reminder that in coalition building, diversity fuels resilience.

2. All of the participants had a minority background, most having grown up in Norway. In addition the programme employed several migrants from conflict areas. As the residence status of such individuals seems to be in constant flux, a philosophical question emerged around the role of urban agriculture. One of the programme participants expressed joy in being able to grow something – an understandable sentiment for a young person who, as a minor, migrated without parents through multiple countries over several years in order to escape conflict,
with few possibilities to put down roots. These individuals may be forced, or may choose, to return to their homelands at some point in the future. Part of Nabolaagshager’s goal in the work in East Oslo is to cultivate knowledge and inspiration with regard to urban agriculture so that migrants, immigrants and children of immigrants can build positive communities in Oslo and, perhaps, back in their country of origin.

3. Students with a refugee background and language limitations demonstrated alternative skills when working with other youth. These youth shone as leaders during various projects such as constructing a chicken coop or developing guerrilla gardening strategies, demonstrating that urban agriculture can be an excellent form of enhancing social inclusion through shared activities.

4. The training the youth received and the mentor assessments have been incorporated into letters of recommendation that are available for the youth to utilise in seeking future employment opportunities. Many participants have also expressed an interest in exploring further job opportunities with Nabolaagshager or in related fields.

The programme has provided at-risk youth with a fresh breath of inspiration. Emerging from a disadvantaged socio-economic background, these youth will become important change agents for a shift to an ecological mindset and become role models for a new, multicultural, green generation. The partnering high school now wants to be the “greenest” high school in Oslo. For Nabolaagshager the lesson is that garden knowledge often applies to society as a whole: even a weak seedling that nobody expects to survive can thrive and provide a bountiful harvest if given the right nurturing and support.

Time and again, Norway is ranked among the “best” countries in which to live. However, even in a politically stable and economically wealthy country, there are huge differences between the “haves” and “have-nots”. In our globalised world it is interesting to see how urban agriculture serves as a tool for empowerment and connecting people of different backgrounds. The fact that utilising urban agriculture for building life and workplace skills among youth resonates so well across continents and cultures is a testament to the relevance of food production within cities, both today and far into the future.

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The longer term: not just a summer programme
Nabolaagshager’s vision of this programme is to assemble teams of youth to help with the services and consulting offered by the organisation, as well as to serve as leaders and mentors in similar, future programmes. By developing a variety of career paths in urban agriculture for at-risk youth, the impact can be scaled up and will be sustainable over time.
Harriet Nakabaale's garden is a magnet for young people who see a future as agricultural entrepreneurs.

“Camp Green” – as she calls her 15-by-9 metre compound in the Kawaala-Kasubi district of Kampala, Uganda – is bursting with plant life and bustling with activity. Growing there are guava trees, passion fruit and strawberries, cauliflowers, cabbages and eggplants, and aromatic herbs such as mint, oregano, parsley and fennel, to name but some of the thriving edible species. Among the greenery is a menagerie of birds, including chickens and quails, that produce fertiliser for the crops as well as eggs. At nine o'clock each morning up to 50 trainees arrive at Camp Green for six hours of intensive training in skills such as mixing manure, making a soil bed, saving seeds and planting. Nakabaale, a single mother, started planting vegetables, fruits and herbs in huge sacks outside her house in 1994, initially to feed her own family. She learned how to grow food from her parents, who instilled in her the importance of a woman having her own garden. She was so successful that not only could she sell her surplus, but her friends, neighbours, and even total strangers began coming to learn how they, too, could turn corners of Uganda’s capital into green oases. Now courses at Camp Green run for two days, after which there are agricultural tours to visit other farmers and learn about crops and practices not used at Camp Green. Participants do not pay for the training itself, although they do contribute 20,000 Uganda shillings (around USD 7) to cover lunches. They also pay for any seedlings or produce they wish to buy, and transport costs for the tours. “The less costly the better,” says Nakabaale. “You don’t want to scare people away with steep charges.” She supports herself by selling produce, through paid consultancy work, and also working as a tailor. The courses are so popular that trainees must book in advance, and she has enlisted the help of her grown-up son to manage the courses.

Growing a reputation...
Nakabaale estimates that over 10,000 budding urban farmers have trained at Camp Green over the years. Not all of them are from Kampala – nor are they all from Uganda. Word has spread far and wide, especially since Uganda’s New Vision newspaper named Nakabaale “woman achiever of the year” in 2012. Indeed, most people hear about Camp Green through traditional media (newspapers and occasional radio and TV spots) or Facebook. Nakabaale also participates in farming events, such as the annual National Agriculture Show in Jinja. Nakabaale sometimes travels abroad to train larger groups. For instance, she recently visited refugee camps in Sudan, where she led a five-day training course for 200 refugee participants.

Cultivating a dream
Nakabaale has ambitions to expand her training programme. She has her eye on 20 acres of land near the city where she dreams of establishing a farm-based retreat. The land is privately owned and she is actively seeking sponsors to raise USD 50,000 to buy it. “The need for a residential premises is because students travelling from outside Kampala struggle a lot with accommodation,” she says. Being able to provide accommodation would also enable Camp Green to take on interns for extended training periods, ideally for two weeks.

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Jaden Tap Tap occupies the site of a former rubbish dump. On land that was once littered with plastic bottles, old tyres and all the rotting detritus of overcrowded slum living, now over 20 varieties of vegetables and herbs grow in brightly-painted containers.

Jaden Tap Tap is central to the agronomy programme of SAKALA, "the community centre for peaceful alternatives", in Haiti’s notorious Cité Soleil. Covering more than an acre, the garden was founded in 2012 in the wake of the devastating earthquake that struck Haiti two years earlier. It is a source of hope, training, and food security for the community.

Cité Soleil has a reputation as one of the most dangerous neighbourhoods in the western hemisphere. It has a history of gang rule and is unpatrolled by the Haitian National Police. Gun violence is a nightly occurrence there. Yet according to SAKALA, during the day it is a normal community – albeit a poor one where there are few employment opportunities. No one knows exactly how many people live in Cité Soleil; estimates range from 200,000 to 400,000, most of whom are children and young people.

Community roots
Jaden Tap Tap is in the former textile quarter. During the riots following the overthrow of President Aristide in 2004, the abandoned t-shirt factories, owned by wealthy businessmen, were ransacked. The industrial buildings were left to ruin and much of the land became a vast, informal landfill site.

After the 2010 earthquake, displaced people swarmed into the quarter, which had sustained minimal damage. Conditions were extremely unsanitary, the post-earthquake cholera outbreak was first identified in Cité Soleil. The anticipated aid from international organisations did not live up to expectations.

Kyanja Urban Agriculture Resource Centre in Kampala, Uganda

The city of Kampala has a population of 1.5 million, and 3.5 million live in the Kampala Metropolitan Area. This administrative city and commercial hub is the most urbanised centre in Uganda and attracts the highest number of rural-urban migrants. While it is projected that Kampala’s population will grow to 8-10 million by 2030, it is estimated that 60 % of Kampala residents live in slums, with incomes averaging between USD 2 and USD 5 per day. As the city grows and develops, both challenges and opportunities will arise for urban food production.

Many city households that fail to secure a source of income are turning to urban agriculture for survival, in terms of both nutrition and income generation. Because of the role urban farming plays in addressing the challenges of food and nutrition insecurity and employment, Kampala developed an Urban Food Production Policy in 2014, as well as five urban farming ordinances to guide the sector. Kampala Capital Authority (KCCA) is spearheading interventions to promote urban farming in Kampala through dissemination of skills and knowledge regarding kitchen gardening and organic waste recycling.

KCCA established Kyanja Agriculture Resource Centre to assist farmers with a number of services: demonstration of urban farming technologies; provision of hands-on training for farmers; production of high-quality inputs for farmers (vegetable seedlings, piglets, chicks and fish fingerlings); provision of artificial insemination services for pig farmers; and a plant disease diagnostics clinic. In the past three years, 450 trainers have been trained in organic vegetable production – and these have in turn trained nearly 7000 farmers within the city. Every week about 100 visitors come to the centre, for a tour or to purchase high-quality inputs.

By René van Veenhuizen

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Haiti
The Garden that Turned a “Red” Zone Green

Jess Halliday
Initially SAKALA selected 250 at-risk kids to learn the basics of agroecology, agroforestry, nutrition, and leadership and entrepreneurial skills. Subsequently, in 2017, the organisation obtained a United Nations grant that has enabled it to train 100 young adults as agricultural entrepreneurs.

"Why agriculture? It is the easy way to get a youth a job that does not require too much skill, but it is also a great opportunity to reconnect people, or simply connect the youth with Mother Earth," says Tillias.

The trainees were selected based on their vulnerability, considering categories such as young parents, former prisoners, and former gang members. The intention was for a 50-50 gender balance, but more men than women were interested and in the end only 30% of trainees were female.

"Our approach is all about reconnecting people with the soil through simple action [...] and linking trash and cash to see the opportunity in waste," Tillias says. Altogether the trainees have created 20 businesses, not only in food production but also in beekeeping and compost. "They all remain connected with soil, which is our core value," says Tillias.

Community supported agriculture – the next big thing

Going forward, Tillias has big plans to involve more of the local community in the daily running of Jaden Tap Tap. "Community supported agriculture is the next big thing for Haiti, where the people understand the challenge of growing food and participate in the process."

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Catbalogan is a medium-sized city (103,897 inhabitants, NSO 2015) in the Philippines with rich farmlands. Nonetheless, 80% of the agricultural products that Catbaloganons consume are imported from elsewhere. Catbalogan faces challenging performance indicators for both junior and senior high schools, with a participation rate of 66%, a dropout rate of 4% (school year 2014-2015) and a vast number (10,500) of out-of-school youths (2015 Literacy Mapping). The combination of these agriculture and education statistics inspired the Schools Division Superintendent of the Department of Education in July 2017 to lead the implementation of an innovation project: the Catbalogan City Agro-Industrial School, commonly known as CCAIS.

The CCAIS is a training facility for teaching Catbaloganons, particularly youth, the knowledge, skills and attitudes necessary to become producers and/or agripreneurs. The project enjoys the full support of City Mayor Stephany Uy-Tan; her long-term strategy aims to improve the lives of her constituents and to ensure a safe and healthy environment.

**Catbalogan City Agro-Industrial School**

CCAIS is situated in a long-abandoned prison facility on 9 hectares of city-owned agricultural land. The school was realised through strong collaboration by various stakeholders led by the Schools Division Superintendent of Catbalogan City Division. He envisioned the school to be a centre of organic farming agripreneurs in response to food security and greening initiatives of the city government. To date, more than PHP 13M (about EUR 207,000), mainly from the city’s Special Education Fund, and the PHP 10 (EUR 0.16) annual counterpart from the internal revenue allotment of every barangay have supported and sustained the needs of the school. Fifty-seven barangays (13 urban and 44 rural neighbourhoods) were each asked to send two students (junior high school completers and senior high school students, aged 16 to 18) to enrol in CCAIS. All students receive free board and lodging, as it is financed by the city. Students can enrol in agricultural crop and/or animal production. The school head reports on the school’s activities to partners such as the Philippine Business for Social Progress, which helped strengthen school operations with their “Livelihood Education through Agri/Aqua Development Project” funded by Standard Chartered Bank. Through this project the teachers and students are given both equipment and training on advanced farming technologies. Other partners involved are the City Agriculture Office, City Tourism Office, Department of Trade and Industry, Cooperative Development Office and the Department of Labour and Employment.

**Results and impacts**

To date, high school participation in the city has increased to 76% and the dropout rate has dropped to 1% (school year 2016-2017). In its second year, CCAIS has increased its senior high school enrolment from 44 to 101 and continues to attract students to enrol in agriculture courses focused on practice-based vegetable and crop production and animal production. CCAIS is attractive to parents due to the free board and lodging. Initially the students produced crops like cassava, camote, rice and corn. They have also maintained their so-called “pakbet farm” where they produce vegetables like squash, okra, beans, pechay, pepper, eggplant and chayote. Poultry products and vegetables produced are for student consumption and for the local community. Students develop their entrepreneurial skills by marketing their products in the neighbouring barangays. They gain experience earning money while studying because of the agri-products that they sell. This convinces them that they will have a better quality of life once they venture into their own agribusiness. Students are also given seed capital to start their own agri-livelihood after graduation. Small farmers in neighbouring barangays can also receive training on farming technologies. The school regularly receives visits from other farm entrepreneurs for benchmarking, and generates some agrotourism revenues. The school also continues to attract and gain support from non-governmental organisations that see the feasibility of the innovation project. The activities of the CCAIS help the city to improve the future economic status of its people and to eventually ensure food and environmental security.

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More information
www.youtube.com/watch?v=pVL4NzZYnQ
Urban Growers Collective (UGC) is built upon the foundation of Growing Power, an NGO and land trust established in Milwaukee in 1993. Growing Power operated its urban farming and education non-profit for 25 years before closing its doors in the fall of 2017. Will Allen, Growing Power’s founder and CEO, inspired thousands of visitors annually – allowing people to see first-hand how local food centres can transform a community and inspire the “Good Food Revolution”.

The Growing Power Chicago branch was established in February 2002 to address the need for scalable food system models that were inclusive, impactful and economically viable. Through many partnerships—with the City of Chicago and Chicago Housing Authority, innovative projects such as the Fresh Moves Mobile Market, Grant Park Potager Farm, the South Chicago Farm and Incubator Farmers Program, and the Roosevelt Square Youth Farm and Altgeld Gardens Community Farm—the Chicago Office changed perceptions and policy regarding the viability of land tenure for food production, while addressing food insecurity and urban ecology as well as community development. After Growing Power closed, Chicago’s leadership team, committed to continuing the legacy of Growing Power, formed UGC to build upon 15 years of successes creating thriving urban farms and training programmes in Chicago.

Urban Growers Collective programmes
UGC demonstrates, and supports communities in, developing community-based food systems where food is grown, prepared and distributed within home communities. In this way, vulnerable populations help themselves by learning how to provide for their own needs in a sustainable manner. UGC operates seven urban farms on 11 acres of land predominantly located on Chicago’s South Side. These farms are production-oriented, with staff integrating education, training, leadership development and food distribution. UGC grows over 7,700 kg of produce a year and sells it through the Fresh Moves Mobile Market and at local farmers’ markets. Each farm site “demonstrates” the capacity for both large volumes of production and the ecological and social impacts of farming in society.

UGC tackles food insecurity through a variety of programmes.
- **The Fresh Moves Mobile Market** uses converted buses as farmers’ markets that travel to food-insecure neighbourhoods.
- **Farmers for Chicago’s** job-readiness programme includes the Youth Corps Program (for teens) and the READI programme (for adults) and trains over 250 teenagers annually and more than 30 formerly incarcerated adults through an 18-month programme.
- **Incubator Farmer Programme** provides land and technical assistance for new Chicago farmers.
- **Head-start Preschool Farm** serves over 150 pre-school children and their families.
- UGC also provides education to a larger audience through a series of agriculture, small business development, and equality-building workshops.

UGC’s core values honour shared leadership and collective decision making; racial, economic, gender and LGBTQ equity, and employee well-being. Those involved have witnessed how these values lead to thoughtful, holistic programming and yield environments that nourish and create prosperity.

**Youth Corps**
Urban Growers Collective Youth Corps engages and employs over 250 youth annually throughout different urban farm sites. Teens come from across the city to participate in the programmes and receive a small stipend for their participation. They are eligible to participate when they turn 14 years old and have completed 8th grade, and can continue participating through their senior (final) year in high school (18-19 years old). Youth Corps has a very high retention rate and many teens elect to stay in the programmes for their entire high school tenure (4 years), often referring friends and family members to join. On average the programmes maintain 94% enrolment; 45% of participants are male and 55% female, with over 97% of teens identifying as people of colour. The farms serve as a safe space for teenagers to explore their interests, work collectively, share their talents and learn from one another. During their time spent on the farms, youth expand their understanding of many aspects of urban farming and community food system development.
Through hands-on instruction, teenagers learn the technical skills essential for farming in an urban environment. They grow organic vegetables, herbs and flowers and participate in all phases of farm production. They learn to produce compost and prepare growing beds, and how to identify, plant, harvest and market the vegetables growing at the farm. They also assist with general farm tasks, pest management, site beautification and infrastructure development. At many of the locations, youth also manage an on-site farm stand, increasing access to fresh, healthy, affordable produce for their community, and providing a window into the economic and entrepreneurial opportunities that exist within food system development.

In addition to hands-on instruction at the farm, youth explore the science behind farming through several inquiry-based experiments, and take part in activities regarding nutrition, hunger, cooking, art, food justice and food politics. The programme aims both to serve as a job training experience and to encourage leadership development. Teenagers complete the programme with a comprehensive understanding of sustainable food system development and with the ability to connect and communicate how the skills they have gained at the farm translate to any career path they may follow.

The youth programme is currently structured into three terms throughout the year: spring, summer and fall. The spring programme is 10 weeks long for 8 hours a week, and teens can earn up to USD 325. During the spring semester teenagers help determine the crops they want to grow for the season and prepare the farm for planting. The summer programme is split into two different models: the Apprenticeship Programme in which teens work 16 hours a week for 6 weeks and can earn up to USD 420; and the Advanced Apprenticeship Programme in which teens work 20 hours a week for 7 weeks and can earn up to USD 725. During the summer they manage all aspects of farm production and harvest for farmers’ markets and the Fresh Moves Mobile Market. In the fall and winter the programme is 10 weeks long for 4 hours a week, and teens can earn up to USD 300. Teenagers transition to classroom-based learning and focus on developing food system literacy, culinary skills, college and career readiness and knowledge on micro-enterprise development through the creation of added-value products such as body scrubs, dried herbs, tea blends, flavoured salts and oils. Teen’s earnings are dependent on the success of their business.

Community impact
UGC aims to build economic opportunity for youth and to mitigate food insecurity and the limited access to high quality, affordable and nutritionally-dense food, primarily on the South Side of Chicago. Over half a million people in Chicago experience food insecurity, with a disproportionate number residing on the south and the west side of the city. According to Chicago Magazine in March 2018, the South Side dominates the city’s 35 worst communities for life expectancy, 75 per cent of which is caused by social and behavioural factors – including diabetes and cancer. As this is an organisation led by women and people of colour, food justice and healing are part of the mission in building market opportunities for farmers as well as providing education to the community, including youth.

Through its programming model UGC not only provides employment opportunities to teenagers, it also greatly increases the availability and accessibility of fresh, healthy, culturally appropriate food in three target areas: Altgeld Gardens, South Chicago and Roosevelt Square.

In addition to employment and community health benefits, UGC is able to provide a safe, structured environment for teenagers to feel ownership within their community. We tend to assume that all people have access to outdoor play in beautiful environments. In fact, real and perceived violence has greatly reduced access to outdoor play and learning for young people in Chicago, and has particularly impacted African American families.

Dealing with trauma from violence can be radically transformed by providing safe spaces and using art as therapy to process trauma, especially from the violence that so many of the participants encounter. UGC recognises that offering clients this opportunity is life-changing – greatly enhancing and creating a foundation that tends to the whole person, with impact beyond measure.

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On a cold, damp morning in early May, ten newly hired seasonal staff approach the still snow-covered field in anticipation of the upcoming growing season. This group of young urban indigenous people, new Canadians and settlers, of whom most have never planted a seed before, have been brought together to transform a 2½ acre grass field into a working farm with an orchard and apiary. While there is much enthusiasm, this will not be an easy process. There will be many gruelling workdays in the hot sun, mistakes made, successes to celebrate, new friendships formed and life lessons to be had. This is the beginning of the Seasonal Horticultural Outdoor Worker (SHOW) programme facilitated by Roots to Harvest in Thunder Bay, Ontario, Canada. For 20 weeks, these ten young adults will be trained in urban agroecology, build commitment to their jobs and fellow workers and become more engaged in their community.

The roots of it all
Roots to Harvest was established in 2007 as a non-profit organisation. It offers educational and employment opportunities for youth through agroecological agriculture and food systems. Roots to Harvest also provides opportunities to engage in Thunder Bay’s food systems.

From school-based education and cooking courses to community garden animators, Roots to Harvest provokes people to become more than just consumers: to be growers, market gardeners, eaters and lifelong learners. By accepting this challenge, participants develop an ability to identify existing challenges and to advocate for more vibrant and healthy communities. With the understanding that food plays a crucial role in the health, ecological resilience and connectivity of communities, Roots to Harvest aims to create spaces for discovery and learning which can disrupt and empower individuals to become agents of change. Roots to Harvest is part of a larger network of community food organisations across Ontario and Canada that are working at both the programme and policy levels to create a more healthy, just and sustainable food system for all.

SHOW in action
Thunder Bay is located in north-western Ontario and plays a key role in the region, not only as a regional hub for many of the remote indigenous and settler communities, but also as the largest urban centre within 700 km in each direction. Many of the city’s youth face systemic barriers of poverty, unemployment and racism. Since 2016 the SHOW programme has successfully engaged over 30 marginalised youth in agroecology and food systems work experiences.

Matthew joined the SHOW programme in 2017 at age 22 when he had been living in his parents’ basement, unemployed, discouraged and not sure of the next stage in his life. As an indigenous man in Thunder Bay he had faced discrimination in employment and personally. At the same time, he was full of both big ideas and a desire to learn. Working with the SHOW programme staff and addressing these concerns and hesitations head on, Matthew found connection not only in the soil and with the plants – carrots were his favourite – but also with his fellow workers and his dedication to work. By participating in programming and learning with, through and about food, Matthew found a community of people to share a common experience, where food is a tool to engage in the world in a meaningful way.

Matthew commented, “Before this job I didn’t feel like I had any friends or support. I now have a family and people to turn to.” The key to this feeling was the support at work he had not had before. Using urban agriculture as a connection to the land, water and other people, Roots to Harvest helps people to feel valued and confident, to make healthy life choices and to become advocates for more just and sustainable food systems now and for years to come.
weekly markets and in a community-supported agriculture weekly subscription. Crops are also sold to local restaurants.

One individual worked with a local restaurant, learning to cook, and explained how this job has made an impact on his comfort level in the city: “I moved to Thunder Bay from my reserve three years ago and I have had a hard time making friends. This work allowed me to make friends and to feel comfortable in other areas of town. Before this I never set foot on the other side of town, and now I ride the bus here every day.” One person commented on how much they learned working with the urban farm: “I loved learning about food and I shared what I knew with my mom. She thought I was really smart . . . I now have the skills to start and maintain my own garden. I definitely want one next summer.”

The SHOW programme aims to employ the whole person and create a supportive work environment, focused on dignity and respect, that allows participants to gain support in meeting their basic needs. To enhance long-term employability, participants also receive a range of training, such as first aid and safe food handling certifications as well as workshops in leadership, setting and meeting goals, financial literacy, workplace safety and communication. This training helps participants develop a stronger sense of self, understand financial security, improve physical and mental health and build greater community connections. They dig deep into their everyday challenges. For some, these challenges are systemic barriers that go well beyond what one individual or one organisation can do. The urban farm becomes a living example of how hard work and knowledge and skill acquisition are vital, but – with soil degradation, pest infestations and the impacts of climate change – perseverance can only go so far. As participants learn over time in the SHOW programme, effecting change requires not only deep personal work, but also broader collective action with a view to the longer term. Most recently the SHOW group participated in a community art building event with indigenous activist Christie Belcourt. Involvement in this activity enabled them to further learn about the connections between food, water, people and land, in a creative way that engaged not only the mind but the heart as well.

Upon reflection Matthew commented on how, with a newfound set of skills, he is ready to take the next step forward. “I realised new skills (shovelling, weeding, hoeing, communicating) and learned how to handle money. I’m more likely to set goals now, I have a better balance with social life and my work life and better motivation. My relationship with my family got better too. I feel more comfortable around people and I am dedicated to working with plants in the future.” “My goal for the summer was to move out of my parent’s house and I did it. It took a while but I actually did it.”

Matthew took a full-time job with a local business after finishing the programme, and has been able to apply the many skills he learned while engaged in growing food.

The growth continues

This 2018 season is in full swing and we are only about halfway through, but the impact of this year’s programme can be felt deeply. This year we welcomed our first Syrian refugee to the group and the learning has already been rich. While Roots to Harvest will not transform everything, it is an important starting place for its participants and the city of Thunder Bay. It is a model for other communities wishing to address the diverse needs of their community through creative, community-engaged space and meaningful employment.

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Video on SHOW: https://vimeo.com/258368387

Photos by Airin Stephens
Two young Peruvian women stand proudly in front of a small stand, offering cake, chocolate, tea and a conversation to anyone who wants a taste of their home-made products. The products are based on the herb muña, a plant packed with nutrients, also referred to as Andean Mint and found throughout the Andes. Their goal is to make the plant popular in Peru and to promote local culture and healthy eating habits. With this initiative, these young women are trying to contribute to a healthier, more sustainable food system.

How do you unlock the – often hidden – potential of rural and urban youth? This was discussed during the last day of a workshop, organised by the consortium Wanted: Food for the Future, in which youth takes action to reshape the food system. The consortium (consisting of the University of Leuven, retailer Colruyt Group, the NGO Rikolto, the Province of Flemish Brabant and University College Leuven-Limburg) seeks to identify, from a multi-stakeholder perspective, future-proof food (how to feed more than 9 billion people in 2050). The workshop leaders challenged youth from Peru, Tanzania and Indonesia to dream about their future food system. The two young Peruvian women and their Andean Mint products are only one example of the new initiatives created in the context of this project by young people who want to take matters into their own hands.

The project team believes a new and refreshing approach is needed in order to engage young people. Co-creation, bringing together different stakeholders in a holistic approach, is considered key to the process. Different types of young people are invited to interact and collaborate, including young farmers, university students and entrepreneurs.

The methodology used during the workshops is partly based on the principles of CEAL (community-based action learning, more info at www.ceal.eu) and adapted for empowerment as well as stimulating social entrepreneurship in food and agriculture. The main purpose is to facilitate social entrepreneurial initiatives, and to inspire young people to think about different ways of feeding a growing world population and about what that entails, e.g., what territorial urban-rural linkages should look like. This can elicit a change of mindset, or a social conscience, to see new opportunities through the “business as usual” dogma and to take action according to the think global, act local principle.

During four-day workshops split into two weekends, young people are challenged to dream about what their food system should look like in the future, and to turn words into deeds. Collaboratively, participants examine their local area, usually a district within a city, and its food system. They map the district (the location of streets and businesses) and talk to locals about their life, their dreams and the food they eat. Workshop participants then reflect upon the main challenges from different perspectives, and look for ways these can be turned into opportunities. Taking into account skill sets and intrinsic motivation, groups are formed around certain ideas. The last step is to actually build or implement the innovation. Participants have the week between the two halves of the workshop to make a prototype: one litre of organic fertiliser, for example, or ten banana chocolates, a fly catcher made from waste material, or a logo/brand design. Finally, they present their ideas and prototypes to the local community, including business people, local governments and community residents, in order to receive feedback and support. Two co-organisers of the workshops in Indonesia and Peru share here their experience and learning.

New ways of collaboration and value creation

Olivia Purba, Rikolto in Indonesia:
In Indonesia we have a young population: more than half of the people are under 30 years old. With 250 million mouths...
Healthy banana chocolate snacks

An idea emerged from a local market assessment through talking to banana farmers, cocoa farmers and the community in general. The group involved combined several findings. First, they identified ever declining banana prices, and that a new banana-based product could revalue bananas in the local market. Then group members saw that while the region is producing a lot of cocoa, it is not being transformed into chocolate or other products. Local processing adds value to a product, which benefits the local community through labour opportunities, more economic profit and a diversity of short chain (local) products. For these reasons, the group decided to start making banana chocolate snacks, and began experimenting in their kitchen with several recipes. The next week, the participants brought in their products so that everyone could have a taste and give feedback.

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Less talk, more action

Louise Rose, Rikolto in Peru

One of the main insights we gained from the Food for the Future workshop is the value of turning words into deeds. Last year we had participated in a different start-up weekend in Lima with young cocoa farmers. It was really interesting and very different from what the young farmers were used to, but although they could connect with people and dynamics within an urban context, their start-up did not develop beyond the concept phase. One of the reasons for this was the physical distance between the participants after returning home. In contrast, when they participated in the Food for the Future workshop, after only two days they had developed a prototype of their idea. The participants had already created some products to show the public, to sell or give away. Beyond the empowering aspect of this physical accomplishment, it made them understand that it was possible to really do something, even with limited budget and limited time, and by starting small.

The second insight was that actual labour opportunities arise from the local context, and not just from a theoretical understanding of the food system. The participants had to go out on the street and ask the local community questions like, What problems are you currently facing in relation to agriculture and food? What are your needs and where do you see opportunities? The starting point for their search for solutions and ideas was thus based on a large and diverse pool of information and experiences. Starting with the needs of the population, they experienced a new way of developing ideas; not only from what they wanted to do, but also from what the people needed them to do.

The experience was a real success. In collaboration with university students, young farmers and the community, the participants created initiatives with a lot of potential. We are currently systematising the methodology and adapting it to the reality of farmers’ cooperatives.

General conclusions:

- Create open and safe spaces for youth to express themselves and experiment.
- Focus on a specific context, and on experiences and connections within that context.
- Entrepreneurial initiatives need to include a diversity of people, opinions and skills.
- Co-creation with actors and communities fosters better understanding among stakeholders in a segmented food system.
- Approach differences in generations and territorial development (rural-urban gap) as a positive opportunity to exchange and grow.
- The mental flexibility of youth is ideal for facilitating multi-stakeholder settings and combining different needs.

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With increasing urbanisation and migration to cities, agriculture and food systems in and around those cities play an important role in income generation – especially for young people. Recognition of both this fact and the presence of intersecting barriers to employment among young people is essential in a City Region Food System (CRFS) approach. Quito, Ecuador is a large city experiencing urbanisation and youth unemployment; its AGRUPAR project has the potential to mitigate some of these issues through urban agriculture (UA).

Youth employment in the Global South
Youth make up the majority of urban populations in the developing world, with an estimated global total of 1.8 billion between the ages of 10 and 24 years (Kundeya, 2018). The World Bank Youth Employment in Sub-Saharan Africa report explains that, overall, young women and youth already living in poverty, or those coming from poorer households, are at a greater disadvantage in finding employment because they often have fewer connections and networks (Filmer & Fox, 2014). Over and above finding employment, society imposes the additional expectation that young women also start a family during their transition to adulthood. As well, young women often remain in lower-income jobs.

The World Bank report emphasises the need for education, skill development and access to resources for youth for gaining employment. For agricultural employment, finance and land tenure are needed, and for employment in other sectors the focus should be on infrastructure as well as access to finance. These factors influencing youth development can be addressed by adopting a CRFS approach. This integrative approach promotes policy and programme development across scales, and includes multiple stakeholders providing a “collective voice for food actors” (Blay-Palmer et al., 2018). According to Blay-Palmer et al. (2018), better rural-urban linkages can improve food security, increase livelihood opportunities and improve the environment. The CRFS approach aims to work towards a sustainable food system (see UAM 29 for more information) and is linked with international agreements such as the Sustainable Development Goals, the Milan Urban Food Policy Pact and the New Urban Agenda. Additionally, the incorporation of gender in further developing the CRFS framework and tools is critical to ensuring equity.

Akinnifesi (FAO, 2018) believes that rural-to-urban youth migration can be reduced by making agriculture more attractive to young people. He sees huge potential in transforming agriculture, from an activity for those living in poverty to a thriving career opportunity for those transitioning to adulthood. He sees UA as beneficial to reducing the pressure of migration and increasing food availability in urban spaces. UA can also provide many benefits along the rural-urban value chain, from production to consumption. Those who participate in UA can not only sell fresh food at markets, they can also transform food into other products. In Quito, for example, urban growers sell processed value-added foods – such as dried beans and fruit, sauces, bakery, snacks, grains and jams – to markets and restaurants.

Youth employment through urban agriculture in Quito
In Quito, the UA project AGRUPAR is led by the Economic Development Agency CONQUITO. The goals of the project are to increase food security and sovereignty, promote social inclusion, increase income and employment, and provide

In 2010 the population of the Quito urban area was 1.6 million, while the entire Metropolitan District of Quito (MDQ) included approximately 2.2 million inhabitants (MDQ, 2016). Over half of Quito residents were under 29 years of age (INEC, 2010). From 2011 to 2016 the urban sprawl of the MDQ increased by 11% despite municipal planning and regulations; 72% of inhabitants lived in urban spaces and the remaining population was located in the valleys and rural areas. Of the urban population, 30% lived in poverty and 7% of these in extreme poverty. The rate of unemployment was 5%, yet youth unemployment was over 60% (INEC, 2015) and underemployment was at a staggering 40% (MDQ, 2016).
environmental management through sustainability and the promotion of resilience for vulnerable populations. This is accomplished by means of farmer training and support, microfinance opportunities, education on nutrition and healthy diets, building infrastructure and promoting the UA value chain in the city. With the success of the AGRUPAR project has come improvement in the economic situations of many Quito residents. On average, participation in the project gives the growers USD 175 of extra income per month, which is 2.5 times local social assistance rates. Approximately 84% of AGRUPAR participants are women, and 8% are between 18 and 34 years old. Women were far more likely than male participants to report an increase of income related to participation in the project. This is important information for Quito, to ensure that lived experience is included in future AGRUPAR development.

Youth in Quito are vulnerable to poverty and job insecurity; this is reflected in the 60% unemployment rate (INEC, 2015). The 8% youth AGRUPAR participation rate could be increased by analysing youth experiences and tailoring the project towards the specific needs of this target group. It is important to understand the lived experiences of these youths and how these might affect their ability to participate in employment – UA or otherwise. Youth experiences of inequity or unequal power relations are connected to various intersecting social identities: gender, race, ethnicity, class, ability, among others.

Quito is currently working on a food policy that seeks to improve (temporary) access to municipally owned land for UA, for vulnerable groups and especially for youth. This proposal re-values urban agriculture as a decent way of urban living. Access to these vacant spaces does require a revision of the current regulations. Since 2015 the city has been involved in CRFS studies via RUAF and the FAO (Blay-Palmer et al., 2018). The AGRUPAR project embodies the CRFS approach in its linkages to rural production areas, allowing for more diverse and larger production areas.

Final remarks

Cities need to create opportunities for youth employment. With youth populations already so large and urbanisation increasing, the time for change is now. Organisations like AGRUPAR can help mitigate the vulnerability of youth in urban areas by reducing barriers and increasing employment opportunities. CRFS linkages and UA participation will allow young people more opportunities to support their transition to adulthood and to improve their livelihoods. We must ensure that any solutions proposed in the future are designed to include those who are marginalised and also involve youth in the decision-making processes to guarantee that their voices are brought to the table in building solutions to this global problem.

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Among the challenges that humanity faces, two take precedence over all others: 1) to ensure that the soil is healthy enough to produce nutritious food for billions of people and 2) to involve young people in dealing with a particularly threatening future. This article describes a project in Brazil where urban agriculture is used to engage young people holistically in issues related to food, organic waste management, income generation and urban sustainability.

Background
Brazil is, along with China and the US, among the largest and at the same time most populous nations in the world, with an area of 8.8 million km² and 220 million people. However, unlike the other two, Brazil has neither the organisation nor the financial resources to deal with its increasing problems. Nevertheless, the country’s vast agricultural areas make it one of the largest food exporters worldwide, and the immeasurable value of its forests, freshwater reserves and biodiversity are especially important for the global environment. These precious resources are at risk, and society faces growing problems that can be seen as a consequence of the impoverished education and commercialised culture which fuel problems such as corruption, violence and environmental degradation.

Youth and agriculture
Many Brazilian youth risk facing problems like drugs, teen pregnancy, violence, school dropout and juvenile delinquency. And it appears that young Brazilians have never been so alienated from problems related to the environment, the economy and food. Very few young Brazilians realise that they will need to participate actively in the food systems that supply cities if they want to consume healthy foods to avoid diseases linked to unhealthy nutrition. Many cannot imagine that being a farmer – even a part-time urban farmer – may be the best choice for enabling them to feed themselves and their children, improve their neighbourhood and perhaps earn some money. Getting them to think about this situation and helping their communities to become more food productive are the main objectives of the project described here.

The project
The project is being implemented in six pilot schools located in three out of thirty municipalities that constitute the Federal Environment Protection Area (EPA) of Mantiqueira Sierra – an environmental hotspot located amid the three most important Brazilian states: São Paulo, Rio de Janeiro and Minas Gerais (see Figure 1).

The project activities started in 2014, without any funding. The project thus very much relies on institutional resources and commitment and the voluntary support of interested teachers who take on these activities in addition to their regular duties. The project team currently consists of myself, an agronomist friend, and a few educators: mainly, a biology teacher in Bocaina, and the pedagogical director of Resende’s Secretary of Education and his environment education coordinator. In Delfim, the Secretary of Agriculture and Environment also supports the project.

The project aims to create a network linking students in the area of Mantiqueira and beyond, and to develop their skills as they help their communities deal with current and future socio-environmental challenges, starting with composting, gardening and team building.

The “groups of socio-environmental practices” methodology
To achieve these project goals, we meet with teachers, principals and secretaries of education and/or environment in the region to motivate them to adopt a proposal that combines environmental education, urban agriculture and youth development. With the agreement of school management, and having identified a motivated teacher who will serve as a local contact and activities facilitator, we can start our activities. We put up motivational posters throughout the school, give a presentation and invite students to form a group that will work together. The main distinction between our methodology and others is that we work with the interested students in groups that function like “communities of practice”, instead of with “everybody together”, which we believe is ineffective.
The first extracurricular activity is always composting organic wastes from the school’s kitchen and canteen. Composting is readily understood by students and is an obvious priority, for it links waste, fertiliser, soil, food, health and income generation. Next the group decides what other activities to work on, such as learning how to garden or planning and implementing other socio-environmental projects together. Project activities are not limited to farming; activities also focus on other dimensions of holistic youth development, including “democratic arts” such as learning how to work in groups, assessing their communities’ needs, elaborating projects, raising funds, monitoring project progress, evaluating results and replicating processes. Ethics education and bodily practices are also key elements, to strengthen students’ character and physical capacities.

Students are given an opportunity to develop their interests in communications, sciences, management, commerce, arts, computing, design, education or any area of knowledge or professional field. Various didactic areas are incorporated, whether while discussing the organic materials included in the compost heaps, some rich in carbon, others in nitrogen (biology, chemistry); measuring the amount of residues diverted from the municipal landfill and the money saved (maths, economy, municipal administration, environment legislation); writing and editing a brochure (Portuguese, communication, design); producing a video (computing, team work, art) or researching composting methods in American schools (English).

Income generation
Earning money is a powerful incentive for students to join the activities, and this creates other learning opportunities, like designing a business plan and implementing it, developing their entrepreneurial and professional skills. However, Brazilian public schools are not allowed to develop for-profit activities. Once the groups become more organised they will need to demand an institutional licence to grow vegetables in their schools and sell them to their families and teachers, not as a for-profit initiative, but as a pedagogical activity. An alternative would be farming and selling produce in groups outside the schools, in community areas or in areas belonging to their families – although then other challenges may arise, such as theft.

Results
The project started three years ago. Each of the six pilot schools developed its groups according to its own interest and rhythm. The most active and advanced group is in a high school in Bocaina de Minas, the last to join the project. This difference in speed results from the ease of communication between the biology teacher and the project facilitator: they live close together, allowing frequent feedback. Students developed a video documentary in Bocaina and a leaflet in Delfim. In Rome, a school adapted our brochure to stimulate their students’ families to compost too. Activities in Bocaina are being documented and shared by the students on their Facebook “Grupo de Práticas Serra da Mantiqueira” to promote feedback and replications.

Conclusion
We are gaining experience, identifying committed teachers and principals and gathering interested students and volunteers, and recently new schools are becoming interested in joining our network. The methodology we use is inexpensive, since we use resources that are already there: the students, the educators and the organic residues. The methodology is thus easily replicable through a growing network: on the Internet, in Brazil and even abroad. We are interested in getting in touch with others who work on the “urban agriculture-youth development” interface in Brazil or elsewhere.

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Resource
Bocaina’s group website
China and Nepal

Youth Out-migration and Opportunities for Periurban Agriculture

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While out-migration and movement to cities or overseas has long been a fact of life in peripheral agricultural communities in the Global South, in recent decades migration emerged as a core component of many household livelihoods, with remittances often eclipsing what is earned from the rural sector. According to the International Organisation for Migration, worldwide 258 million people lived outside their country of birth as of 2017 – a figure which has risen by 69% since 1990. Added to this are the FAO-estimated 740 million internal migrants, a large proportion of whom have moved from rural to urban areas.

Narratives of migration in rural Nepal and China

The causes for migration are increasingly complex, and the decision to migrate generally stems from a convergence of economic and cultural changes within communities. Nepal and China, although neighbours, appear vastly divergent when considering their recent path of agrarian and political-economic transformation. Nevertheless, the story from rural areas is remarkably similar when it comes to demographic shifts. The shared experiences described here were revealed through research carried out by South China Agricultural University and the International Water Management Institute (Water, Land and Ecosystems programme) between 2014 and 2018.

Both countries have seen extensive rural depopulation over 20 years, with youth at the forefront of this change. The agrarian sector in both regions has suffered from a labour crisis, an ageing agricultural workforce and a loss of agroecological knowledge. There are differences, most notably in the flows of labour itself. In China the majority of rural-urban migrants are bound for the coastal cities, while in Nepal migrants are more often bound for the Gulf States, as well as cities of India. In China, migration often includes both young men and women, while in Nepal – although this is slowly changing – it remains predominantly the domain of men.

In the research, however, similarities in the narratives regarding migration drivers became apparent. In the Chirkuwa valley of Nepal’s eastern hills, the inability to subsist from agriculture has been a challenge for generations, and with the added climatic pressures, the need for alternative sources of income was rising. There are also more complex changes. The economy had been transformed with the expansion of the road network. In the wake of the expansion, farming families complained of a rising cost of living, including rising prices for food and commodities, as well as pressures on agriculture itself, such as an increasingly erratic climate and rising cost of fertiliser, diesel and other inputs. Other reasons included land scarcity, the need to pay for children’s education, and payments for marriage and dowry. The rising culture of consumerism was also a factor, with the younger generation increasingly aspiring to spend more money on manufactured goods and luxuries such as imported clothes, factory-made liquor and mobile phone accessories.

In Gaozhou and Dianbai, in the gentle hills of China’s Guangdong province, the responses were remarkably similar. Agrarian stress was cited as a key constraint encouraging migration, although – given the excellent irrigation infrastructure in this part of China – climate was not raised as such a significant concern. Instead, households, like in Nepal, were concerned with the spiralling cost of living in this increasingly monetised economy. Not only was the cost of agricultural inputs rising; with expanding markets there are changes in consumer behaviour and aspirations, especially for the youth. For example, households spoke of the burgeoning demand for consumer goods as well as the desire for a better house, and of the city “lifestyle” attracting young migrants. The rising cost of education and healthcare was also cited.

Migration, remittances and agriculture

While remittances are flowing back to the village, in Nepal’s Chirkuwa valley and the hills of Guangdong few migrants or recipients were diverting remittances into the agricultural sector. Only a handful of respondents in both locations noted that they had used migration as an opportunity to generate capital to invest in land (in the case of Nepal), agricultural equipment or other improvements to the land. This is in part rooted in the perceived lack of profitability of agriculture, and also in a cultural perception across the Global South: agriculture has been devalued as an occupation. This phenomenon has been aggravated by the media and the state education system, and due to growing aspirations for urban lifestyles. For migrants from Dianbai and Gaozhou a lot of the work in cities is menial and low wage, and accompanied by a spiralling urban cost of living. In Nepal’s eastern hills, migrants to urban centres face similar challenges regarding the cost of living, and those who go overseas pay huge fees to manpower agencies. Debt servicing significantly eats into the remittance flows. As a result, in both regions there is often little cash left after basic food, healthcare and educational costs have been covered – and
what little is left is invested in consumer goods.

**Periurban agriculture as the way forward for migrant youth?**

Approximately 500 km to the east of the Chirikhuwa valley, in the Kathmandu valley, between brick kilns, factories and housing colonies, the fields are scattered with intensive market-oriented vegetable and fruit production, often under poly houses, and also livestock farms; these all serve the twin cities of Kathmandu and Patan and the rapidly growing urban population. Similarly, six hours west of Maoming is the Pearl River Delta, China’s industrial heartland. Here, on a vastly larger scale, in spite of the rapid urbanisation, the periurban belt between the cities of Guangzhou, Donguan and Shenzhen includes rich and fertile agricultural lands – again, though, these are dominated by high-value and intensive agricultural production.

The remaining question in this context is whether periurban agriculture offers an opportunity for migrant youth. Investment in periurban agriculture could potentially create opportunities for independent and regular income generation among rural migrants, as an alternative to dependence upon insecure and casual labour for others. Periurban agriculture would offer these migrants the opportunity in the urban context to mobilise rich agroecological knowledge brought from rural areas, and at the same time they could take advantage of the huge and growing local urban consumer demand for agricultural produce. This is in stark contrast to many rural areas, where the local market is small and transportation costs can be prohibitive for marketing produce further afield. Opportunities within periurban agriculture could offer youth in Nepal an alternative to risky and expensive overseas employment and could offer a pathway to upward mobility in China, where profits are potentially very high.

Considerable challenges remain, however. In the Kathmandu valley, land rent has skyrocketed in recent years. Many of the poly houses and other plantations on the urban fringe are already farmed by “migrants”, but many of these are wealthy entrepreneurs and skilled horticulturalists from other parts of Nepal who have leased land from the indigenous Newar of the valley. They bring with them capital, and also the capacity to bear risk and employ a large number of labourers. Similarly, in the Pearl River Delta, land use is heavily regulated, and many farms are larger-scale commercial plantations. Nevertheless, there are emerging opportunities on land leased from villages in the periurban fringe – which are being established by migrants from other provinces. In Zengcheng, 50 km away from Guangzhou, hilly land is being used to produce longan, dragon fruit, green date and other crops, with high profits and turnover. Some are being sold by e-marketing to the city and to other parts of China. Some have diversified into agricultural tourism, and the local government has been offering financial support to these enterprises. Given that many of the original local residents in these periurban locales have better paid work in the city, migrant farmers from poorer places such as Guangxi province and North Guangdong have taken up this niche.
Again though, the capital investment is likely to be prohibitive for poorer migrants.

**Periurban agriculture and the importance of smaller towns**

If periurban agriculture is to offer potential for migrants, it is also important to look to smaller towns which are connected to transport arteries and have a growing local market, yet also have greater availability of land and lower rents. For example, in small towns around Maoming city in Guangdong, some returnees from the cities had invested in ultra-high-value “niche” enterprises, such as turtle farming. In Nepal, poultry farms are appearing across the countryside in lowland towns, mostly serving the local market. Again though, persistent challenges relate to the capital requirements for such ventures, which are likely to be beyond the means of many poorer migrants. In the future, the opportunity cost of periurban agriculture may decline with improved transportation links: then high-value produce can be produced within rural communities without needing to set up new farms close to where the market is. This is already evident in the villages of Guangdong, where agriculture is increasingly dominated by high-value commercial crops – with even more remote villages opening up to distant markets. This is occurring through the spread of e-business, often for the production of specialist fruits or products such as shrimps. In some lower communities of the Chirkhuwa valley, returnees have started producing rudraksha, a highly profitable seed used for ritual and decorative purposes in India and China.

For periurban agriculture to flourish, however, policies need to be in place to support rural-urban migrants – most notably by providing land, regulation of rents and appropriate training, and credit provisions to ensure investments are economically sustainable. Other opportunities, such as the development of collectives or joint investments, which offer groups of migrants economies of scale, may also offer a solution in the years ahead.

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More Information

See the [MARIIS network website](http://www.mariis.org) (Migration, Agriculture and Resilience: Initiative for Sustainability).
Sierra Leone suffered a devastating civil war between 1991 and 2002 and an Ebola virus disease outbreak in 2014/15. During the war many people, many of them young, fled the conflict by heading to the city for protection. As a result, Sierra Leone is experiencing a post-conflict and post-epidemic economic and demographic recovery. The country shows evidence of economic growth, electoral stabilisation and improving human development indicators. These indicators include school enrolment, which grew 115 per cent in 2016, and life expectancy at birth, which increased from 35 years in the middle of the war to 51 years in 2016 (World Bank, 2018). The population was seven million in the 2015 census (up from five million recorded in the 2004 census), of whom 80 per cent were under 35 years of age and 41 per cent under 15 years (Statistics Sierra Leone, 2017). Considerable challenges remain.

In Kenema (Sierra Leone’s second largest city by population and the largest city in the east of the country) this situation is smaller-scale but no less acute. Kenema was a crucial strategic location during the civil war, with the local militia (known as “Kamajors”) resisting the incursion of the rebel forces for most of the duration of the conflict, occasionally with the support of peacekeeping forces. It became an important enclave during this period, attracting many refugees and internally displaced people fleeing the conflict. During the Ebola epidemic, Kenema Hospital was in the front line of the fight to tackle the disease, as the city is one of the closest to the epicentre of the original outbreak. Because Kenema District Hospital had some facilities to treat patients it became a focus for the international response. Sierra Leone carried out its fourth census in 2015 and Kenema recorded a population of 609,000, of whom one-sixth were born outside Kenema and migrated to the city and 77 per cent are under 35 years of age. These statistics highlight the city’s significant in-migration and very young population (Statistics Sierra Leone, 2017).

Kenema is now recovering, growing and developing rapidly. In Kenema and in Sierra Leone, young people represent both a challenge and an opportunity for the development of the city and the country (Restless Development Sierra Leone, 2012). The challenge lies in the fact that so many young people have grown up during the civil war and the immediate post-conflict period, leading to adverse effects on their childhood and education. The opportunity is inherent in the fact that they are the key members of the population who are economically, socially and sexually active and therefore important to the future development of the country and the reproduction of the population. With over 100 established youth groups active in agriculture in Kenema district, the National Youth Commission (NAYCOM) has established a database of organisations. NAYCOM engages youth through radio broadcasts, talking to young people in the street and in public gatherings in order to sensitise, train and mobilise them. NAYCOM observes that urban youths are trapped in declining and scarce urban jobs. This includes diverse categories of youth, especially those who feel hopeless, meaningless and not useful to society. As a government institution under the Ministry of Youth Affairs, NAYCOM works with young people, aiming to reorient them towards urban agriculture for income generation and food security, to replace antisocial and criminal behaviour (e.g., drug addiction, urban crime, gangsterism and violence), through working, liaising and tapping into their potential for individual and community or city development (Sama, personal communication, 2017).
The following are extracts from interviews with three young urban farmer respondents:

**Respondent 1**

“I do not have any formal learned skills in agriculture. What I do have is basic farming skills I acquired in the farm work I used to do, growing rice together with a few vegetables on my parents’ farm in the village. I was a petty trader. I lost my husband in early 1996 during a rebel attack in Kailahun District and relocated here in Kenema city. Circumstance compelled me and I entered into urban farming in 1996. There was nothing left for me and my two children to live on, so I took up growing vegetables on a rented swamp close to my residence. I grow vegetables all year round and rice during the wet season to sustain me and my two children. I am indebted to the landowner for allowing me to work on his land at a low annual cost. Eighty to ninety per cent of the vegetables I grow are sold either on the garden or on the market. I usually receive about SLL150,000 a month (approx. USD 17) between November and April/May each year. The income from the farm is what I use to support my children to go to school and meet my personal and family needs (food, clothing, shelter, etc). The rice I grow is used, though not sufficient, for daily consumption. Urban agriculture is very important to me because I am not educated nor do I have any trade to seek a job. Even if I have all these, unemployment is a big issue. I need support from everyone to increase food production, raise more money and make this urban farming work much more beneficial to me.”

**Respondent 2**

“I learned about farming in my village in Sorogbema Chiefdom, Pujehun District. In the war years my husband was captured and became a “Kamajor” fighter, a local militia. He never returned from the day he was taken away, and I migrated to Kenema city four months later in 1996. Initially I stopped doing agriculture in my new location. As “internally displaced” I got agriculture training from the Rural Training Institute (RTI) camp in Kenema city. After the training I started full-time agriculture on my own during the war in 1996. Apart from the training I got at RTI I did not have any opportunity to go to school or an agriculture institute. In Kenema city I rented a room to a man who owned a swamp and I arranged to work on his land with the condition to share between us the income generated from the garden work I do. I developed a very strong interest in urban agriculture because I was encouraged by the income that I generated— which I used to sustain myself (daily consumption), pay house and swamp rent, buy medication and meet other needs of my one-parent family.”

**Respondent 3**

“During the peak of the civil war in 1998 my parents were killed, while my brother and two elder sisters were forced to join the rebels who attacked us in Bo District. My elder sisters became sex partners of the rebel commanders that attacked our town. In 1999 I lost my brother and two sisters, and a few weeks later I became a dangerous fighter to revenge the loss of my family members. I joined the attack in Kenema in 2000 and was captured by ECOMOG [Economic Community of West African States Monitoring Group] troops securing Kenema city when I came to spy on their location for a later attack. I gave them the impression that I was running away from rebels who had attacked and killed my family. I was sent, with strict surveillance, to the RTI displaced peoples camp in Kenema city. As a young fighter I was exposed to drugs, cannabis and hard liquor. “After the war in 2001 I decided to stay in Kenema city but was living the hard way: no job, no skill learned except the agriculture training I got in the camp. I started to find quick ways to make money in the city and got involved in selling cannabis in a ghetto, stealing, washing cars and commercial bikes; then I became a commercial bike rider. I got involved in urban crime with the police after me as a result of these urban engagements I did just to earn a living or survive. Through the local stakeholders (the National Youth Commission, District Agriculture Division and Kenema City Council) I was enlisted for support directed to young people in urban and periurban agriculture in Kenema city. I embarked on vegetable and rice production as a source of earning income and food to sustain myself through the help of the head man at Samai Town, who assisted me with 0.5 acre of swamp. I cultivated rice two times a year during the rainy and dry seasons and produced exotic and leafy vegetables, all for the market, on the upland during the rainy season and in the swamp during the dry season. I sell my harvested vegetables to vegetable retailers within Kenema city and beyond. Some came from Bo city and Freetown. The income I earn from my garden is not only secure but it has given me respect in my community. Now I am contributing to the development of my community in the areas of food production and availability, food security and good health. Thanks to my new work as a young urban farmer, my dignity is restored and I now have a future.”

These testimonies illustrate the opportunity that urban agriculture provides to young people who have no skills or qualification other than what they have learned on their parents’ farms and what they may have practised before the circumstances of war overtook them. These three examples were picked from a sample of 250 young farmers in Kenema city.
Fourah Bay College Geographers are conducting research in Kenema, gathering evidence of the experience of young farmers around the city. A key focus of this work is their motivation, experiences and challenges based on similar work carried out in Freetown, the country’s capital (Lynch et al., 2013). The work is ongoing, but preliminary analysis shows that the young farmers reported themselves as predominantly uneducated, engaging in farming because of limited employment prospects and as a livelihood strategy. However, a significant proportion also expressed their views that the farming was very good for empowering youth, important for poverty alleviation and an important source of good nutrition and for recycling urban waste.

The preliminary results of this research point out that more understanding is needed of the challenges facing young people in cities emerging from conflict or other humanitarian disaster, and demonstrate the potential of urban agriculture to provide livelihood opportunities. NAYCOM has begun this work and there is a role for city authorities, the Ministry of Agriculture and the Ministry of Education.

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The production of erva-mate (yerba mate, a tea commonly consumed in southern South America) in traditional agroforestry systems in southern Brazil is a practice with roots in Guarani indigenous culture that has continued for generations on small-scale family farms. These systems take advantage of erva-mate’s characteristic as an understory tree and make use of the forest cover of larger tree species, many of which are endangered, to provide the shade necessary for erva-mate to thrive. The use of the natural forest structure has led to the preservation of important forest ecosystems in a region plagued by deforestation and land conversion to large-scale monocultures. Despite the important role these farmers play in local ecosystem services and food security, their knowledge of the forest, and the agroecological practices they use, are often devalued or ignored.

Challenges for youth

One of the greatest challenges these communities face is the continuation of traditional systems. Many youth who grew up on these farms are reluctant to continue this traditional way of life as it is not valued in their communities or in society more generally. In our ongoing research documenting erva-mate producers’ oral histories and knowledge of the forest, we have spoken to members of the next generation who have eloquently elaborated on the challenges they faced when deciding to continue on the farm.

Jessica, a young woman of 26 and daughter of an agroecologist and ervaíro (traditional erva-mate producer), noted that throughout primary and secondary school her teachers emphasised that students need to leave their communities in order to “be someone” in society. She stated that this perception of small-scale farmers as “poor” and “unsuccessful” was prevalent even in a rural community school, and teachers suggested that the best path for students was to attend university and migrate to the city. Jessica also faces challenges in terms of being a woman in rural production. While it was expected that her brother Jean would continue to live and work on the farm, Jessica’s choice is unique among many families. It is much more common for young women to migrate to the city, which has led to a significant difference (reaching 10% in some areas) in the numbers of young men and women in rural areas. Meanwhile, based on a recent assessment by Oxfam, men are the owners of an overwhelming majority of rural establishments in Brazil (87%), while women are proportionately more likely than men to own properties of less than 5 ha. A scarcity of social outlets for young rural women, as well as a lack of mentorship and representation in local farming organisations, can be both isolating and a significant deterrent for those thinking of continuing family farming practices. Considering that there has been a steady decline in the number of small and medium-sized family farms and an increase in the number of large agribusinesses, encouraging more young women to remain on the farm is an important strategy to support rural resilience.

Another member of the next generation also recalled his struggle to decide to return to farming – an increasingly common process in which young people who have migrated to the city are returning to rural life. When he was finished with school, Thiago, the son of an ervaíro, went to Curitiba, the state capital of Paraná, where he managed to find a job. But due to the low wages in Brazil for entry-level employment and also violence, poor housing and food insecurity, Thiago realised that the realities of migrating to the city to escape rural life did not necessarily offer him a better life. In the city, young people often face precarious situations never encountered on the family farm. Thiago has since started his own family and is now coordinating the organic cooperative
in his community that meets the needs of the National School Food Programme (PNAE) and National Programme for Food Acquisition from Family Agriculture (PAA).

Policy initiatives supporting rural youth
The perception of rural life and small-scale production often found in urban contexts contrasts with the very real contribution these producers make in their communities, and the important rural-urban connections they foster. Through PNAE, for example, local producers work together through cooperatives to provide agroecological and organic produce to public schools in their municipalities. While this programme has been in place since the 1950s, a policy change in 2003 requires that at least 30% of the produce come from local and organic sources, thus offering new markets and types of production for younger generations. The PAA programme also acquires produce from family farmers to supply public institutions. While this programme has had great success in attracting young farmers, it is susceptible to budget cuts and changes in government policies, and its future is unclear.

One policy put in place to stem the migration of rural young people to cities is a financial programme called “Our first land” (Nossa primeira terra) in which children of family farmers can apply for financial assistance to purchase their first plot of land. Although this programme is relatively poorly subscribed, with only 3000 families enrolled by 2010, it enabled Jessica and Jean to acquire a property in their community which they have begun to manage, giving them not only a sense of pride, purpose, and accomplishment, but also the opportunity to develop a successful agroecological business. The expansion of such programmes is essential to supporting the continuation of small-scale family agriculture in the face of land consolidation for large-scale agribusiness. In Brazil large properties make up only 0.91% of all rural establishments yet they occupy 45% of the country’s total rural area—while farms of less than 10 ha represent 47% of all farms but occupy only 2.3% of the total area.

Local initiatives to involve young people in farmers’ unions and other networks are being developed in many of the communities in which we work. Thiago, for example, plays an active role in the local chapter of the union of family farmers (FETRAF) and many young people participate in regional events such as seed exchanges, fairs, and caravan excursions to neighbouring communities. While these social and networking outlets are essential to creating a shared identity as young rural producers, Jessica noted a lack of young women participating in these events. This is mostly due to the continuing perception that young women are not farmers, but also, as Jessica mentioned, due to a clear bias in how rural life is portrayed.

Increasing awareness and support of rural-urban connections
What is becoming clear in our work to document and share knowledge about traditional erva-mate production in southern Brazil is that recording, sharing and valuing these practices is an important first step in changing the way small-scale family farm production is seen, both in their own communities and in larger urban centres. Consumers of erva-mate, for example, are unaware of the benefits of traditional production systems, or of the cultural and ecological importance of their continuation. There is a definite lack of recognition of the central role small-scale producers play in providing the biodiversity and the clean air and water that periurban and urban areas depend on, and that help to ensure communities remain resilient to global change.

One of the goals of our project is to recognise and to disseminate information about the significance of these traditional agroforestry systems across a variety of scales, beginning in the communities in which they are practised. Our multidisciplinary team includes researchers and outreach workers from federal, state, and municipal institutions, universities and community partners. We are starting this process by working with municipal secretaries of education to develop learning resources in order to integrate this knowledge and local history into school curricula. The aim is to foster a better understanding among youth of the importance of maintaining traditional agroforestry and agroecological practices and of valuing their cultural, ecological and socioeconomic contributions.

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A means for youth to a future in agriculture?

Agricultural Cooperatives

One third of African youth are underemployed or unemployed, or have marginal incomes or limited career prospects (AfDB, 2016; AGRA, 2015). As well, there is a burning need to efficiently commercialise the agricultural sector to enhance food security and create employment for youth. Engaging youth in agribusiness could provide a win-win solution, and agricultural cooperatives could play an important role. Youths would benefit from cooperative membership by accessing opportunities not available to them as individuals.

Cooperatives would benefit as well: young women and men sustain and revitalise (ageing members of) agricultural cooperatives and introduce new ideas and technologies. However, little knowledge is yet available on how to strengthen synergies between cooperatives and youths. An exploratory study, carried out by the Royal Tropical Institute (KIT), and the global network of Young Professionals for Agricultural Development (YPARD) and Wageningen Centre for Development Innovation (WCDI) and supported by the Food & Business Knowledge Platform, aimed to contribute to current knowledge on youth in agricultural cooperatives by providing insights directly from youth in Rwanda, Tanzania and Uganda.

Back to the land

In general, young people perceive farming as a poor man’s job, requiring a lot of hard work with little return; parents also prefer to see their children in a white-collar job. A negative perception of agriculture leads more and more young people to move to urban areas for education or employment opportunities. However, formal unemployment is skyrocketing in most African countries (even after graduation). Because they need to make a living, young people return to their rural livelihoods. Some move back by their own will, seeing agriculture as a true income opportunity and feeling passionate about it. When turning to agriculture to earn a living, whether due to necessity or opportunity, the youth do face serious challenges such as a lack of agricultural knowledge, or no access to land and financial services. Agricultural cooperatives could play a role in helping young farmers overcome these challenges and, at the same time, sustaining the cooperatives’ own relevance.

Key motivation for youth to become members

During discussions with participants from six agricultural cooperatives in Rwanda, Tanzania and Uganda, access to knowledge and training was mentioned as a key reason for youths to join a cooperative. Youth face challenges in accessing training opportunities: often, they are neither organised into groups nor members of agricultural cooperatives (Guilliani et al., 2016). Also, young farmers in cooperatives gain access to the generational exchange of knowledge as well as peer-to-peer learning, which can be very effective and influential. Young farmers can be role models for each other (inside and outside of the cooperative) in sharing their knowledge.

Another key motivation for joining a cooperative was access to land and financial services for engaging in agricultural activities and economic opportunities. However, none of the cooperatives studied had successful examples of supporting youths in access to land or financial services – despite the fact that involving young people by providing access to land would increase membership, volume of produce, and the sustainability of the cooperative. Providing these services may not be the cooperatives’ core business; as long as young people do not engage in productive activities or value addition, they are not, as members, very relevant to co-ops and will not have access to co-op services (e.g., land or financial services). However, if young farmers are to participate in the agricultural sector they need land, finance, and knowledge/skills. So it is a vicious circle: young farmers’ expectations towards cooperatives are directly related to fulfilling their need to access productive assets. Though limited, some cooperatives have found innovative solutions to support youth in gaining access to land. For example, cooperatives in Burkina Faso have lobbied village chiefs to convince them to give land to young women in their communities (FAO et al., 2014).

Youth: benefits for agricultural cooperatives?

By becoming members, and by increasing their capacity for innovation and entrepreneurship, youth could be the key to the longevity and sustainability of cooperatives (FAO et al., 2014; MIJARC et al., 2012; Plechowski, 2014). Young people are often more inclined to work with new technologies, and generally have higher levels of education than older farmers. Moreover, the engagement of youth in cooperatives can counteract the alarming pace at which the farming population...
is ageing. However, it is still common for agricultural cooperatives to be dominated, managed and led by older men. Also, young people, and young women in particular, are scarcely involved in key decision-making processes.

The cooperatives that were part of the explorative study have not recognised, or have only recently started to recognise, the importance and potential of youth engagement for the functioning and sustainability of the cooperative. Senior cooperative members are not always convinced of the benefits of attracting and including young farmers, though youth in Tanzania have been given record-keeping positions because their education level is higher than that of older generations. To top it off, youth are often insufficiently aware of the benefits of being a member of an agricultural cooperative. All of these factors combined lead to limited youth membership.

Recommendations

A summary of recommendations to tackle these challenges include the following.

For policy makers:
- Identify solutions to improve access to land (e.g., land registration and land rental).
- Support collaboration between cooperatives and financial institutions by providing guarantees for loans to youth members.

For (development) organisations and agricultural cooperatives working to promote youth engagement in agricultural cooperatives:
- Offer youth-specific training on good agricultural practices and new technologies, and soft skills such as leadership, negotiation and marketing.
- Facilitate peer-to-peer or mentor systems where (groups of) older farmers and young farmers learn from each other. In the interviews conducted, young female farmers stressed the need to meet other (female) farmers, to have a sense of belonging and to have a chance to share their experiences.
- Establish savings groups linked to the cooperative, with each member regularly depositing a sum of money which can then be borrowed. This practice is quite widespread in Uganda and strengthens social relations and trust among youths.
- Facilitate meetings with microfinance institutions, local government, banks and young members to discuss the possibility of developing tailored financial services.
- Facilitate the establishment of youth councils to strengthen the voice of young farmers, particularly in collaboration with local and regional authorities.

For the private sector:
- Identify and/or create specific jobs within market systems suitable for young people (ICT jobs or off-farm services).
- Improve farm-firm relations by training youth cooperative members and assigning a mentor from the company to guide youth in service provision (e.g., milk transportation, input traders).

For research and knowledge institutes:
- Build an evidence base around the following questions:
  - Does the input of youth lead to more ICT use and new technologies in cooperatives?
  - How can different organisational structures (e.g., cooperatives, networks, associations, groups) contribute to youth inclusion in the agricultural sector?
  - What are good practices/case studies of agricultural cooperatives in supporting youth to gain access to land and financial services?

The full report can be downloaded here: http://knowledge4food.net/youth-in-agricultural-cooperatives-a-two-way-street/

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Private sector opportunities in city region food systems

This policy brief reports on a recent study, implemented by RUAF and supported by the Food & Business Knowledge Platform (F&BKP) and the CGIAR Water, Land and Ecosystems Research Program (WLE/IWMI), on the role of the private sector in building more sustainable and resilient city region food systems. It recognises that business opportunities can be found in traditional food services (production, processing, retail), and increasingly also in resource recycling, development of new products and services, and technological innovations. Small and medium-sized enterprises seem to have the highest potential for supplying city region markets, and providing or sourcing city region products, while at the same time ensuring local job creation and social inclusion. www.ruaf.org/publications/policy-brief-role-private-sector-city-region-food-systems

Community of Practice – Youth in Agribusiness

AgriProFocus and F&BKP facilitate a Community of Practice to share recent work on youth in food systems. Meetups are organised several times a year; the latest one was called “Rural youth empowerment to mitigate international migration?” Are you interested in joining the next meetup, or do you have interesting insights from your work regarding youth in food systems that you would like to share with this community? Get in touch with Rolf Schinkel at rschinkel@agriprofocus.com or Babs Ates at babs.ates@knowledge4food.net.

FOA Forum: Youth employment in agriculture as a solid solution to ending hunger and poverty in Africa

In preparation for a regional conference, the FAO Global Forum on Food Security and Nutrition held an online discussion with the aim of providing an opportunity for youth who are engaged in agriculture and rural development across Africa to have their say and share their experiences. While recognising that youth are a very heterogeneous group, and that local conditions need to be carefully taken into account, consensus was reached on the importance of successful role models to attract young people to agriculture and encourage them to stay in the sector. The discussion also emphasised the need for appropriate and relevant training, knowledge sharing and guidance to help young people prepare for opportunities in agriculture and agribusiness.

Capitalising on untapped potential

This two-pager aims to summarise the current state of the art on jobs for youth in Africa’s agricultural transformation. It builds on the knowledge gathered in the F&BKP Knowledge Portal on youth. It covers youth heterogeneity, the potential of mainstreaming and youth-specific interventions as well as comprehensive policies.

With as many as 226 million individuals between 15 and 24 years of age, of which a staggering 60% are currently unemployed, Africa’s youth can be considered an untapped potential. Currently, agriculture provides approximately 60% of total sub-Saharan African employment – yet the continent also remains a major importer of food and related products. This can mainly be explained by the productivity of Africa’s agricultural sector, which is improving but still lagging behind other continents. Clearly, Africa has a threefold challenge that needs to be addressed in an integrated manner: increasing employment opportunities for youth, improving food security and transforming its agricultural sector.

Africa’s youth are a highly heterogeneous group, in terms of location, education, employment, gender (in)equity, embeddedness in community and other sociodemographic factors. Most youth, however, are low-skilled, live in rural areas and find jobs on small farms or in survival enterprises.

Many reports have outlined the specific constraints that youth face when seeking employment in agriculture. These relate to aspirations among youth to work in agriculture, as well as limited youth access to knowledge, information and education, land, finance and financial services, markets, and policy dialogues. Most of these constraints apply to job creation in agriculture in general, not specifically to youth. But what stands out is that better education and connectivity cause rural youth aspirations to rise, which makes them seek jobs elsewhere. Beyond the opportunities that lie in applying youth-specific or general agricultural transformation interventions, it is of prime importance to mainstream a youth focus in existing and new interventions.

A systematic review of labour market interventions for youth concludes that the most successful programmes combine interventions such as business skills training and increasing access to capital. This confirms the need for comprehensive policies.

There is a large potential for agripreneurship: apart from increasing the number of small farms, agroprocessing, packaging, technology and other food-related industries are on the rise. However, entrepreneurship in agriculture may not be an option for many low-skilled, rural youth who lack access to knowledge, land, credit and markets. An inclusive approach (i.e., decent jobs for all youth) should focus on additional constraints faced by marginalised youth: comprehensive programmes that combine skills training with additional education, mentoring and asset transfers.

knowledge4food.net/capitalizing-on-untapped-potential-finding-jobs-for-youth-in-africas-agricultural-transformation/
Policies facilitating access to credit, land and markets were identified as necessary for enabling young entrepreneurs to consider agriculture as a viable profession. [www.ruaf.org/youth-employment-agriculture-solid-solution-ending-hunger-and-poverty-africa-online-discussion](www.ruaf.org/youth-employment-agriculture-solid-solution-ending-hunger-and-poverty-africa-online-discussion)

**Food-Based Business Incubator Programmes**

This municipal action guide by the National League of Cities provides an overview of food incubator programmes as well as guidance on how local governments can support these emerging strategies to promote local entrepreneurship and strengthen local food systems. [citiespeak.org/2017/02/01/kitchen-and-farm-incubators-support-access-to-local-food-systems/](citiespeak.org/2017/02/01/kitchen-and-farm-incubators-support-access-to-local-food-systems/)

**What skills do you need to succeed in urban agriculture?**

The Urban Green Train project team documented approaches and types of economic models of urban agriculture in Europe. The team also identified the current urban agriculture educational offerings and did a training needs assessment among various stakeholders. As a result, the team developed training resources to foster entrepreneurship in urban agriculture. The material is available in English, Dutch, German, Italian, French and Portuguese. [www.urbangreentrain.eu/en/?id=Pilot_Course](www.urbangreentrain.eu/en/?id=Pilot_Course)

**How and why food service should be a leverage point for creating job opportunities for the young generation**

This year’s Eating City Summer Campus theme was “Youths and Labour.” During ten days of discussions, workshops and sessions with experts, 29 youth investigated the complex challenges facing sustainable food systems. The group expressed its vision on job opportunities for young people in a common declaration. [www.eatingcity.org/summer-campus/](www.eatingcity.org/summer-campus/)

**Building Future Food Leaders: A change makers guide**

Slow Food Youth Network, Hivos and Food Hub created this guide, inspired by the activities co-organised at Terra Madre Salone del Gusto 2016. These organisations wish to accelerate the transition towards a good, clean and fair food system by showcasing a range of portraits of inspiring people who operate at the grassroots level around the world. Those profiled are undertaking actions and organising activities to create awareness and make small or large changes within the food system. The tools in the guide are meant to help you to create your own intervention, campaign or project plan. [thefoodhub.org/future-food-leaders-opgelet-guide-is-jou/](thefoodhub.org/future-food-leaders-opgelet-guide-is-jou/)

**Foodathon: Youth employment opportunities in city region food systems**

On 30-31 August 2018, Wageningen University (WUR) organised a foodathon as part of the Sustainable Development Goals (SDG) conference “Towards Zero Hunger: Partnerships for Impact”. The foodathon aimed to engage students and young professionals in SDG 2, Zero Hunger, and to bridge the gap between knowledge and practice regarding the SDGs. It was a 36-hour event during which students and young professionals worked in small teams to create local solutions to global food system challenges. RUAF and WUR worked with several student teams on the issue of urban-rural relations and youth employment. The challenge was to “develop a strategy on how a small to medium-sized city can use rural-urban linkages as an opportunity to provide livelihood opportunities and decent jobs along the local food supply chain that are especially relevant to young people.”

One team worked on developing a mobile app, [YAgriConnect](http://www.ruaf.org), that links young rural (horticultural) cooperative producers to urban consumers and investors through young sales agents. The [Greenovators Youth4Youth](http://www.ruaf.org) also proposed a digital platform for Monogoro, Tanzania. The team would operate as an employment agency, consulting urban citizens who own rural idle land about possible agribusiness opportunities; the digital platform would be used to connect these citizens with local unemployed youth, in order to tackle youth unemployment and food insecurity at the same time. A third team, Food Accessibility, proposed the [Urban River Agriculture Project](http://www.ruaf.org) in Kathmandu, Nepal. This project aims to develop a sustainable and inclusive area for food production along a river, targeting the problems of food security, civil inclusion, environmental sustainability and youth unemployment along the horticulture chain.

More information and the resulting full strategy reports are available at [foodathon-solutionsmarket.com/theme/g/index.html](foodathon-solutionsmarket.com/theme/g/index.html)
Growing Food in the Cities: Successes and new opportunities

On 10 April 2018 the 50th Brussels Development Briefing addressed the topic of Growing food in the cities: Successes and new opportunities. This series of bimonthly development briefings focuses on rural and agricultural issues in Africa, the Caribbean and the Pacific (ACP). It is organised by the Technical Centre for Agricultural and Rural Cooperation (CTA), in collaboration with the European Commission /DEVCO, the ACP Secretariat and CONCORD.

The Briefing brought together roughly 140 participants to discuss the status, opportunities and challenges of urban agriculture in the ACP. It examined main trends in urban and periurban agriculture and how growing food in cities can offer new opportunities in the ACP and Europe, especially for young entrepreneurs. Here we share the most important conclusions of the Briefing and the discussions.

To be sustainable and attract youth, the agricultural sector needs further development of productive enterprises and entrepreneurial skills, improved processing and marketing capacity, access to finance, and identification of lucrative markets.

There is also a need for capacity building of producer organisations and to facilitate access to land for urban production. Urban farmers who are not landowners also need support through, for example, medium- to long-term investment strategies, as contributors of multifunctional green city infrastructure. Food safety issues and traceability are key for all actors in the value chain, especially consumers, and efforts are needed to meet safety requirements and enhance product quality.

Strengthening rural-urban linkages in terms of infrastructure, transport, market access and exchange of information, ideas and innovation can catalyse economic development in rural areas and provide future perspectives for rural populations, especially youth. Rural development strategies should consider some of the following opportunities:
- New income-generating opportunities in food systems as a result of changing urban consumption patterns;
- Investing in towns and intermediary cities as hubs for economic growth and service delivery for rural areas;
- Boosting agricultural productivity and attracting youth to farming;
- Supporting job creation in the rural non-farm economy and enabling diversified and multilocal livelihood strategies.

Urban agriculture can play a multifunctional role and offer economic opportunities. The innovative nature of urban agriculture, the use of technology and short production cycles have the potential to attract young entrepreneurs. But to achieve this, the many innovative farming business models should be mapped, documented and shared to allow for their replication and scale-up, and to promote understanding of important enabling factors. More efforts are needed at policy level to create conducive frameworks for value chain actors involved in urban agriculture activities. More attention should be paid to promising new markets for urban agriculture in Europe and Africa, such as agrotourism, organic agriculture, and linkages to supermarkets, restaurants, hotels and schools. These underline the importance of partnerships with the private sector to sustain the future development of urban agriculture.

A major focus of CTA’s work is on encouraging young entrepreneurs to enter the agricultural sector, and the Centre helped to identify cases from Africa and the Caribbean presented in this issue of UA Magazine.

More information: brusselsbriefings.net/past-briefings/so-urban-agriculture/

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