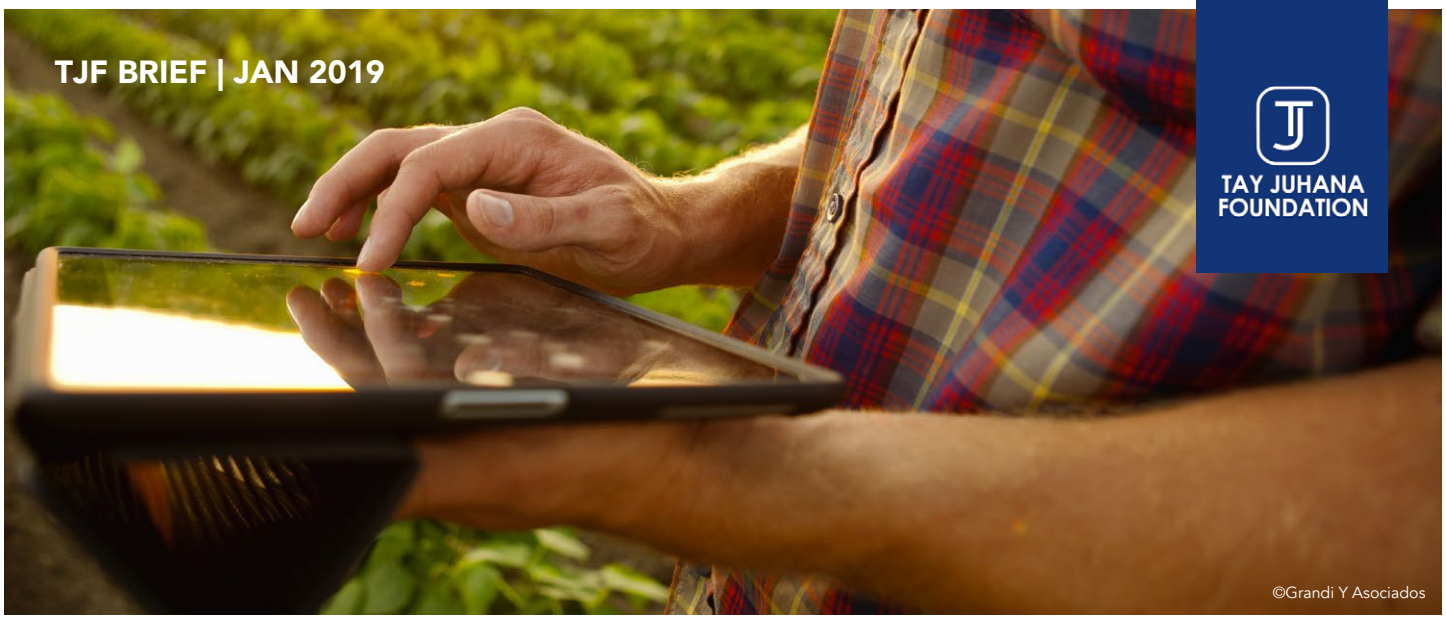

Unlocking Youth's Potential in Improving Food Security

Ika Zahara Qurani

Today's youth, especially those who live in urban areas, might wonder if they really at risk of food shortage. Thanks to modern technology that enables us to order food instantly, meals can be delivered with ease once we feel hungry. It seems like we are surrounded by enormous and lasting food supply. A situation where youth suffer from starvation or scarcity of food products in the market is inconceivable unless you are living in the extreme condition. However, we can wonder where our food ingredients come. Are they entirely grown locally? Or some have been imported from elsewhere since our country cannot meet the national demand?

YOUTH PROPORTION AMIDST WORLD POPULATION

According to the Food and Agriculture Organization (FAO), the world will need to produce 70% more food than today to feed nearly 10 billion people in 2050. Youth role is increasingly essential since they are predicted to make up half of the population.

The youth do not have to wait until 2050 to be the world's majority, even in 2017, the population with ages between 15 and 34 have reached 2.3 billion which equates to a third of humanity. In low-and middle-income countries (LMICs) across Africa and South Asia, a large share of the growing population is comprised of adolescents and young adults. In India, about one million people turn 18 every month. Similarly, Africa's youth population is expected to double by 2050, with one billion people projected to be under 18 years old. Today, more than 60% of the population in Sub-Saharan Africa is below age 25 (Yeboah, 2018).

GLOBAL PHENOMENON CALLED FOOD INSECURITY

Unfortunately, the surging population is not followed by increasing available lands to grow food. On average, arable land per person is shrinking from 0.38 ha in 1970 to 0.23 ha in 2000, with a projected decline to 0.15 ha per person by 2050 (FAO, 2011). Lack of available land reduces human ability to attain food security through agricultural production, particularly those who live in rural areas. Their food security and livelihood largely depend on agricultural production and land rights. Without them, families could face food security risks by having to rely on small plots or marginalized land that may not produce enough food to maintain sufficient food levels for the household (Feighery et al., 2011).

Table 1. Food Insecurity Prevalence by Region and Age Group (Amarnani, 2017)

Region	Youth	Adult	Total
East Asia and Pacific	30.72	28.94	**29.23**
Europe and Central Asia	27.81	30.06	**29.69**
Middle East and North America	33.66	40.82	**39.04**
South Asia	43.54	49.33	**47.91**
Latin America and Carribean	47.93	54.24	**52.68**
Sub-Saharan Africa	74.43	73.40	**73.72**

Food insecurity is afflicted by both adults and youth across the globe. Indeed, youth in rural areas have higher odds of being food insecure compared to those in urban areas, in particular, those living in the poorest households (Amarnani, 2017; Hadley et al., 2009). However, Table 1 shows that adults were more likely than youth to be food insecure in Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, also South Asia. No significant differences in food security outcome by age group were found in East Asia and the Pacific, next to Sub-Saharan Africa. The main reason behind this phenomenon is that adults usually support the food provision for youth of the family (Amarnani, 2017). This finding urges even more attention should be given to enable youth to have access to the food system.

The ability to acquire agriculture skills can help to strengthen the food security of their households. For example, research conducted in India found that families working in small-scale agriculture have a lower income, but higher food sufficiency compared to those engaged in off-farm employment (Patel et al., 2015). The dependence on self-production of food to achieve food security, rather than household income, explain the lower food insecurity income-related inequalities in regions such as Sub-Saharan Africa and South Asia (Amarnani, 2017).

ENABLING LAND ACCESS FOR YOUTH

Increasing youth ability to produce food on their own may strengthen food security among youth. Unfortunately, it is always a challenge for them to have access to owning or managing agriculture lands. Initiatives have been implemented all over the world to help them to become successful young farmers though some were actually worked while the other did not go very well.

In Egypt, the national government and the International Fund for Agricultural Development (IFAD) have been collaborating to provide agriculture land to more than 200,000 people through desert reclamation in West Noubaria (IFAD, 2017). Lack of arable land has made them initiate unproductive soil conversion program in the desert. The primary target groups were landless farmers and young graduates. They were given lands, crops management training, seminars for farmers' development, and support to market their yields to exporters and major buyers in the domestic market, cutting out the need for middlemen. Perhaps their most impressive contract is with Heinz, the global food company, which buys more than 6,000 tons of tomatoes each year from 300 project farms (IFAD, 2017). Heinz provides the farmers with the quality seed and guarantees to buy half their harvest at an agreed price. If the farmers cannot sell the remaining tomatoes in the domestic market, Heinz is committed to buying them.

A similar project had been implemented in Mexico through the Young Rural Entrepreneur and Land Fund Program in 2011. The country had worked with the World Bank to create a land market by giving youth credits to purchase underutilized, potentially productive land (World Bank, 2011). Unfortunately, the program was less successful. Assistance was given to older landholders, who transferred their lands to young farmers, to access and participate in social welfare schemes (life-long pension payments, health insurance and life insurance). Apparently, this initiative turned out to be an incentive for early inheritance within Mexico's *ejido* (communal) land ownership system, which did not allow land sales outside the community. In fact, 90% of land transfers were within families (Byamugisha & Ansu, 2017). The program did not have a consistent strategy to encourage viable land transfers, especially outside families, and failed to develop productive subprojects.

ADVANCING INNOVATION IN AGRICULTURE TECHNOLOGY

The future of agriculture depends on attracting young talents who are prepared to balance risk and reward so that they can deliver the food we need, with sufficient return for their labour and capital. According to the Young Professionals for Agricultural Development

(YPARD) Report of 2017, there is a new generation of young professionals that have the ideas and aspire to become successful entrepreneurs, farmers, tech-savvy, researchers and policy makers. Yet, they are often held back because of: 1) Existing view of unprofitable agriculture career; 2) difficulty in accessing suitable land; 3) low market price; 4) disconnect between education and practice; and often, 5) exclusion of youth decision making.

One of the effective ways to address those constraints is by exposing youth to various intriguing opportunities related to agriculture sector, particularly for urban youth who live in the digital age with thriving utilization of the internet. The technology has brought transformation that advanced the commercialization of agriculture products, financial service, as well as the collection of scientific data related to cultivation process such as climate, harvest prediction, and soil modification.

In Indonesia, e-commerce platform such as Tanihub and Regopantes aims to cut the chain between farmers and direct consumers. There is also crowdfunding platform such as Tanifund and CROWDE. A comprehensive learning platform for farmers such as Desa Apps provides discussion forum and real-time market price for agriculture products. These platforms are often available as user-friendly smartphone apps. A farmer group called Pangudi Boga in Blora (Central Java) experienced that Tanihub's partnership allows them to market their products to a broader range of consumers with more competitive profit, next to improve the farmers' knowledge on post-harvest processes (KOMPASTV, 2016).

WAY FORWARD

There are various approaches to be used to close the gap between youth and agriculture. On the one hand, land access is one of the primary and vital needs to provide the availability of food. In practice, follow-up measures are necessary to improve the whole quality of our food production system. On the other hand, the emergence of digital platforms has helped to eradicate the perspective that farmers are out-of-date. More people are connected to the agriculture sector. Even some are investing in the business. It also aids the farmer's work in distributing the harvest without middlemen and maintaining the market price. Interestingly, the teams behind these platforms are usually youth who recognize the benefit of implementing the digital approach. Eventually, approaches above could be further explored and modified per case to improve the practices of on-farm and off-farm that leads to the increasing involvement of youth.

BIBLIOGRAPHY

Amarnani, E. (2017). Predictors of food insecurity in the global youth: A decomposition analysis of inequalities (Master's Thesis). McGill University. Retrieved from http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1576638367760~520

Byamugisha, F., & Ansu, Y. (2017). Securing Land Tenure and Access for the Youth to Modernize African Agriculture. Retrieved from https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/Presentations/frank-byamugisha-and-yaw-ansu-clpa-2017-conference-paper.pdf

FAO. (2011). Agriculture (Publication). Retrieved from Food and Agriculture Organization of the United Nations. Retrieved from http://www.fao.org/docrep/014/am859e/am859e01.pdf

FAO. 2009. High Level Expert Forum - How to Feed the World in 2050. Rome, FAO. Retrieved from http://www.fao.org/fileadmin/templates/wsfs/docs/Issues_papers/HLEF2050_Global_Agriculture.pdf

Feighery, J., Ingram, P., Li, S., & Redding, S. (2011). Intersections of Youth & Food Security (Rep.). Retrieved from https://rmportal.net/library/content/intersections-youth-food-security/at_download/file

Hadley, C., Belachew, T., Lindstrom, D., & Tessema, F. (2009). The forgotten population? Youth, food insecurity, and rising prices: implications for the global food crisis. NAPA bulletin, 32(1), 77-91. doi: 10.1111/j.1556-4797.2009.01029.x

IFAD. (2017). Arab Republic of Egypt West Noubaria Rural Development Project: Project Performance Evaluation (Rep. No. 4388-EG). Retrieved from https://www.ifad.org/en/web/ioe/evaluation/asset/39825970

KOMPASTV. (2016). Retrieved from https://www.youtube.com/watch?v=JITzvR0ldcs

Patel, K., Gartaula, H., Johnson, D., & Karthikeyan, M. (2015). The Interplay between Household Food Security and Wellbeing among Small-Scale Farmers in the Context of Rapid

Agrarian Change in India. Agriculture & Food Security, 4(1). doi:10.1186/s40066-015-0036-2

World Bank. (2011). Implementation Completion and Results Report: Access to Land for Young Farmers Pilot Project in Mexico (Rep. No. ICR00001212). Retrieved from http://documents.worldbank.org/curated/en/573621468299126941/pdf/ICR12120P0887300only0900BOX361509B0.pdf

Yeboah, F. (2018). Youth for Growth: Transforming Economies through Agriculture (Rep.). Retrieved from https://www.thechicagocouncil.org/sites/default/files/report_youth-for-growth_20180322.pdf

YPARD. (2017). 2017 Internal Review of YPARD's Pilot Mentoring Program: Equipping Young People to Make a Change in Agriculture (Rep.). Retrieved from https://ypard.net/sites/default/files/legacy_files/Mentoring Report Review.pdf

ABOUT THE AUTHORS

Ika Zahara Qurani - Research Coordinator
contact: zara@tayjuhanafoundation.org

ABOUT TJF

Tay Juhana Foundation (TJF) is a nonprofit organization dedicated to promote the advocacy of the conversion and cultivation of suboptimal lands into productive lands, through the most environmentally, economically, and socially sustainable manner.

CONTACT US

For further discussion on the TJF Brief and any publications, or to submit an article, please contact
info@tayjuhanafoundation.org