

Extended abstract – Conference “Sustainable diets < > sustainable food systems”

Submitted by Paola Termine, American University of Rome.

Sustainability of agro-food systems and rural migration. A conceptual framework to analyze the “missing link” between agricultural development and the migration decision.

Introduction

In the process of structural transformation, the role of agriculture and food systems¹ is changing, with unclear impact on the provision of rural livelihoods and the decision to migrate. The link between migration and agricultural transformation has been at the basis of the seminal theories on growth and structural change, focusing on the movement of surplus labour from traditional agriculture to modern industrial sectors in response to productivity and wage differentials (Lewis, 1954; Harris and Todaro, 1970). These models, however, mainly focused on rural-urban and permanent migration, and considered agriculture dominated by low-productivity and traditional operations, failing to explain the different composition in terms of individual characteristics, and patterns of migration (permanent, temporary, seasonal, circular) (Lucas, 2007). The link between migration and agri-food systems has not been systematically studied, especially for what concern intra-rural movements and non-permanent migration.

Agri-food systems are increasingly important in terms of their contributions to GDP, employment, and exports, and witness a process of integration in regional and global supply chains (Reardon 2015). The middle segments of the value chains (including processing and wholesale) are transforming quickly and becoming important contributors to the economy, especially in developing and middle-income economies. In fact, rapidly transforming agri-food systems that respond to consumers’ demand in urban areas, have the potential to enhance value addition and employment in their more modern stages of the chain, such as processing (Reardon et al., 2015; Kwame-Yeboah and Jayne, 2017).

However, a trend common to many countries is that rural youth, and especially skilled youth, are increasingly leaving the agriculture sector. Agriculture and other rural enterprises are not part of youth’s aspirations. This is not surprising as the majority of agricultural employment is precarious and seasonal; contracts are informal, therefore with no access to social security; working conditions are hazardous; and, more importantly, agricultural work is characterized by low productivity, low pay, and ultimately by low social status. “Modern” food systems coexist with traditional and mixed food systems, and are often closely interlinked (Gómez and Ricketts, 2013). While unsustainable agro-food systems, which rely on underpayment and underemployment of the workforce and provide marginal revenues to producers, act as push factors for rural outmigration, development of agro-processing in mixed and modern food systems can create rural

¹ In this paper, the FAO definition of food systems is utilized: “Food systems (FS) encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded” (FAO, 2018b).

employment in areas of origin, or attract labor migrants in areas experiencing agricultural transformation. Food systems and the stage of development of agriculture and rural economy have a strong impact on job opportunities and on the perspectives offered by farm and non-farm activities, both in areas of origin and destination, therefore playing an important role among the structural, macro-level, migration drivers.

The relationship between food systems and migration is more complex. For example, there is evidence of a positive correlation between migration and agriculture value added per worker. Countries that are completing their agricultural transformation witness slowing-down of rural-urban migration, while countries at an early stage of rural transformation can expect internal rural-urban migration to spike up (Arslan, Egger and Winters (2018, IFAD)).

Food systems and migration: determinants, impact and transmission mechanisms

Rural outmigration can ease population pressures on scarce resources - especially when agriculture suffers the impact of climate change - enhance educational opportunities and skills development for youth, allow households to diversify their income sources through remittances and facilitate access to goods and services or invest in income-generating activities. However, outmigration also poses challenges to rural development and transformation, since it drains the most productive and dynamic labor force from the local economy and implies social costs for families and communities left behind, who are often unable to productively invest remittances.

Based on the definition of sustainable food systems / value chains, it is important to retain the key elements that exemplify the linkage between food systems and migration: the ability of the food system to generate employment and livelihoods opportunities; and the “feedback loop” from migration into investing remittances and direct investments in the food system. In terms of the participation of each household, whether households engaged in agriculture are integrated in food value chains, either horizontally (e.g. through farmers’ associations and cooperatives) or vertically (e.g. through contract farming, or other supplier contracts with agri-food businesses) can have an impact on migration decisions and outcomes.

The analysis of the linkage between food systems and migration can be declined according to the following:

1. Engagements of individual and households in specific food systems / value chains, including in what capacity they are engaged, at what node/activity of the value chain and with what degree of specialisation and skills; and how this engagement has changed as a result of migration, both at the level of the individual migrant and of the household;
2. The characteristics of the food systems and the nature of their operations, for example whether they produce mainly for export markets or for local markets; whether the main produce is food or cash crop (making reference to secondary data)
3. Some indicators of the “performance” of these systems, such as the degree of diversification within the food system and the chain; the value addition at different stages in the chain, the integration with other activities, labour intensity; small-scale or intensive agriculture.

Methods

This conceptual framework has been developed in the context of a study undertaken by FAO, the Ministry of agriculture of Egypt, and Cairo University. The study, which includes a combination of qualitative and quantitative tools, will collect primary data through a survey (November 2019) covering 300 households, selected through a stratified random sample. The purpose of the survey is to gather data to better understand rural migration trends, drivers and impacts, disaggregated by age and sex. The survey will examine socio-economic characteristics, incidence of migration (in its different forms), with respect to the prevailing food systems in the target areas.

Discussion and Conclusions

The link between rural in- and out-migration and agro-food systems has started to be discussed in recent years, however with a paucity of data and evidence on how the performance and sustainability of food systems impact the creation of employment, and therefore influence migrations' decisions. In the context of the North Africa and Middle East Region, where agro-industrial transformation is occurring unevenly and where agro-climatic conditions in many countries are worsening, the issue of how agro-food systems can mitigate migration has important social, economic and political implications.

The development of economically competitive, environmentally sustainable and inclusive agri-food systems can enhance rural livelihoods and provide alternatives to migration, as well as counteract some of migration's negative impacts on rural areas. In this context therefore, providing incentives for private and public investments in selected agro-food value chains as a way to provide alternatives to migration, together with the engagement of diaspora and the reintegration of returnees, for instance by supporting their productive investment in agricultural and rural activities, represent policy and intervention areas still largely untapped. A better understanding of the complexity of rural migration drivers and trends and their connection to the performance of agro-food systems can sustain more coherent and complementary policies on rural and urban development, employment and migration, to respond to concerns of rural development, youth unemployment and over-urbanization.

References

- Amer, M., & Fargues, Ph. (2014). Labor Market Outcomes and Egypt's Migration Potential, EUI/RSCAS Working Papers - MPC Series 2014/55, San Domenico di Fiesole (FI): EUI, 2014, pp. 18- 19.
- Arouri, M., & Nguyen, C. V. (2017). Does International Migration Affect Labor Supply, Non-farm Diversification and Welfare of Households? Evidence from Egypt. *International Migration*.
- Bell, M., Charles-Edwards, E., Kupiszewska, D., Kupiszewski, M., Stillwell, J., & Zhu, Y. (2015). Internal migration data around the world: Assessing contemporary practice. *Population, Space and Place*, 21(1), 1-17.
- Binzel, C., & Assaad, R. (2011). Egyptian men working abroad: Labor supply responses by the women left behind. *Labor Economics*, 18, S98-S114.
- Castagnone, E., & Termine, P. (2018). Youth migration from rural areas in the Mediterranean: Socio-economic determinants, challenges and opportunities for targeted policies. Chapter 8 in *Mediterra – Migration and inclusive rural development in the Mediterranean*.

David, A., & Jarreau, J. (2015, December). Short-And Long-Term Impacts of Emigration on Origin Households: The Case Of Egypt. Economic Research Forum.

De Haas, H. (2007). Turning the tide? Why development will not stop migration. *Development and Change*, 38(5), 819-841.

Egger, EM., Arslan, A., Winters, P. (2018), Migration, Demography, and Agri-Food Systems

Chapter 3 of Agriculture & Food Systems to 2050. - Available at SSRN 3300817, 2018

Food and Agriculture Organization of the United Nations (FAO) (2018a). The State of Food and Agriculture – Migration, Agriculture and Rural Development.

FAO (2018b): Sustainable food systems. Concept and framework.

Gómez, M.I. & Ricketts, K.D. 2013. Food value chain transformations in developing countries: Selected hypotheses on nutritional implications. *Food Policy*, 42: 139–150.

Harris, J. R., and M. Todaro (1970) Migration, Unemployment and Development: A Two Sector Analysis. *American Economic Review* 40, 126–42.

Herrera, S., & Badr, K. (2012). Internal migration in Egypt: levels, determinants, wages, and likelihood of employment.

Lewis, W. Arthur (1954), 'Economic Development with Unlimited Supplies of Labour', *Manchester School of Economic and Social Studies*, 22, 139-191.

Lucas, Robert E.B. (2007). Migration and rural development. *Journal of Agricultural and Development Economics* 4(1): 99-122.

Ranganathan, J., Vennard, D., Waite, R., Dumas, P., Lipinski, B., Searchinger, T. & GLOBAGRI-WRRModel authors. 2016. Shifting diets for a sustainable food future. Working Paper, Installment 11 of Creating a Sustainable Food Future. Washington, DC, World Resources Institute. http://www.wri.org/sites/default/files/Shifting_Diets_for_a_Sustainable_Food_Future_0.pdf

Wahba, J. (2009). An overview of internal and international migration in Egypt. *The Egyptian labor market revisited*, 157-176.

Contact information Paola Termine, American University of Rome. Research undertaken in the context of an initiative of FAO Regional Office for the Near East and North Africa. Address for correspondence: Paola Termine: p.termine@aur.edu