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Diversifying livelihood in Egypt: How is it changing?

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About the authors

A Ph.D. candidate in Economics at German University in Cairo (GUC) Livelihood diversification is attracting considerable interest as a tool to cope with economic shocks and resist vulnerability. This brief discusses evidence on livelihood diversification in Egypt with a particular focus on wealth and urban-rural divides. While distress is a potential reason for higher diversification in urban areas, rural households tend to adopt more diversified strategies. Sustainable employment or entrepreneurship opportunities in the rural non-farm sector are needed to secure livelihood of poor households. Improving education and access to credit will reduce high entry barriers of poor households to remunerative income-generating activities.

In a nutshell

- Rural households tend to have a more diversified livelihood portfolio compared to urban households.
- In rural areas, there is a notable diversification away from agriculture activities over time.
- The non-farm sector is increasingly becoming an entry point for poor rural households to explore alternative livelihood strategies. Policies are needed to create sustainable employment or entrepreneurship opportunities in the rural non-farm sector to improve livelihood choices.
- Targeted interventions that support access of poor rural households to remunerative non-farm activities could include asset transfer or livestock acquisition given that livestock activities regained consideration in 2018 among poor rural households.
- Wealthy households in urban areas tend to depend on relatively more specialized livelihood clusters that stayed stable across the years implying that distress is a potential reason for diversification in urban areas.
- Reducing market and financial entry barriers of poor households to diversify into formal income-generating activities entails improving their access to credit and target education interventions towards poor households.
- Complementary measures such as job-trainings and career services could remove constraints and expand opportunities to secure the livelihood of poor households through formal employment or entrepreneurship and reduce their vulnerability.



Understanding livelihood strategies is instrumental in improving the ability of the poor to manage risks. These strategies play a vital role in designing poverty reduction interventions that enable countries to achieve the first Sustainable Development Goal (SDG): *End poverty in all its forms everywhere*.

What are the livelihood diversification strategies used by urban and rural households in Egypt? Are Egyptian households diversifying more or less over time? Who are the less diversified and the high-diversified households? Using data of Egypt Labor Market Panel Survey (ELMPS) from 2006 to 2018, I address these questions by differentiating between strategies used by poor households and better-off households. Descriptive analysis and cluster analysis techniques were used to identify the livelihood strategies followed by estimating a regression model to explore the characteristics of less, moderately and highly diversified households.

Household motivation to diversify their livelihood includes push factors that commonly lead to low return strategies such as income seasonality, credit market failure and liquidity constraints and pull factors that lead to opportunity-led strategies such as improvement in education, technology, labor market, infrastructure or better access to the market (Ellis, 1998; Loison, 2015; Loison & Bignebat, 2017).

The sustainable livelihood framework indicates that the factors affecting the choice of livelihood strategies include human assets (education, health, skills), physical capital (assets), social capital (social networks), financial assets (savings and credit) and natural capital/resources. These assets are affected by external trends and shocks which influence the choice of livelihood activities. Livelihood diversification leads to multiple interactions that affect income, consumption, food security and poverty dynamics (DFID, 1999; Ellis, 1999; Loison, 2015; Scoones, 1998).

A livelihood strategy is a combination of assets, capabilities and activities to earn income.

Livelihood diversification is a process by which households build a portfolio of different activities and assets in order to survive and improve their standards of living.

The analyses show that both poor and wealthy rural households adopt more diversified strategies compared to urban households, which suggests that distress might not be the reason for diversification in rural areas. Additionally, poor households in rural areas are increasingly relying on informal non-agricultural activities, which implies that the non-farm sector is gradually becoming an entry point to secure their livelihood. Accordingly, targeted interventions that support access of poor rural households to remunerative non-farm activities will create sustainable opportunities in the rural non-farm sector. In urban areas, wealthy households tend to depend on fairly specialized livelihood clusters that remained stable across time. There is a need to remove constraints of poor households to diversify into formal income-generating activities by improving their access to credit and increasing targeted education interventions (Helmy, 2019).

What are the livelihood diversification strategies used by Egyptian households?

The analysis identified seven main livelihood clusters. The dominant livelihood cluster that was adopted by households includes formal public and private employment as well as informal employment inside establishments (Pub-Priv-Infin). However, the participation in this cluster had remarkably declined from 2012 to 2018. This cluster was followed by being dependent on informal self-employment (InfSelf) and diversifying livelihood through farming activities, livestock, secondary job, migration, pension and

social assistance (Far-Liv-Sec-Mig-Pen-SA). This later cluster witnessed a notable decrease from 18 percent in 2006 to 10 percent in 2012 and 9 percent in 2018.

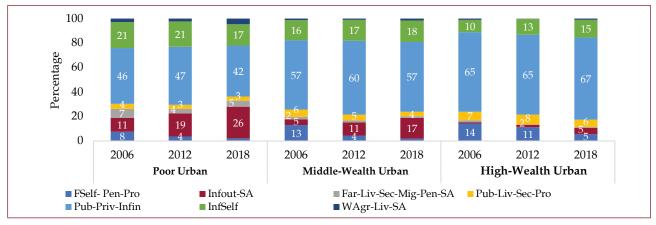
The fourth cluster encompassed households that have members who are employed informally outside establishments in addition to receiving social assistance (Infout-SA). This cluster had been increasing from 6 percent in 2006 to 11 percent in 2012 and 17 percent in 2018. The fifth cluster included being a wage worker in agriculture, owning/raising livestock and receiving social assistance (WAgr-Liv-SA) while the sixth cluster involved households working in public sector in addition to owning/raising livestock, having a secondary job, a migrant, and receiving profits (Pub-Liv-Sec-Pro). Finally, the last cluster included households that were formally selfemployed and received pension and profits (FSelf-Pen-Pro). The later cluster decreased from 8 percent in 2006 to 5 percent in 2012 and 3 percent in 2018.

Livelihood diversification strategies by wealth and location

The results, shown in Figure 1, indicate that urban poor households relied on multiple livelihood clusters with a wide range of diversified informal activities compared to middle and high-wealth households. Poor urban households who relied on public and private sector employment and informal employment in establishments declined from 47 percent in 2012 compared to 42 percent in 2018. This decline was opposed to an increase in informal wage employment outside establishments in addition to receiving social assistance from 11 percent in 2006 to 26 percent in 2018. By the same token, around 17 to 21 percent of poor households engaged in informal self-employment.

Middle and high-wealth households engage mostly in more specialized clusters. For instance, around 65 to 67 percent of high-wealth urban households depended on public and private sectors employment private sector employment and informal employment in establishments. This high dependency remained evident over the years, reflecting lower dynamics of livelihoods among middle and high-wealth urban households. Nevertheless, the cluster compromising formal self-employment, pension and profit declined from 13 percent in 2006 to 2 percent in 2018 among middle-wealth households. Similarly, this cluster declined from 14 percent in 2006 to 5 percent in 2018 among high-wealth households.

Figure 1 Participation of urban households in livelihood clusters by wealth and location (percentage of households participating in the cluster), ages 6-64.



Source: Author's calculation based on ELMPS 2006, 2012 and 2018. Far: farming; WAgr: wage worker in agriculture; Liv: livestock; Pub: public wage employee; Priv: private wage employee; Infself: informal self-employment; FSelf: formal self-employment; Infin: wage employee inside establishment; infout: wage employee outside establishment; Sec: secondary job; Mig: migration; Pen: pension; SA: social assistance; Pro: profits.

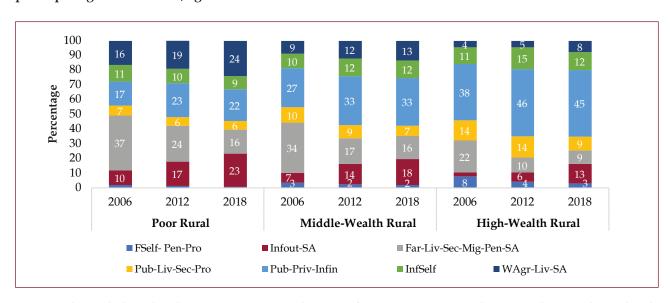
More remarkable dynamics of livelihood activities across the years took place among the poor in rural areas (Figure 2). In 2006, the dominant cluster among poor households in rural areas was a highly diversified cluster. Around 37 percent of households relied on farming, livestock, secondary jobs in non-agriculture sectors, and migration in addition to receiving non-labor income, pension and social assistance. This cluster declined from 37 percent in 2006 to 16 percent in 2018. On the other hand, the cluster of wage employment in agriculture sector, raising livestock and receiving social assistance increased from 16 percent to 24 percent in 2018. Likewise, informal wage employment outside establishments in addition to receiving social assistance increased from 10 percent in 2006 to 23 percent in 2018.

The remarkable decline in the cluster including farming activities was also evident among middle and high-wealth households. However, these groups

diversified away from agriculture by depending on clusters that include public and private sector employment, informal employment in establishments in addition to informal self-employment. These results suggest potential high-entry barriers for poor households to formal wage employment. Furthermore, there is evidence on the changing structure of the economy, which is increasing the similarities of livelihood clusters used by urban and rural households.

The diversity of livelihood activities among middle and high-wealth rural households opposes the distress theory of diversification, in which a negative relationship between wealth and diversification is expected to be found like the one observed in urban areas (Martin & Lorenzen, 2016). These results indicate that in rural areas distress might not be the main reason for diversification while it might be a reason in urban areas.

Figure 2 Participation of rural households in livelihood clusters by wealth and location (Percentage of HHs participating in the cluster), ages 6-64



Source: Author's calculation based on ELMPS 2006, 2012 and 2018. Far: farming; WAgr: wage worker in agriculture; Liv: livestock; Pub: public wage employee; Priv: private wage employee; Infself: informal self-employment; FSelf: formal self-employment; Infin: wage employee inside establishment; infout: wage employee outside establishment; Sec: secondary job; Mig: migration; Pen: pension; SA: social assistance; Pro: profits.

Who are the less-diversified and the high-diversified households?

Exploring the characteristics of households who are less diversified, moderately diversified and highly diversified, based on the regression, indicated that living in urban areas reduces the probability of being in a moderately or highly diversified level by 4 and 9 percentage points respectively. While some studies found that high or middle-income households diversify their livelihood more than poor households (Abdulai & CroleRees, 2001; Smith, Gordon, Meadows, & Zwick, 2001), the analysis shows that the wealth status of household is positively and significantly correlated with the probability of being less diversified.

Female headed-households have higher probability of diversifying their livelihoods, which could be due to their high vulnerability. Moreover, large households and those who have a larger number of working age members have higher probabilities of being moderately and highly diversified households. The education level of the head of household, household members and parental education are important determinants of the degree of livelihood diversification. Households with

better educated heads or members are more likely to be moderately or highly diversified households compared to illiterate heads. By the same token, a higher educational level achieved by the mother of the head increases the probability of livelihood diversification. This is probably due to acquiring better skills and knowledge that help in engaging in more diversified

strategies. Access to land and access to credit had a positive and significant association with the probability of being a moderately or highly diversified household.

Conclusion and Policy Implications

The analysis of different livelihood diversification strategies in urban and rural Egypt indicates that diversification is relatively higher among rural households compared to urban households. In rural areas, there is an increasing level of diversification away from agriculture even among wealthy households, yet they tend to diversify into formal public or private employment. In contrast, poorer households diversified away from farming into wage employment in the agricultural sector, informal wage employment outside establishments, raising livestock and receiving social assistance.

These results point to the dynamic structure of the Egyptian economy that reduced reliance on agricultural activities and increased the similarities between rural and urban livelihood strategies over time. Furthermore, the analysis demonstrates the high-entry barriers of poor households to formal employment or self-employment.

The probability of selecting relatively more specialized livelihood clusters that stayed stable across the years is positively and significantly associated with wealth status and living in urban areas. The results of this study imply that distress might not the main reason for diversification in rural areas while the opposite is found in urban areas.

Access to credit and land could potentially help households in breaking out of the trap of low-return activities. Additionally, targeted interventions that support access of poor rural households to remunerative non-farm activities could include asset transfer or livestock acquisition, especially since livestock regained attention in 2018 among poor rural households after the major decline witnessed from 2006 to 2012. Education is an important determinant of livelihood diversification. These findings highlight the importance of investing in education and skills to alleviate poverty and compensate for asset disadvantages which will enable households to get alternative sources of income and diversify their livelihoods.

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