



# Rural Resilience in Egypt: Exploring finance as a tool

**Qualitative Study**

UNDP Egypt Accelerator Lab



Egypt

accelerator  
lab



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# Foreword



Dear readers,

In our shared mission to combat poverty, it is of utmost importance that we direct our attention towards rural development. A staggering 70% of the world's most impoverished individuals reside in rural areas.

Egypt, with its significant rural population of 57%, heavily relies on agriculture and small-scale farming to sustain its communities. However, rural Egypt is confronted with persistent challenges that perpetuate the cycle of poverty and vulnerability, demanding innovative and transformative solutions.

In light of this context, this report thoroughly examines the notion of rural resilience through the lens of women and men whose livelihoods depend on agriculture. It also investigates the empowering role of financial tools in rural communities. The findings presented here are the result of meticulous research conducted by the UNDP Accelerator Lab, which actively participated in interviews and engaged in discussions in three villages to gain invaluable insights into their financial behaviors, challenges, and coping mechanisms.

The report places significant emphasis on key areas that promote and enhance rural resilience in Egypt. These encompass a range of interventions, such as supporting subsistence farming to ensure food security, diversifying livelihoods into non-farm sectors while creating stable opportunities, and bolstering social protection programs to safeguard the most vulnerable within rural communities.

Moreover, the report underscores the criticality of collaboration among farmers and the mobilization of agricultural extension services in fostering rural resilience. By harnessing knowledge, technology, and fostering cooperative efforts, we possess the capability to drive tangible and positive change, enhancing the overall sustainability of rural communities.

Lastly, the report sheds light on the paramount importance of designing customized and meaningful financial services. By ensuring that credit, savings, insurance, and financial literacy programs are readily accessible and tailored to the unique needs of rural communities, we can empower individuals to make informed financial decisions and effectively navigate the challenges they face.

We sincerely hope that this report proves to be a valuable asset for policymakers, practitioners, and stakeholders who are dedicated to rural development. In particular, it may hopefully be a valuable contribution to the drafting of a national strategy for rural development that reflects the complexity of rural life beyond agricultural policy.

Together, we can continue working hand in hand to create a prosperous and resilient rural Egypt, where the well-being of all women and men takes center stage.

Sincerely,

**Alessandro Fracassetti**

Resident Representative  
United Nations Development Programme (UNDP) Egypt

# Acronyms

ABE	Agricultural Bank of Egypt
CAPMAS	Central Agency for Public Mobilization and Statistics
CBE	Central Bank of Egypt
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
IDI	In-Depth Interview
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
MFI	Microfinance Institution
UN DESA	United Nations Department of Economic and Social Affairs

# Acknowledgements

This study was conducted by the UNDP Egypt Accelerator Lab under the leadership of Alik Mikaelian, Head of Solutions Mapping with Marwa Makhoulf as the main researcher. However, this fieldwork would not have been possible without the guidance and cooperation of the GEF Small Grants Programme (SGP). The Accelerator Lab would also like to highlight the central role provided by the NGOs in Giza, Fayoum, and Luxor, who never hesitated to provide generous support and effort to facilitate this research.

# Executive summary

## INTRODUCTION

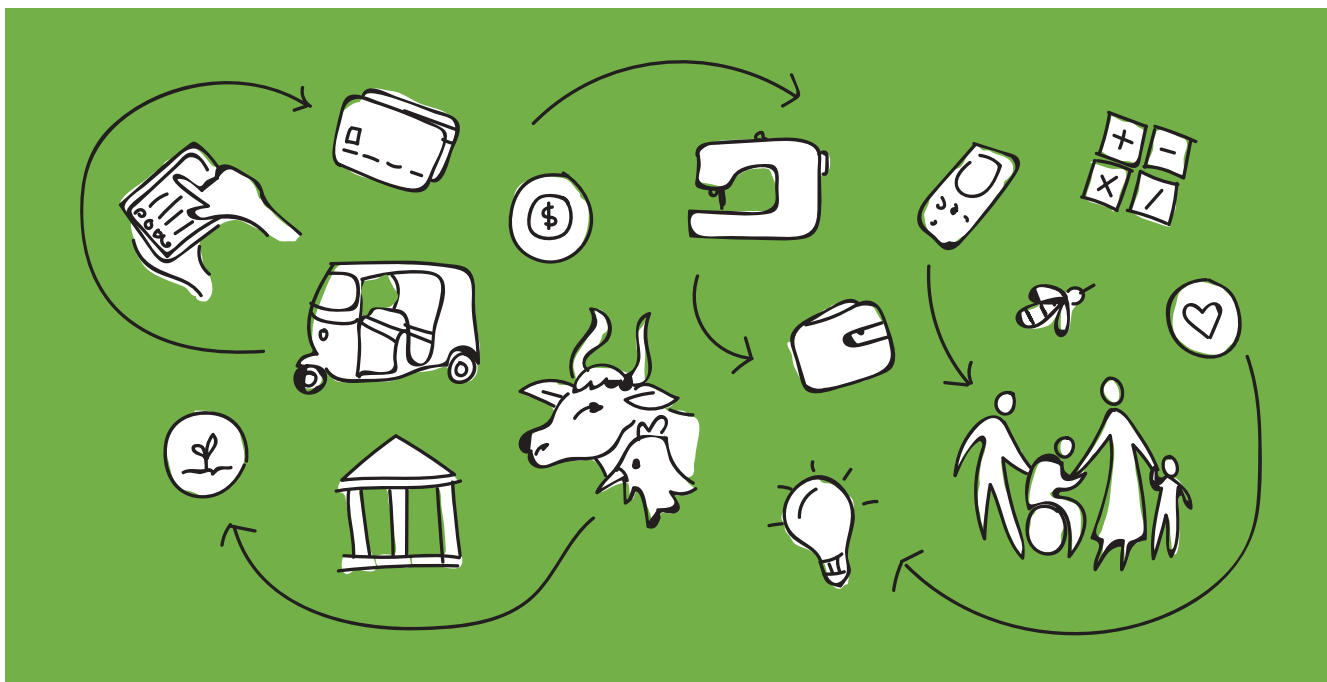
Rural development is central to poverty alleviation. 70% of the world's extremely poor reside in rural areas (IFAD, 2021), while agriculture comprises the majority of livelihoods (ILO, 2019). The case also holds in Egypt where rural populations comprise 57% of the total population (World Bank, 2021) and largely depend on agriculture, especially through small holdings (FAO, 2016). As with the case worldwide, rural Egypt suffers from a multiplicity of challenges culminating to persistent poverty and placing rural households and agricultural livelihoods among the most prone to shocks (Helmy & Roushdy, 2022). Vulnerability begs the question of resilience. Although a contested term between traditional "business as usual" definitions and a "bounce-forward" approach (Scott, 2013), it could serve as a multidimensional lens towards poverty alleviation. Different frameworks have been applied to rural resilience and different variables have been assumed and studied to contribute towards resilience building including access to finance (Moore et al., 2019).

Given Egypt's large strides in financial inclusion and its plans to expand services to rural areas aligning with the Egypt 2030 Sustainable Development Strategy, the Accelerator Lab took a few steps back to conduct this exploratory research to understand how and if financial tools can be utilized for rural resilience in Egypt. To achieve its aim, the research attempted to understand the following points for the communities in focus through an ethnographic approach:

- The livelihood and societal context
- The financial behavior and attitude towards formal and non-formal financial institutions
- The common and particular hardships encountered by the communities, their impact and the tools used for adaptation and mitigation

This study mainly adopted a qualitative approach with a participatory direction. In-depth interviews (IDIs) and focus group discussions (FGDs) were conducted with men and women who practice livelihoods related to agriculture (small holder farming, poultry/cattle raising, etc). Data collection took place in August and September 2022 in 3 villages in different governorates in Egypt: Giza, Fayoum and Luxor.





## LEARNINGS

1. Resilience:
  - is a **multi-dimensional** concept and achieving it requires engaging with the complexity of rural realities
  - should be seen **beyond simply “adapting”** to crises but also in terms of how it can contribute to transforming the conditions of the rural, a “bounce-forward” approach (Scott, 2013)
  - tools mentioned in this research need to be seen in **context** and examined **critically**, especially when designing solutions
2. Leveraging subsistence farming for food security: pressures on smallholder farming have implication on the levels of **nutrition** and **food security**
3. Diversifying Livelihoods and expanding into non-farm economies: efficiency of diversifying livelihoods will depend on their **value** and **productivity**, additionally they should not replace the creation of stable **non-farm** opportunities
4. Strengthening social protection: the combination of risks and precarious livelihoods that rural communities suffer from make the availability of just and inclusive **social protection** programmes imperative
5. Accounting for the psychological and community elements: policy and programming for rural development should not neglect the **psychological** and **community** dimensions in design, monitoring and evaluation.
6. Mobilizing agricultural extension services and cooperation among farmers: it is necessary to mobilize **knowledge**, **technological** and **energy** farmer-centric solutions while encouraging and consolidating cooperative modalities among farmers
7. Designing tailored and meaningful financial services: utilizing the broad range of financial products; **credit**, **savings**, and **insurance** alongside meaningful **financial literacy** programmes.

This research provided a brief encounter with multiple topics that intertwine with resilience but focusing on specific solutions will still require continuously putting farmers and rural communities at the center and linking those solutions to a meaningful understanding of how rural underdevelopment is linked to inequality and the national and transnational sociopolitical context.



# Introduction

It is undeniable that rural areas lie at the heart of the sustainable development challenge. Nearly 70% of the world's population living in extreme poverty reside in rural areas (IFAD 2021), while agriculture is considered the main livelihood for more people than any other economic activity with an average of 59% and 38% of labor in low income and lower middle-income countries respectively (ILO, 2019). Gunnar Myrdal (1984) once said "It is the agricultural sector that the battle for long-term economic development will be won or lost". Rural development can be key to ending global poverty and to achieving the SDGs, particularly SDG 1,2 and 13. Nonetheless, it is argued that rural development still does not receive the needed attention by decision-makers in developing countries, which further exacerbates the urgency of challenges already faced by rural populations that include access to basic services, decent employment, health, and nutrition in addition to climate change (UNDESA, 2021).

## RURAL EGYPT

Rural areas and agriculture hold a particular positionality in Egypt's history and its socio-economic composition. To say the least, rural populations comprise around 57% of the total population (World Bank, 2021) who largely depend on agriculture as a main livelihood, with 50% of the sector characterized by smallholdings (less than 1 feddan or 0.42 hectares) (FAO, 2016). Although having a diminished GDP share of about 11%, agriculture is a key sector in the Egyptian economy which directly employs around 26% of the labor force and accounts for 20% of export revenue, making it a fundamental source of exports and foreign exchange (IFAD, n.d.). However, the rural population in Egypt continues to be the most impoverished and food insecure, especially rural upper Egypt where 51.94% of the population are not able to meet their basic needs (CAPMAS, 2018). With the persistent poverty, studies have shown that rural upper then rural lower Egypt are the areas most prone to exposure to shocks in Egypt with households working in agriculture having a substantially higher vulnerability to those shocks (Helmy & Roushdy, 2022). The vulnerability of rural Egypt is a combination of different factors including infrastructure, access to basic services, education, health,

employment opportunities and gender disparities in addition to climate change where the extreme weather changes are having a significant impact on agricultural output, water resources, animal health and overall ecosystem (World Bank, 2021). The financial crisis is also adding a considerable burden causing nationwide headline inflation to increase from 15% in September to 16.42% in October and to jump to 21.26% in December 2022 according to the CBE (2022a). Inflation is also projected to increase further as the devaluation of the Egyptian pound continues reaching a record low of EGP30 to the US dollar in January 2023, around a 100% increase from January 2022. In addition to civil society efforts, the government attempts to address this vulnerability through programs like the conditional cash transfer *Takaful and Karama*<sup>1</sup> (Solidarity and Dignity) and *Haya Karima*<sup>2</sup> (Decent Life) which is currently focusing on developing the infrastructure of rural villages, however it is apparent that a more structural approach is still needed to accompany those efforts to achieve sustainable change.

<sup>1</sup> <https://www.worldbank.org/en/news/feature/2018/11/15/the-story-of-takaful-and-karama-cash-transfer-program>

<sup>2</sup> [https://www.hayakarima.com/about\\_en.html](https://www.hayakarima.com/about_en.html)



**Figure 1:** Systematic review of rural resilience in Kim et al. (2020).

## RURAL RESILIENCE

The multitude of hardships faced by rural populations begs the question of resilience, the flipside of vulnerability. Rural resilience is traditionally defined as the capacity of a rural area to adapt to changing external circumstances while maintaining a satisfactory standard of living, it also stipulates how much pressure a rural area can endure before reorganizing around a new set of structures and processes in an overlap of ecological, economic, and cultural systems (Heijman et al., 2019). However, there are two approaches to resilience thinking: “bounce-back” and “bounce-forward”. Bounce-back deals with resilience as a depoliticized method to return to a pre-crisis state or “business as usual”, however bounce-forward adopts a more nuanced understanding that sees resilience thinking as transformative. Bounce-forward critically acknowledges the conditions that created the crisis in the first place and aims to incite solutions that can “do something different” (Scott, 2013).

Resilience serves as multidimensional lens that can orient policy making and programme development towards poverty alleviation, it has also been the subject of extensive research to understand the interrelatedness of tools and factors to achieve resilience. In a comprehensive review, a study has analyzed rural resilience literature from 2010 to 2018 and has found the different frameworks applied to revolve around ecological, social-ecological, social, development, socio-economic, and community indicators (Kim et al., 2020). In the complex structure of variables that have the potential in fortifying resilience in rural communities, financial tools/services have been argued to contribute to the resilience of vulnerable households in general. Even though long-term evidence is still needed, some research has argued that through access to insurance, credit, savings and digital payment products, households can mitigate the consequences of shocks and smooth consumption while avoiding costly strategies such as high levels of debt or selling productive assets (Moore et al. 2019). From this point of departure, this research was ideated.

## THE RESEARCH AT HAND: RURAL RESILIENCE AND FINANCE IN EGYPT

Egypt has taken large strides regarding financial inclusion. The 16 years+ population owning a transactional bank account jumped from 27.4% in 2016 to 60.6% in 2022 (a growth rate of 131%), while the increase was higher for women with a growth rate of 192%. The Egyptian Central Bank and Banking Law No. 194 of 2020 defined financial inclusion as: “Availing of various financial products for use by all segments of the society through the formal channels, with adequate quality and cost while protecting the rights of the consumers of these services, which enables them to manage their finances effectively”. Accordingly, financial inclusion also aims to align to the Egypt 2030 Sustainable Development Strategy by expanding access for difficult-to-reach populations in rural areas (CBE, 2022b). Seeing how finance can be linked to rural resilience, the Accelerator Lab took a few steps back to conduct this exploratory research to understand how and if financial tools can be utilized for rural resilience in Egypt through an ethnographic approach. To achieve its aim, the research attempted to understand the following points for the communities in focus:

The livelihood and societal context

The financial behavior and attitude towards formal and non-formal financial institutions

The common and particular hardships encountered by the communities, their impact and the tools used for adaptation and mitigation.

The research, however, has **limitations** as it does not include the legal and sociopolitical dimensions surrounding the findings. It focuses on the concepts and voices from the field-work leaving room for more in-depth analysis to future research.

# Methodology

## TOOLS

This study mainly adopted a qualitative approach with a participatory direction. The main aim was to use methods that can leave room for exploration, accentuate communities' voices, and offer deeper explanatory insights into rural resilience and finance. To this end, the following tools were used:

### **In-depth Interviews (IDI):**

In each village 3 IDIs with women and 3 IDIs with men were planned. The IDIs were intended to offer a more private sphere to the participants to be able to prompt them on their financial behavior, individual hardships, community relationships without compromising their privacy to a larger group. Prior to the interviews, background information on each participant was collected (family, education, livelihoods, chronic diseases, access to mobile phone and/or internet). To prompt for the topics mentioned semi-structured questions were used in addition to small activities such as:

- Preparing cards with participant's expenses as shown in figure 2 and having them sort them out in order of magnitude. Afterwards, those same cards were used to create scenarios with the participants to understand how they make payments for each of them
- On a blank piece of paper as shown in figure 3 the interviewer would draw concentric circles of trust and have the participant draw or write names depending on relationships of trust in different scenarios; people in the inner circle would be the most trusted in general, then the interviewer would prompt further for financial, personal, land situations, etc. This activity was intended to understand the relationships of influence

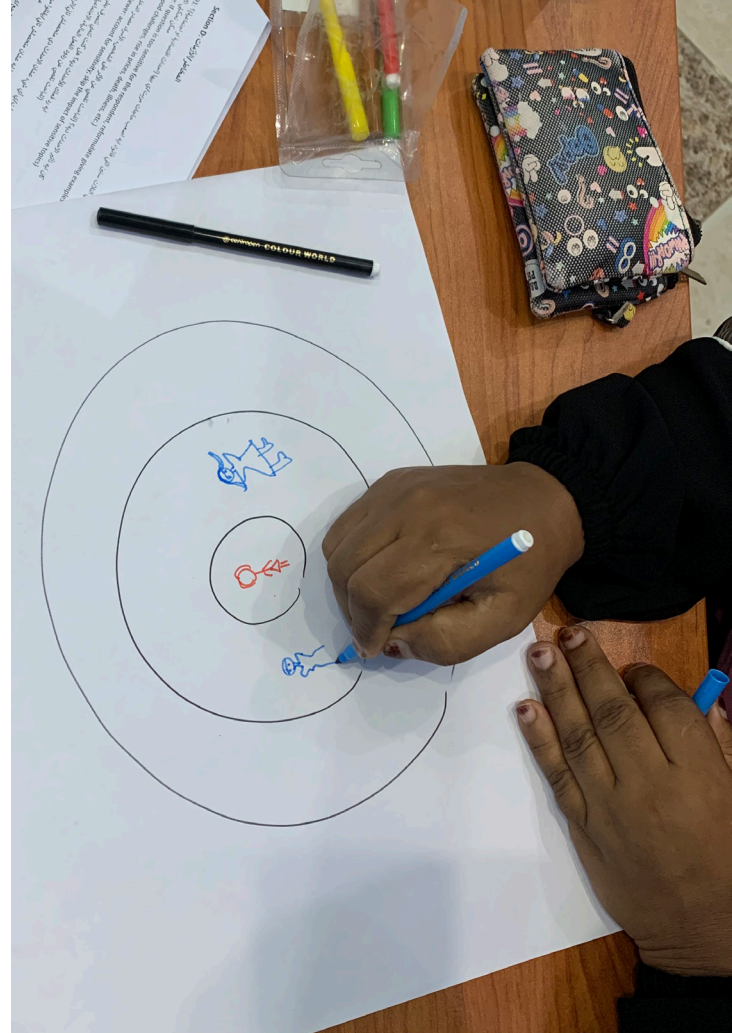
### **Focus group discussions (FGD):**

In each village, 1 FGD with women and 1 FGD with men was planned. The FGDs mainly served in understanding common community-experienced hardships, their impact, how people reacted and adapted to them and whether the participants had ideas for their mitigation in addition to participants' own interpretation of "resilience". Before the FGD background information would be recorded on each participant (as with the IDIs). Each FGDs would start with an ice breaker and/or a round of introductions then participants would be prompted on what comes to their mind when they hear different phrases indicating resilience. Afterwards, the discussion would move to the hardships the community has experienced in the previous 3 years. The interviewer would then draw a table in a chart with each hardship mentioned with slots for impact, reaction/adaptation, and mitigation which would be filled by the participants throughout the FGD.

## SAMPLING AND DATA COLLECTION

The study used a purposive sampling technique. As such, the following female and male participants were targeted:

- Practice a livelihood (commercial or subsistence) related to the agricultural field (working on a small rented or owned land, daily-wage farming, cattle and/or poultry raising).
- More than 21 years old and manages a budget in order to be able to better discuss with them details on spending, saving and borrowing behavior



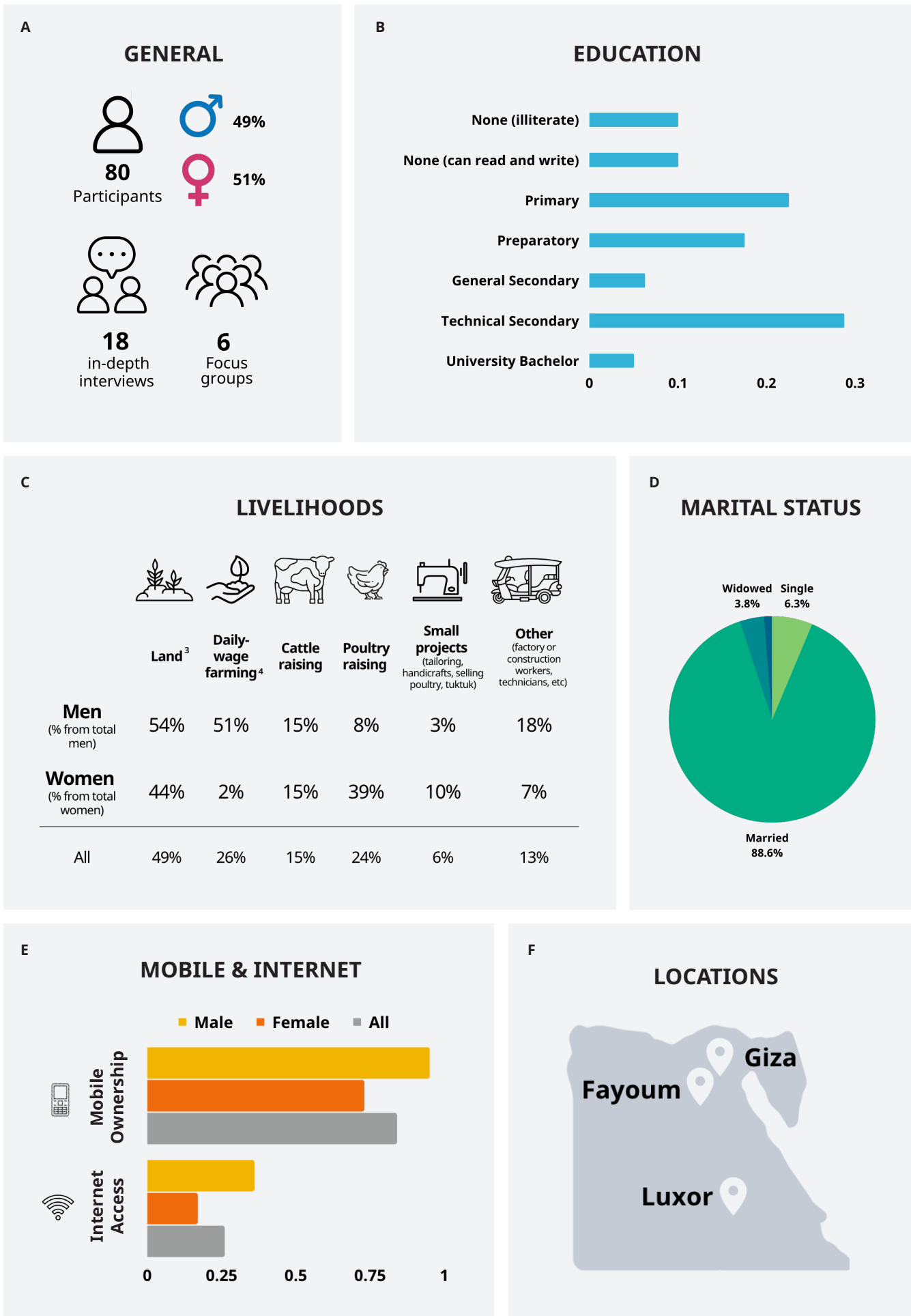
Data collection was carried out in August and September 2022 in 3 villages in different governorates in Egypt: Giza, Fayoum and Luxor. In each village 3 IDIs with women, 3 IDIs with men, 1 FGD with women and 1 FGD with men were carried out. The total was 18 IDIs and 6 FGDs.

## ETHICS

This study abided by the following ethical principles:

- **Consent:** Informed consent was ensured from all individuals (for participation and recording of sessions). Prior to each IDI and FGD detailed information on the study, its purpose, the risks and benefits and voluntary involvement were explained
- **Right to self-determination:** participants are given sufficient information and right to ask questions on the study and have full autonomy to decide whether or not to participate without any pressure or fear
- **Confidentiality:** data kept on password protected devices and only accessible by the research team
- **Anonymity:** all data was anonymized, and identification data kept in a separate file
- **Do no harm:** protecting the identities and confidentiality of individuals' data as a top priority

**Figure 2: Sample description**





# Context

The following 2 sub-section include background information on the study participants and the 3 villages to provide a brief contextual sense on the findings that follow.

## SAMPLE DESCRIPTION

### GENERAL

The research included 80 participants: 51% women and 49% men. The participants were part of families with, on average, 5 members, taking into account that family members were defined as members living with the participant and are the responsibility of the main breadwinner. 93% of the participants' households were reportedly headed (financially led) by either the husband or the father (mostly in case of unmarried women). Women only mentioned being the main breadwinners if they were divorced or widowed. Due to cultural considerations, there may be an overestimation of male breadwinners. The average age of participants was 41 (35 for women and 48 for men). The higher age of men may be due to the criteria of having an agriculture-related livelihood while more and more younger people are steering away from it. 89% of respondents were married, this high percentage is probably also due to the research inviting participants who have financial and household budget responsibilities.

### EDUCATION

Literacy rate was 86.25%: 88% for women, 85% for men. The distribution of education is shown in figure 2b for percentages of education categories for the overall sample.

### LIVELIHOODS

The majority of the women responded negatively when asked if they work or not, even though those women can contribute to land labor (only 5% reported working on their land as a job), raise birds and cattle for the household or occasionally sell them. The ones who responded affirmatively were those who had small projects like a tailoring or handicrafts

business, working as daily farmers or volunteering for the NGO. This is essential as it highlights rural women's unpaid labor that mostly goes unacknowledged and far exceeds that of urban women's (UN Women, 2018). Figure 2c outlines all the livelihood activities mentioned by men and women whether for subsistence or commercial purposes, indicating that many households attempt to diversify their livelihoods to survive.

### MOBILE AND INTERNET

As for mobile and internet usage, as shown in figure 2e<sup>5</sup>, there is a large gap between owning a mobile phone and having access to the internet as the majority own a feature phone not a smartphone. The gap is also noticeable between males and females. In addition, most reported not having the literacy to log on the internet even from other devices in the household. Most of feature phone owners use it for calls only and rarely to send even an SMS for the lack of know-how. On the other hand, the minority who own smartphones access social media platforms and applications (Facebook, Whatsapp, Twitter, Tiktok, Snapchat, Vidmate, Youtube, etc) to socialize, just scroll through the feed, stay up to date on news, watch videos on food or clothes, play games, etc. only one male respondent mentioned using the internet to look up agriculture information. On the level of the family, mostly the children or other younger family members are the ones who use the internet most frequently for studying, social media, connecting with friends or gaming in internet cafes. It is to be noted that some of the poorest households did not have any members who have internet access.

## VILLAGE PROFILES

Before carrying out the fieldwork, information on each village was obtained from the NGOs. Figure 3 provides a quick overview that sheds the light on selective issues only.

<sup>3</sup> Land here means working on land that is rented, owned or under "agriculture reform"

<sup>4</sup> Daily wage farmers may also have their own land

<sup>5</sup> Percentages are calculated of the total males and females not from the total sample

**Figure 3: Village Profiles**

	Giza village	Fayoum village	Luxor village
<b>State of Houses</b>	Mostly brick houses	Mostly brick houses	Both mud and brick houses
<b>Infrastructure</b>	Informal, unpaved inner roads with mainly private lighting, weak mobile network and internet, absence of a sewage system, absence of drinking water (needs to be bought) and non-drinking water is available for 2 hours per day	Informal, unpaved inner roads with mainly private lighting, uneven network coverage. Infrastructural challenges exist (sewage, gas, etc)	Mainly unpaved inner roads, private lighting with streetlights. Absence of sewage and gas systems leading sewage water to mix with underground drinking water causing diseases such as kidney failure
<b>Inclusion in <i>Haya Karima</i> programme plans</b>	Included in the pipeline, no work is done yet	Yes	Yes
<b>Health</b>	One public health unit available with one doctor visiting once per week in addition to private clinics and pharmacies, nearest hospital is in a nearby village	One public health unit in addition to a public hospital in the <i>markaz</i> <sup>6</sup>	One public health unit with one doctor, the community mobilized <sup>7</sup> to fund an ER unit. The nearest hospital is in the <i>markaz</i>
<b>Inclusion in the Universal Health Insurance programme<sup>8</sup></b>	No	No	Yes
<b>Education</b>	All stages available, inhabitants usually go to the city for universities or for nearby institutes	All stages available except for a high school which is under construction, inhabitants usually go to Fayoum to attend universities or institutes	All stages are available including schools built through community mobilization (donating land, contributing funds, etc). Inhabitants need to go to Luxor, Aswan or Ganoub Al Wadi for higher education, which requires securing accommodation due to the distance
<b>Livelihoods</b>	Mainly farming, however, women also engage with raising poultry, selling vegetables, handicrafts, some men work in quarries or work in Cairo, Alexandria, New Capital or 6th of October factories/ construction or self-employ (ex: tuktuk)	Mainly farming. Farmers can engage in construction work during off-season times while women can also raise poultry or sell dairy products. Some men migrate to Cairo, Giza, New Capital for construction work while some women may travel with husbands to work as porters in city buildings. Increased migration to Libya is also reported	Mainly farming, minority engage in other commercial activities (ex: shops), women can also raise poultry. Some men migrate to Cairo, Alexandria or Suez while others may aim for Gulf countries
<b>Agriculture</b>	Majority of land is agricultural, main crops are: Okra, green beans, corn, spring onions, potatoes, cucumber, dates and <i>Molokhia</i>	Agricultural land surrounds the village, main crops include: corn, beetroot but mainly for subsistence purposes (which can turn commercial in need only)	Includes lands under the "agrarian/land reform" <sup>9</sup> , main crops include corn, wheat, and sugarcane



<sup>6</sup> Level of administrative subdivision below the governorate, in rural areas.

<sup>7</sup> The village has a council where inhabitants fundraise for basic services.

<sup>8</sup> Egypt's Universal Health Insurance is still in its preliminary phase with coverage only for a few governorates: [https://www.](https://www.presidency.eg/en/المشاريع-القومية/المشروع-القومي-للتأمين-الصحي-الشامل/)

[presidency.eg/en/المشاريع-القومية/المشروع-القومي-للتأمين-الصحي-الشامل/](https://www.presidency.eg/en/المشاريع-القومية/المشروع-القومي-للتأمين-الصحي-الشامل/)

<sup>9</sup> Referring to lands distributed to farmers post the 1952 revolution. This modality is different from normal ownership as for example it cannot act as loan collateral, as reported, farmers need to go through the Agrarian Reform Authority to obtain financing, which they claim is insufficient.

# Personas

The following are simplified fictional personas based on a variety of real characters and stories from the fieldwork. They are intended to bring better light to the lives of the research participants; however, they are still only brief portrayals and should not be seen as representative nor be taken beyond their purpose. It is also important to highlight that the bias towards “farming” for men and towards the “household” for women is based on the participants’ narratives and focus of responses in the IDIs and FGDs.





## **Fatma,** The resourceful farmer

**Age:** 51 years old

**Education:** Technical secondary school

**Mobile:** Feature phone

**Internet Access:** No

Fatma is married with three kids. Together they live in their own house. She has a technical secondary certificate and owns a feature phone with no internet access. Her husband works in construction in Cairo, so she takes care of his 7-kirat land, which is mainly used for subsistence. Her daughter, who studied agriculture, gives her tips on how to manage it. In addition, she raises ducks and chicken to sell but also uses them for household consumption. The bird business allowed her take part in a *gm'ya* to help her with her daughter's marriage expenses. However, she has been having a hard time maintaining this business as bird feed prices have soared. A year ago, her husband fell victim to a business scam that lost them all their savings and forced Fatma to take a loan from a commercial bank to pay off her husband's debt. She suffers from diabetes and hypertension, which further weigh down on her expenses. She dreams of a debt-free life and wishes that her community ties become strong again.



## Sahar, The proactive woman

**Age:** 31 years old

**Education:** Technical secondary school

**Mobile:** Smart phone

**Internet Access:** No

Sahar is married with two kids. Her husband works as an electrician in construction projects. She inherited a small piece of land from her father, but her brothers refused to give up her share, instead they send her an annual sum as a compensation. Sahar finished technical secondary education in commerce so when COVID-19 hit, and her husband could not work, she started a small hairdressing business to push through the family's financial difficulties. Currently, her husband is not content with her working and wants her to stop. Sahar is a smart budget manager; she entered a large *gm'ya* and was able to build her own house with her husband. She also raises chickens on her roof and whenever she saves money she buys more. The chickens are mainly for subsistence but also to sell in emergencies. Sahar still faces budget shortages every other month, especially if her husband cannot find work, but she borrows small amounts from her neighbors to pay for bills, when needed. To adapt to the increase in prices she tries to add cheaper substitutes in meals but is worried about her kids' nutrition. She has a smart phone and enjoys watching videos and listening to music off the internet, but she still wishes she would have the financial ability to go out with her family to "breathe" and have an enjoyable time together.



## Nawal, The hard-working single mother

**Age:** 40 years old

**Education:** Primary school

**Mobile:** Feature phone

**Internet Access:** No

Nawal is divorced with two kids. She currently lives in her parents' house who provide her with partial financial support. Her family used to have a small piece of land, but her father sold it to help her brother get married. Nawal tried different methods to generate income such as working as a daily farmer picking garlic. However, currently, after receiving embroidery training at an NGO, she makes products at home and sends them to the NGO to sell. Alongside the income from embroidery, she receives Takaful, which helps her with her children's expenses. She wishes she can save some money on the side, but her small income does not allow her to. She used to have a savings account at the Post Office before she got married but now it is empty. Nawal only finished primary school and always dreamt she could have continued further, therefore she prays she can work hard enough so her kids can obtain a good education. She has a feature phone and no access to the internet, but her children often visit the cybercafé in the village to gain access.



## **Mostafa,** The agricultural wage worker

**Age:** 35 years old

**Education:** No formal education

**Mobile:** Feature phone

**Internet Access:** No

Mostafa is a daily-wage farmer who works other people's land for a living. He never received any education, therefore, cannot read, or write. He only has a feature phone and him and his family have no access to the internet. Currently, he lives in his family's house with his wife and three kids. Even though his family and neighbors may provide occasional support, Mostafa is struggling with his economic situation, which was made worse by the price hikes. The high living expenses, especially that of education and energy, have led him to remove one of his children from school. Due to the instability and lack of predictability of his income, he cannot plan a budget nor enter a *gm'ya* to economize. Mostafa has constant pain in his foot but cannot afford to visit the doctor, instead he resorts to pain killers. His primary concern is to find work. He prays that he can have a better economic situation and be able to provide for his family.





## **Gamal,** The farming veteran

**Age:** 61 years old

**Education:** Primary school

**Mobile:** Smart phone

**Internet Access:** Yes

Gamal is an owner of 1.5 feddan piece of land, which is his main source of income along with the retirement pension from his work in the public sector. He has three kids who are all married now and live with him in a family house. He received elementary school education, can read, and write and has a smart phone with internet access to scroll through social media. When farmers struggle with a problem in their land, they go to Gamal for advice. However, he believes that the agricultural situation has changed from the past due the weather changes and increase in pests, which has significantly affected his crop yield. He does not know how to react to those changes, so he stopped planting weather-sensitive crops like *Molokhia*. Due to the challenges of agriculture today, that render it unprofitable, Gamal is thankful that his children have steered away from it. Even though he does not prefer to deal with banks, he once took a land loan from the Agriculture Bank of Egypt (ABE) but used it towards his daughter's marriage expenses. Gamal wishes the economic state of the country to get better and for the price hikes to stop.



## **Ibrahim,** The ambitious farmer

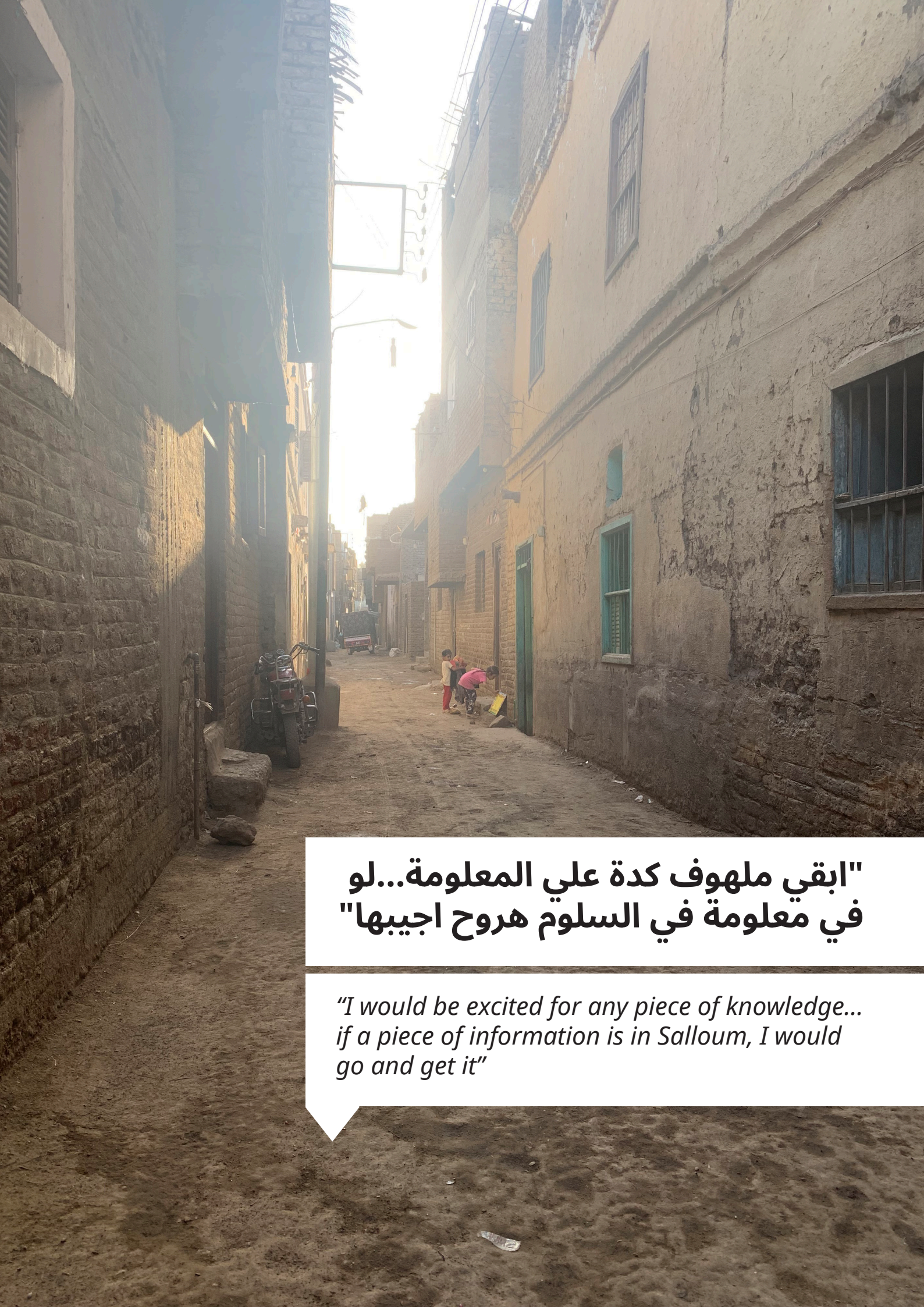
**Age:** 37 years old

**Education:** Bachelor degree

**Mobile:** Smart phone

**Internet Access:** Yes

Ibrahim farms 1 feddan, half owned (under agriculture reform), half rented and has one head of cattle. He has two kids and lives in his own house. Ibrahim is well-educated with a bachelor's degree in law; hence he is always keen on staying up to date, especially through following news on his smart phone. Recently, he has been encountering a difficulty in maintaining an adequate crop yield, especially since the price hikes in fertilizers are forcing him to use less of it. He has been observing the new agricultural methods used in larger farms such as drip irrigation, green houses, and organic compost. He aspires to use those tools but has no knowledge or finance to start. He pondered asking for financing from a bank but does not think it is possible due to the ownership modality of his land. Ibrahim's biggest concern is how to secure a future for his son who has a disability. He wishes he can save money in a bank or the Post Office for him, but it is difficult as he spends a lot of money on doctors and medications, which he mostly buys on *age1* from the pharmacist.



**"ابقي ملهوف كدة علي المعلومة...لو  
في معلومة في السلوم هروح اجيبها"**

*"I would be excited for any piece of knowledge...  
if a piece of information is in Salloum, I would  
go and get it"*

تحتفي في القرآن  
\* نعلم القراءة وال  
\* نساء \* أطفال  
\* رجال \*

زيادة  
تنسأ

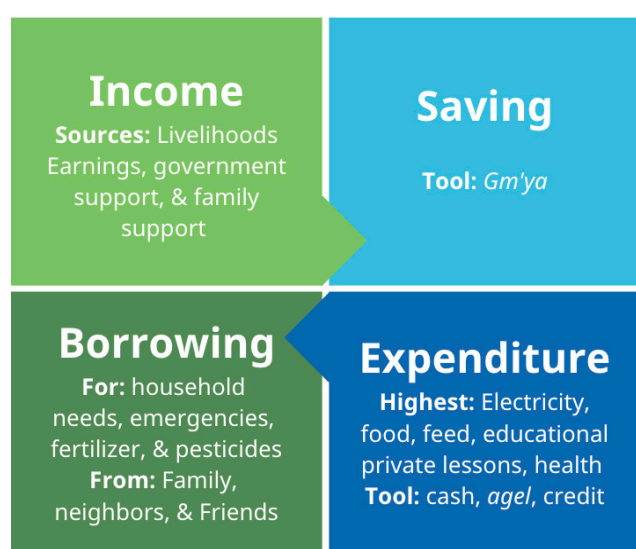
مكتب  
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# Findings

## Financial Behaviors

During interviews, the research focused on the financial behavior of respondents from sources of income, patterns of expenditure to practices of saving and borrowing in the household. In general, most respondents explained that they do not have budgets for their household finances, nor do they have separate planning for their land expenses (except in cases where land is the main source of income). Monthly income and especially expenditure were hard to estimate mainly due to the precarity of income for those who work on land and construction for daily wages (thus daily unplanned expenditure too), those who receive seasonal income from selling crops and those who have unpredictable medical expenses for a sick child or adult, for example. Nonetheless, the following patterns were inferred regarding financial behavior:



### INCOME

On average, the majority of interviewed respondents had around EGP2,000<sup>10</sup> as income per month, which is below the government minimum wage of EGP2,700 at the time of interviews. Those reported incomes include earnings and, often, conditional cash transfers. Several respondents also receive types of family support which are not included in monthly estimations. Below is a brief on all sources of income, included or unincluded in monthly estimations.

### LIVELIHOOD EARNINGS

As mentioned in the “Sample Description” section, families try to diversify their livelihood sources. Here are how those sources can generate main or supporting household income:

- **Land:** On its own, land is not a stable nor sufficient source of income for most of the interviewed respondents, due to several reasons including the possible small size of the land. Few participants relied on income from crops alone, however even small size land could provide subsistence crops for the household. In cases where land was unproductive<sup>11</sup>, it can be used to grow food for livestock.
- **Daily-wage farming:** Several participants engaged in daily-wage farming as a main income generating activity, others who even own or rent their own land can participate to generate extra income between seasons or if their land is low in productivity. This type of livelihood provides income

<sup>10</sup> It is worth noting that the least incomes were found in the village in Luxour, which is in line with the data showing that the highest poverty rate as in rural upper Egypt.

<sup>11</sup> The lack of productivity here alludes to several possible problems including unhealthy soil due to intensive farming, climate change, and water shortage problems that small-holder farmers do not always have the means to overcome. This part is detailed under the “Hardship and Resilience” section.

per day of work and is usually characterized by considerable precarity due to the lack of predictable demand of workers and the increasing introduction of agricultural machinery to replace labor.

- **Poultry farming:** While present in most households, poultry farming is not usually used for commercial purposes. Women predominantly take responsibility of this activity, raising chicken, ducks, pigeons (beside other animals like rabbits). Some women are able to turn it into a profit-generating project while others consider it as an occasional “extra income” tool to satisfy household financial needs. However, in most cases poultry farming acts as a significant food security/subsistence tool for households even though it is under threat due to several factors including diseases, inadequate raising environment, lack of experience to raise them (which can result in frequent deaths) and increase in bird feed prices.
- **Livestock:** Cows, sheep, goats are considered as valuable possessions of any farmer, if afforded. Respondents who had livestock benefit from milk, cheese and ghee products used for subsistence or commercial purposes at times, when there is excess, to provide extra income. Few participants had more than one cow or use livestock as a project (for slaughtering, for example) due to the high cost of buying, feeding and livestock sheds. While livestock is usually owned, some respondents engage in a type of “partnership”. This partnership allows farmers to receive a cow from an owner who either pays or not for the cow feed. Depending on this, when the cow gives birth, the partner and the farmers split the price of the calf into 1 third for them and 2 thirds for the partner, if he paid for feed, or the opposite if he did not.
- **Construction:** Some families have a member (husband or son) working in construction-related jobs whether within or out of the village. Most of those jobs also provide daily wages and can be characterized by a degree of precarity.
- **Pensions:** Some participants rely on own pension (men) or that of the husband or father (for women).
- **Other jobs (non-farm):** Few participants

engage in other jobs such as stable ones in companies, driving a tuktuk and making handicrafts (women).

## GOVERNMENT SUPPORT

The majority receive at least one form of government support. For example, around 90% of participants have *Tamween* (ration) cards for themselves and most members of their family. Additionally, 55% of participants receive or used to receive *Takaful and Karama* payments<sup>12</sup>. The ones who used to receive it claim that payments have been cut for unclear reasons.

## FAMILY SUPPORT

Mostly women participants can receive different kinds of support from family members through stable or occasional monetary or in-kind gifts (such as food). One respondent also mentioned that she receives support from a brother towards the university education of her daughter.

## SAVINGS

### GENERAL ATTITUDE

“What comes in [income] is equal to what goes out [expenses]”<sup>13</sup>. The topic of savings was usually met with sarcastic laughter. Respondents explained that their income barely suffices their expenses and saving is usually impossible. They also cited large expenses that weigh them down such as the high cost of private lessons for children, being in constant debt or needing to pay for daughters’ marriage expenses. A minority of participants mentioned occasionally putting money aside that they receive from family or from selling a cow, for example. It is important to highlight that respondents did not consider *gm’yas* or ROSCAS as “savings”. They consider the *gm’ya* as targeted for specific expenses while savings is generally keeping extra money for long term purposes such as having a secure future for their children, a behavior relatively reserved for the better off.

<sup>12</sup> Multiple participants complained of the selection process which may benefit “undeserving families” in addition to getting rejected for no apparent reason indicating possible corruption and/or inefficiency.

<sup>13</sup> Most respondents used the Arabic expression “*elly gy ala ad elly rayh*” when the topic of savings was brought up.

## GM'YA/ ROSCA

Mainly formulated and controlled by women, ROSCAs are used by several female participants at different stages of their lives for different purposes and comprise a significant aspect of their financial behavior. Women control household expenses, hence through economizing from selling milk, poultry, or vegetables in the market and/or from *Takaful and Karama* payments, they are able to set money aside and participate in ROSCAs of different sizes depending on ability and purpose, at times without the husband's knowledge. A ROSCA can be as large as participating with EGP1,000 per month and as small as EGP50 per month. For many women, a ROSCA is a convenient financial solution due to the flexibility of its size and duration in addition to the commitment angle of it, without which, as explained, money would be lost or spent on other purposes.

- **Goals:** Due to their flexibility, women use them for a variety of purposes. Considerable goals include marrying off daughters, to get married themselves or even build a house<sup>14</sup>, beside other expenses such as: children's education, paying land rent, paying debt installments, and giving birth, where some women adjust the *gm'ya* to coincide with their due date.
- **Barriers:** Although the *gm'yas* are a more affordable and convenient type of economizing for women, it is still not available for all families mainly who do not have stable incomes. Participants whose incomes depend on daily labor explained that they cannot make such a commitment while not knowing how many days they will work in a given month. Others explained that with the increasing expenses of children they could not carry on with payments.

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<sup>14</sup>In rural areas, despite the prevalent poverty, building a house is considered a goal for the majority. It is a goal that many try to work towards to avoid rent expenses, have stability of accommodation and to have their own asset beside other purposes. Size and material of those houses, of course, differ depending on financial ability.

## EXPENDITURE

Most households had common points of expenditure. Most mentioned were: food, education fees (including tuition and private lessons<sup>15</sup>), electricity, gas, water<sup>16</sup>, health, seasonal clothes and paying off debt in addition to land expenses, livestock, and bird feed. However, there was agreement that the highest expenses go to electricity, food, feed, private lessons and health (in case of a disability or chronic illness such as hypertension, heart disease or diabetes of which 25% of the sample suffered). Those elements were especially mentioned given the recent hike in inflation and the partial alleviation of energy subsidies. When prompted on spending preference, interviewees explained that:

- **They wish to spend more** on food (nutritious diet, especially for children's health). Women also highlighted children's private lessons, which gets affected by financial difficulties, entertainment activities and clothes, while men highlighted feed and fertilizer to augment the productivity of land and livestock. Feed and fertilizer have also undergone price increases, which affect the farmers' ability to purchase the necessary amounts.
- **They wish to spend less** on mainly electricity and payments of debt. Both men and women also agreed on the high cost of health treatment where they often need to resort to private clinics instead of public ones due to their relative inadequacy.

Participants satisfy those expenses with different modes of payments; cash, *age*<sup>17</sup> and installments.

- **Cash** payments are usually for payment of electricity, water, gas cylinders and education.

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<sup>15</sup>In Egypt, the public education system is often accompanied by private lessons taken on the side. Parents of different classes are pressured to provide those lessons for their children, without which their educational level may be negatively affected. Needless to say, it constitutes a considerable financial burden on families.

<sup>16</sup>Beside paying for the water bill, due to the lack of a system providing clean drinking water, inhabitants of the Giza village also have to buy drinking water.

<sup>17</sup>Buying goods and delivering payment within a month to the merchant. This mode of payment is usually built on a trust basis between the merchant and the customer.

- **Agel** mode of payment/borrowing is prevalent among the participants especially for purchasing groceries. Others also depend on it for purchasing medicines, but it is contingent on having an understanding with the pharmacist. Farmers can also rely on *agel* in purchasing fertilizer, pesticides, and feed. Some farmers can even resort to untrusted merchants if they provide this form of payment as they lack the ability to pay in cash. While several rely on this method out of necessity, others with less stable incomes prefer to avoid it.
- **Installments** is the most relied upon method to buy clothes, blankets, electrical appliances, smartphones and even water meters. This mode of payment adds around 30% to the cost of products, as explained by the respondents.

## BORROWING

As explained, debt is a significant feature of the finances of rural communities. Most participants elaborated that they engage in one form or the other of borrowing every month. Debt can range from small amounts of EGP50 to larger amounts of EGP1000. In cases of health emergencies some may resort to larger debt of EGP10,000, for example. Amount borrowed can depend on purpose and stability of income in a given month.

- **Reasons.** Most women explain that borrowing is a constant to satisfy household needs of food, clothes, electricity, education payments. Some men indicated that they could borrow fertilizer and pesticides from merchants (with expected crops as collateral), while both men and women mentioned that they borrow in cases of health emergencies. *Agel* payments mentioned in the previous section may also be considered a type of borrowing.
- **Sources.** The majority agreed that they only borrow from people they can trust to be patient and understanding with payments. Ones they can trust to be patient and understanding with payments if delayed and who will not talk about the debt out loud to not cause embarrassment. Therefore, family members were the most mentioned followed, rarely, by neighbors and friends. Merchants were also mentioned (for agricultural products) and other sources such as banks, NGOs and government bodies were rarely mentioned.





**“اللي جاي علي قد اللي رايح”**

*“What comes in [income] is equal to what goes out [expenses]”*

# Attitudes towards Formal Financial Products

Participants were prompted on several financial products in terms of knowledge, interaction, and overall impression. In general, knowledge and interaction were not generalized among the sample, however participants elaborated on certain products more than others; for saving: bank accounts, post office accounts, for loans: bank loans and MFI loans.

## SAVING

### BANK ACCOUNT

Participants consider saving in a bank as a behavior reserved for the better off and that it requires large amounts of money. In general, a bank is not considered as a relatively familiar institution; for example, only 44% of interviewed participants mentioned having ever interacted<sup>18</sup> with a bank in contrast to 72% in the case of the Post Office. One participant told a story of how a bank teller looked down on her for withdrawing a small amount of EGP600 and how she decided afterwards to never step foot in a bank. However, some respondents expressed their desire to have one for future savings, even if they currently do not have the means. Only one respondent mentioned having a bank account, which was facilitated by a relative who works in the bank.

### POST OFFICE ACCOUNT

The Post Office sustains its position as a known and accessible institution, mainly due to the multitude of services it offers (which include receiving government transfers) and its availability on a village level. Around 44% of interviewed participants have or used to have a Post Office savings account. Those accounts were/are used for savings towards buying livestock, building a house, and trying to save for children. However, with the increasing

financial stress, many ended up emptying their accounts to pay for financial obligations and were not able to continue saving in it anymore.

## LOANS

### BANK LOAN

With a relatively rare uptake, a few participants or their relatives attempted to take a loan from a bank. The ones who took it wanted to use it to marry off daughters, support household and land expenses or buy a piece of land and others indicated their need for a loan to buy livestock. Some of the loans used for household purposes were taken against the loan condition of agricultural usage. However, respondents mentioned several barriers vis a vis bank loans:

- **Product characteristics:** 1) General concern that interest rate is high and needing low interest offerings, 2) difficulty to obtain an agricultural loan [from the ABE] without a formal ownership of the land, which excludes tenants and those under "land reform" contracts, 3) long and difficult procedures in cases where urgent financing is needed, some explain that a commercial loan is only possible with an employee, who has a stable income, as a guarantor while others state that having someone on the inside facilitates the process; *wasta*<sup>19</sup>, 4) insufficient grace period for borrowers to generate profit and become able to pay back installments.
- **Religious:** Multiple participants refuse to take loans based on opinions of certain sheikhs who advise against taking any loan even if it is low interest.
- **Financial literacy:** Many are discouraged from taking loans due to bad experiences (personal or of someone they know) of loan management causing interest to pile up or not having a sound project plan against which the loan was taken. Others expressed their desire to have a loan while not demonstrating an understanding of the financial obligation and others stated they do not understand the technicalities of it.

<sup>18</sup> Interaction here is not account ownership, however, it can indicate accompanying someone to carry out an errand in a bank, depositing or withdrawing money for someone else, etc

<sup>19</sup> Loosely translated as someone's connections who can facilitate a certain process

- **Other:** General fear of the bank as an institution and what may happen if they are unable to make payments or if their project is unsuccessful, in addition to not having excess income to be able to repay debt.

#### MFI LOAN

The village in Luxor mentioned a specific microfinance company, which appears to have a high penetration within their community. According to the respondents, it offers easy loans from EGP5,000-50,000 and only requires a guarantor. However, as its loans have high interest rates participants saw people have their lives “destroyed” from accumulating debt, which is exacerbated by the ease of acquiring those loans without sufficient calculation of payments.

For the general attitude towards loans from MFI, the same religious and income concerns apply as with the case of bank loans.

		Barriers					
		Uptake (1-5, 1 being rare, 5 being common)	Need	Product	Financial literacy	Social	Other
Savings	Bank	1	General savings, children's future			Feeling it is reserved for the well off	
	Post Office	3	General savings, transferring money, buying cattle, building house, marrying off daughters	No commitment as a <i>gm'ya</i> causing money to be withdrawn in hardships			No excess income to save due to economic situation, unstable income/ precarious work
Loans	Bank	2	Household and land expenses, marrying off daughters, buying land and livestock	High interest, insufficient grace period, land ownership, difficult and long procedures	Lack of product understanding, no payment to income calculation	Religiously forbidden	Fear of not making payments, no collateral or sufficient income
	MFI	1		High interest rate	Easy to obtain, high interest rate, lack of calculation causing indebtedness	Religiously forbidden	Fear of not making payments

Other financial products including saving certificates and insurance were also brought up. For the certificates, most were not familiar with them while some saw them as religiously forbidden. For the insurance, health insurance was known in terms of having a stable job in an institution or for those who have the newly introduced Universal Health insurance<sup>20</sup>. For other forms of insurance such as life and property, some participants explained that they do not have that culture in their community, “no one insures here” as a male participant from Fayoum commented, in addition to not having excess income to pay the premiums.

For financial transactions, most participants cited the Post Office and Vodafone Cash as accessible and easy to use.

<sup>20</sup> <https://www.presidency.eg/en/المشاريع-القومية/المشروع-القومي-للتأمين-الصحي-الشامل/>

# Hardships

Experienced hardships and challenges in the previous 3 years were discussed at length during focus groups and to a lesser degree during interviews. The goal was to understand the most frequent intersecting hardships among the men and women on a community and individual levels, their impact and the adaptation techniques used (financial and non-financial). Afterwards, ideas for mitigation were also prompted whether as attainable or unattainable solutions. By reconciling themes from adaptation and mitigation techniques in addition to participants' own definitions, contextual elements of resilience can be put together while highlighting the role of financial tools in the rural hardship-resilience nexus.

Hardships mentioned by the participants can be divided into land and non-land related issues.

	Hardship	Impact	Adaptation	Mitigation/ Contemplated Solutions
Land	Price of inputs	Increase in fertilizer, pesticide, land labor, fuel, etc	Abandoning land, using cheaper low-quality fertilizer (no efficacy), subsidized fertilizer (insufficient), using less fertilizer (weaker crop yield)	Diversifying sources of income to lower risk of farming land (ex: livestock)  Introducing new farming methods such as greenhouses, drip irrigation, compost, etc, however financial and technical support are needed
	Water	Limited canal water for irrigation	Using underground water (harms soil and crops), staying at night to capture canal water when available, abandoning land, only planting crops for livestock	
	Climate change	Extreme heat and cold weather, inability to identify farming seasons resulting in lower or ruined crop yield	Stopping planting weather-sensitive crops (mostly vegetables), only planting crops for livestock	
	Pests	More intense presence of worms in crops like corn, lack of knowledge to react correctly	Consulting more experienced farmers, buying pesticide on <i>agel</i> , selling land or taking loans to compensate lost crops	
	Competition/better technology	Unattainable modern irrigation, fertilizing and farming techniques, better-off farmers have better productivity and lower cost of farming	Lacking the financial and technical tools to adapt	
Non-Land	Price hikes	Financial turmoil causing price hikes in food, energy, medicine, etc resulting in financial, social, and psychological stress	Rationing consumption of food, energy, and clothes, seeking less medical support, less education private lessons for children, seeking support from family and community, increased trend towards borrowing	Other income generating activities to boost income; men: need stable jobs in factories, migrating to other cities for work; women: small projects (need skills and finance), jobs suited for educated and uneducated women
	COVID-19	Illness and unemployment causing financial, social and psychological stress	Community solidarity, selling gold, relying on <i>Takaful and Karama</i>	
	Sudden expenses	Unaccounted for expenses or emergencies causing acute financial distress	Selling gold, assets (ex: livestock), seeking family support, debt, <i>gm'ya</i>	



**“السنة اللي فاتت شوفنا  
شتا ماشقنا هوش في حياتنا”**

*“Last year we saw a winter like never before”*

## LAND

Agricultural land was characterized more than once as “a failed project”. The 3 communities in this research agreed that agriculture has ceased to be a profitable livelihood, some even wish to abandon it themselves or to not have their children follow in their footsteps. The farming challenges appear to be even more exacerbated for the smallholder farmers who were the focus of this study. Multiple events, appearing or worsening in the past 3 years, contribute to this phenomenon as will be discussed below, which are aggravated by a near-absence of extension services and an apparent lack of accessible financial and technological support to smallholder farmers.

### WATER:

Mostly mentioned in Giza and Fayoum villages, canal irrigation water has been noticeably diminished and therefore put under stricter government control. This is due to several reasons that put immense strain on Egypt’s water resources causing it to be classified as “water scarce”<sup>21</sup>. In the Giza village, for example, canal water is only available 10 days per month. Canal water, according to the participants, is the healthiest irrigation option for the land as it contains the needed nutrients, taking into account that farmers do not have access to modern irrigation techniques, they instead use the old “flood” method.

**Adaptation:** With less canal water available per month, farmers try to capture as much of its share as possible when it becomes available, some even wait in their land starting midnight and stay up all night to irrigate (first come first serve basis). However, as this is an insufficient solution, many resort to digging wells “*aysoon*” to irrigate with underground water. Even though underground water is their only solution, it is saltier and contains less needed minerals for the land causing salinity of the soil in addition to affecting the quality of the crop; smaller size, dryer/withered leaves. This inevitably affects the crop value and hence farmers’ profits. Using underground water also requires motors and with the hike in fuel prices it weighs on land expenses. As a result, some farmers choose to abandon their land, farm only plants for livestock (less risk and expense) or stop planting water intensive crops such as tomatoes, cucumbers, onions, green beans, and peas.

### PRICE OF INPUTS:

Prices were a main challenge mentioned in land and non-land related contexts. The recent increase in price hikes has affected the prices of fertilizer, pesticides, land rent, land labor and fuel for water motors and machines. For example, by August 2022, the price of some fertilizers has jumped more than 100%.

**Adaptation:** Due to the heavier financial cost of farming, some farmers decided to leave their land dry. Others attempted to get subsidized fertilizer from the Agricultural Association, however, since they are only allowed a limited share, farmers are still obliged to seek the market. In addition, receiving subsidized fertilizer obliges farmers to sell their corn and wheat crops to the Association at a lower asking price. Others seek bad-quality cheaper fertilizers for their lower prices despite their low effectiveness. Consequently, many farmers have started using less-than-needed fertilizer in their land causing weaker and smaller crop yield.

### CLIMATE CHANGE:

While the majority do not understand the details of the phenomenon, farmers in Giza and Luxor account the repercussions of a “weather change”. Hotter summers, colder winters, and unpredictable start of seasons render them perplexed on how to react; “last year we saw a winter like never before”, expressed a male farmer in Luxor. Farmers cannot identify the right time to plant due to unpredictable seasons, so they plant anyway resulting in lower crop yield. In winter, frost can cover the land causing seeds to fail to sprout, and in summers, the extreme heat can ruin heat-sensitive crops like vegetables.

**Adaptation:** Due to the absence weather-resistant seedlings, some farmers have stopped planting vegetables altogether (ex: eggplants, cucumbers, potatoes, *molokhia*) and some switched to corn and plants intended as cattle feed. One male farmer in Giza expresses: “return from the land has become indirect... it needs a lot of time to be realized” explaining using land to feed livestock only, thus realizing land profit only through livestock not through crop yield.

## PESTS:

Farmers in Luxor and Fayoum complained of pests that have intensified this year in crops such as corn, sugarcane, and carrots. In addition to the extra expense of having to buy pesticides, which may not always be effective, as some participants claimed, a lot of smallholder farmers do not know how to react correctly to such situations.

**Adaptation:** With the absence of extension services, farmers resort to consulting with older or more experienced farmers. Only one participant mentioned consulting the internet and an agriculture TV channel to find answers. Moreover, with the extra expense of pesticide, some farmers attempt to buy it through *agei*, while some of those who lost their crops took loans from the ABE or even sold their land.

## COMPETITION:

Farmers in Giza and Luxor discussed at length their inability to compete in the markets as they lack the technological tools and modern methods of farming. More affluent landowners are able to deploy modern irrigation techniques (such as drip irrigation), invest in greenhouses (which can protect crops from extreme temperatures, pests) and use organic compost (instead of only chemical fertilizers, allowing them to sell “organic” products also). With those tools at hand, they can lower their cost of farming, increase their profit, and avoid multiple risks that smallholder farmers find inevitable. In addition to those techniques, those landowners also use more machinery, further lowering costs, but also negatively affecting the demand for daily labor and exacerbating the precarity of dependence on daily-wage farming.

**Adaptation:** “We gave up”, said one male farmer in Luxor as he gestured defeat with his hand. As farmers are unable to keep up and do not have the knowledge, financial or technical resources to introduce those new methods, their problem persists. Some farmers explained that they attempt to plant crops, which cannot be planted in greenhouses.

## MITIGATION

When asked if participants had any ideas that solve or mitigate the above-mentioned challenges, there were multiple responses, however, most were labeled as “unreachable” for smallholder farmers. “I have a million ideas but each needs money”, expressed a male farmer from Luxor as another male farmer in Giza said, “there are solutions, but the solution needs a solution”, the latter “solution” here signifies finance. Participants also agreed that the presence of agricultural extension services is integral as all agriculture activities now “require scientific knowledge” as a male farmer from Luxor explained, he continued, “I would be excited for any piece of knowledge... if a piece of information is in Salloum<sup>22</sup>, I would go and get it”. Evidently, access to suitable financial solutions coupled with technical and knowledge resources were the most stated barriers to mitigating agricultural hardships. The ideas mentioned were related to:

- **Diversifying sources of income** through for example, livestock, investing in a tractor (to rent to others), having women start small projects at home (ex: sewing machine) to not “put all eggs in one basket” as a male farmer in Luxor expressed.
- **Introducing new farming practices:** weather-resistant seedlings, greenhouses, modern irrigation techniques, using compost as fertilizer, introducing new crops; for example, palm trees and herbal plants (basil, mint, anise, caraway, etc). Farmers here stressed on the importance of having the know-how beside finance, they explained that they need someone to show them a model first then everyone will follow as farmers like to double check information and share knowledge among themselves.

<sup>21</sup> Egypt’s water share per person per year is around 560 m<sup>3</sup>, which falls below the threshold of 1000 m<sup>3</sup> per person per year as indicated by the UN

<sup>22</sup> Egyptian village close to the Egypt/Libya border, signifying the far distance.

## NON-LAND

While most non-land hardships were finance-related, they manifested in different events.

### PRICE HIKES:

As discussed previously, the global financial crisis has had grave consequences on the Egyptian economy causing the devaluation of the Egyptian pound and a heightened inflation rate. The resulting price hikes have affected all aspects of life including food, medicine, and energy (electricity and gas cylinders) directing a blow to the already fragile rural communities. All male and female participants have mentioned the price hikes one way or another in interviews and focus groups. This pressure has resulted in not just financial difficulties but also social and psychological ones. The financial pressure has resulted in higher divorce and marital disputes rate, higher crime rate along with less solidarity among people as it is becoming more costly to invite others in one's home, as a female respondent in Giza explained. This has not just led to stress and anxiety but has also led some to commit suicide out of despair, as participants in Fayoum mentioned. Others have also mentioned that they had to close their micro projects/businesses as more people take products on *agel*, making it difficult to sustain profits, while some of those who had poultry farming projects also stopped due to the increase in bird feed prices.

**Adaptation:** methods mentioned by men and women were almost similar, however, women discussed the household adaptation methods at a deeper level since they are mostly responsible of maintaining the financial integrity of the family's budget.

- **Consumption:** for food, rationing or eliminating the consumption of red meat, using cheaper vegetables, relying more on legumes, eggplants, and potatoes, consuming 2 meals instead of 3 per day, keeping food leftovers for the next day instead of feeding it to birds and generally being aware of food consumption. For energy, some started using the *kanoon* (oven made with cow dung and straw) to replace gas cylinders despite its lack of efficiency (can only cook one item at a time) and health effects (as it emits

large amounts of black smoke), beside also being aware of energy consumption; for example, some started switching off the fridge at night. In addition, clothes consumption is also reduced.

- **Medical treatment:** when getting sick, instead of visiting a doctor, some adults just resort to painkillers to save the money for the food and education, also some switched from visiting private clinics to public ones, compromising on quality of treatment.
- **Education:** making children attend fewer private lessons (a significant part of the education as explained before) or forcing them to quit school altogether.
- **Community support:** seeking financial or in-kind (food) support from family, friends, and neighbors.
- **Loans:** increased trend towards borrowing whether from individuals to meet household expenses or from MFIs.

### COVID-19:

The pandemic did not just have a health impact but also an economic impact on the 3 communities as many lost their jobs. Female participants report feelings of panic and stress, as beside the illness, children had to stay home adding to their burden. One participant explained that she felt trapped as she does not have the education to know how to react if one of her kids got sick. Multiple participants also reported Long COVID/ Post-COVID symptoms that they suffer from until today. In addition, losing jobs resulted in financial stress causing divorces in some cases.

**Adaptation:** Community solidarity was key in adapting to COVID in certain communities. Neighbors and family provided masks, alcohol beside giving away food to those in need. Additionally, some waited on debt payments while others tried to give money in the form of labor (better off farmers employing disadvantaged ones to not embarrass them with direct monetary support). To adapt, people also sold gold, got into debt and/or tried to sell some of their land produce (which was not intended for sale) to sustain their household. *Takaful and Karama* also helped support living conditions for those who received it.



## SUDDEN EXPENSES:

Unaccounted for expenses or emergencies were frequently mentioned as hardships in interviews. Respondents may find themselves in financial distress due to issues such as the accumulation of a large debt, illness of a child, death of a husband or a husband going to prison.

**Adaptation:** Women mostly sold gold, or other assets like livestock and some also received support from family members. Men mentioned borrowing money and one explained that he relied on his livestock as a food security cover (as it provides milk, cheese, butter/ghee). One male respondent in Fayoum told the story of how his wife had to have a C-section while giving birth, which was an unaccounted-for expense, and did not know how to react only to realize that his wife had a secret *gm'ya* for the birth, which allowed him to pay the extra expense.

## MITIGATION

Participants were asked if they had any ideas on how to mitigate those financial difficulties should they persist (inflation) or reoccur (emergencies or pandemics). Alternative or additional income generating opportunities to increase household's income were the main solutions mentioned by both men and women, however, in different approaches. Some men saw a need to switch from agriculture due its instability or try another income generating activity on the side, but they explained that this is difficult for a farmer. Other male respondents expressed that they could work in another city (internal migration), while others stressed that the government needs to build factories to offer stable job opportunities to rural communities. Women on the other hand mainly spoke of setting up small projects, one female respondent in Giza commented on her desire to start a project, "I think of many solutions, but I feel like I am dreaming". Projects including tailoring, selling vegetables, selling detergents, selling clothes on installments and opening up a supermarket were the most mentioned. Nonetheless, as some women explained, to have a successful project one needs to have the necessary skills alongside the finance to be able to sustain a profit, both which are not available to participants. Beside ideas for self-employment, other women in Fayoum expressed their need for job opportunities to be available to women who are both educated or not.

Regarding the hiking energy prices, one male farmer in Luxor spoke of the need to have cheaper alternatives to generate gas and electricity such as solar energy and biogas. While economizing was also mentioned as an important behavior.

# Resilience

Resilience emerged in multiple forms throughout the interviews and FGDs. Participants were asked directly on how they define resilience; what would a person need to be resilient in their community? What does it mean to be able to overcome a challenge and remain strong afterwards? Additionally, elements/factors of resilience also appeared in participants' discussions on adaptation and mitigation, most of which reinforce what participants mentioned in their direct answers. As resilience is a multi-faceted concept, it presented itself through the different layers, almost similarly for both men and women. It's important to highlight though that those elements do not include basic rights such as health, education, and infrastructure. Moreover, they may vary in their relevance and effectiveness depending on the magnitude, duration and nature of the shock/hardship.

## SPIRITUALITY

Having faith, seeking support from God and praying were usually the first resilience variables mentioned.

## PERSONAL ATTRIBUTES

A person who is patient, enduring, confident is more resilient. In addition, that person needs to be sociable, emotionally intelligent, and able to learn from their mistakes.

## EXPERIENCE AND KNOWLEDGE

Being formally educated was mentioned only once (which may be due to the challenges of public education), having cultural knowledge on different life issues, and having life experiences that allows a person to react better to difficult situations. Multiple participants stressed that they believed experience does not come from education but rather from being immersed in life and learning from it.

## STABLE LIVELIHOODS

Having a stable source of income and being able to predict future cash in-flow is key for the utilization of many tools such as saving, credit and investments that can enhance resilience of individuals. This point mainly applies for those who depend on casual labor as a source of income.

## COMMUNITY SUPPORT

Community has emerged as major theme throughout the whole research and can be considered as an informal insurance mechanism. Specifically, family members (spouses, fathers, mothers, and siblings) were mentioned as the most trusted, providing

financial and psychological support and giving advice on life problems. Friends and neighbors are also consulted and sought for support on household, land matters, and finance but to a lesser extent. Participants spoke of the importance of this community and connection to provide encouragement and raise self-esteem to be able to overcome a hardship. They also explained that to overcome land challenges for example, they need to consult and seek advice from more experienced neighbors who can also provide immediate support with their own resources.

## FINANCIAL TOOLS

To be more resilient is to have the ability to generate income from different sources; a second job or a small project, for example. Finance was also an element in different adaptation techniques and proposed solutions.

- **Takaful and Karama** offered a safety net during COVID and allows several women to participate in *gm'yas* through the extra income they receive.
- **Borrowing from family and friends** does not just help in satisfying short term household needs but also in emergencies and education. It is a form of debt but with favorable terms as the trusted lending individuals can wait on this debt, pose no interest rate, and maintain confidentiality to not embarrass the borrower.
- **Short-term borrowing through *agel*** from merchants to be able to buy food, medicine, fertilizers, pesticide, etc.
- **Economizing through participating in *gm'yas* or even savings groups** (even though only mentioned by one participant) allows several women to respond to emergencies, pay for children's education, fulfill household's needs beside other usages.
- **Finally, having access to credit with favorable terms**, (including interest rate, grace period, collateral, etc.), appears to be barrier for several participants in order to diversify their income sources and/or boost the productivity of their land, which is otherwise a costly, low-profit livelihood. Access to credit is a risky element, however, depending on how it is offered, it can be helpful or problematic if easily granted to borrowers without financial literacy or carefully studied projects.

## ASPIRATIONS

All responses revolved around three themes: children, finances, and psychological well-being. Participants wished they can be good parents for their children, provide them with a secure future, see them graduating and marry them off hoping that their future would be better than theirs. Regarding finances, they wished to pay off their debts, have better income and economic status in general, have a decent life, find work (for those with precarious jobs) and be able to build their own house. Finally, psychological well-being was mostly mentioned by women; calm, safe and peaceful life and to see solidarity back among their community, which was affected by the price hikes.



# Conclusions and Learnings

Rural resilience is a key pillar to achieving rural development through poverty alleviation. It is important, however, to examine the nuances in this approach. Resilience is a multi-dimensional concept and achieving it requires engaging with the complexity of rural realities. This also stipulates understanding and strategizing for the rural with its different particularities regarding different geographies, ecologies, livelihood modalities, gender disparities and sociopolitical context. Resilience should also be seen beyond simply “adapting” to crises but also in terms of how it can contribute to transforming the conditions of the rural; a “bounce-forward” approach (Scott, 2013), as explained at the beginning of the report. Simply seeing resilience as techniques for adaptation may exacerbate structural problems and inequalities. Therefore, resilience tools mentioned in this research need to be seen in context and examined critically, especially when designing solutions. Not all techniques that assist households in withstanding short-term shocks are healthy on the long-run, on an individual and/or a community-wide level, such as the short-term borrowing mentioned under the “resilience” subsection, and not all techniques for resilience qualify as structural solutions.

This research attempted to explore how financial tools are situated within rural resilience techniques, in this direction it highlighted the main hardships and barriers encountered by rural communities and how different individuals adapt to and reflect on their mitigation. While the study shows the urgency in the current situation, it also paves the way for further investigating this concept and extracting applications for sustainable solutions.

In addition to the findings detailed in the previous sections, the following were main takeaways from the analysis:



## **LEVERAGING SUBSISTENCE FARMING FOR FOOD SECURITY:**

The current pressure on small-holder farming coupled with the hike in prices can have wide implications especially that the majority of farmers in Egypt are small. Small holder farming, whether commercially oriented or subsistence, provides a safety and nutritional net for households and its disappearance may have impact on the food security not just in terms of providing food to urban areas but also for that of the rural families. Small plots of land, birds and cattle provide richer diets for households without which they have weaker immune systems and are more vulnerable to diseases. This point was observed as giving up land, seizing to plant vegetables, reducing food consumption, and resorting to cheaper food options (ex: reliance on potatoes) were among the primary reactions to the discussed challenges.



## DIVERSIFYING LIVELIHOODS AND EXPANDING INTO NON-FARM ECONOMIES:

Livelihood diversification is essential for rural communities to minimize the impact of risks, however, a strategy of how to apply and increase the value and productivity of those additional livelihoods (cattle rearing, poultry farming, small projects, etc) will determine the degree of added resilience. It is important to acknowledge how the drive for diversifying livelihoods arises in a large part due to the lack of productivity of small holder agriculture and the multitude of risks it is facing, hence it may not be seen as a structural solution. In addition, small projects as a tool for resilience should not be considered as a silver bullet, especially for women, as not everyone can or want to manage a micro-business. The creation of decent non-farm job opportunities, through the establishment of factories or workshops near rural areas is still needed, especially for those who want to exit the farm economy.



## STRENGTHENING SOCIAL PROTECTION:

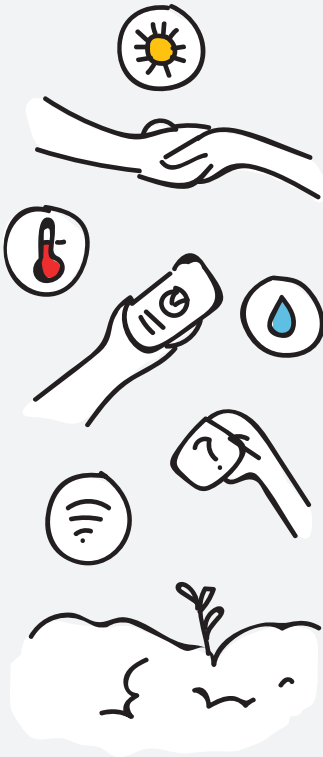
The combination of risks and precarious livelihoods that rural communities suffer from make the availability of just and inclusive social protection programmes imperative. Until a holistic gender-sensitive strategy is implemented to transform agricultural areas and livelihoods, many will still depend on safety nets. Social protection programmes such as *Takaful and Karama* act as stable and predictable income that can allow households to plan small payments, be able to put away some savings and guarantee a minimum cash-inflow during emergencies. The strengthening of those programmes and ensuring minimum leakage in their implementation are currently central to be able to respond to the financial crisis that is hitting rural areas most.

## ACCOUNTING FOR THE PSYCHOLOGICAL AND COMMUNITY ELEMENTS:



Policy and programming for rural development should not neglect the psychological and community dimensions in design, monitoring and evaluation. Unprompted, participants discussed psychological factors as tools for resilience such as spiritual fulfillment, self-esteem, and encouragement from loved ones. On the other hand, they also discussed stress, anxiety, and despair during hardships. Community also ties in with the psychological and provides other modes of support through advice and emergency finance in addition to having significant implications in the formation of norms and uptake of new solutions. Taking such indicators into account humanizes rural development and puts people at the center of more holistic solutions.

## MOBILIZING AGRICULTURAL EXTENSION SERVICES AND COOPERATION AMONG FARMERS:



Many commercially oriented farmers are thirsty for technology and modernization techniques that can help them sustain their profits and be able to scale up in the face of price hikes, climate change and competition. To this end, it is necessary to mobilize knowledge, technological and energy farmer-centric solutions while encouraging and consolidating cooperative modalities among farmers to achieve economies of scale, have better access to credit, higher bargaining power and higher scale marketing. Higher value-added activities or new opportunities can also be introduced among farmers such as organic produce, fair trade, spices, and herbs taking into account marketing plans and saturation concerns (which can partially be mitigated through partnerships with the private sector). Considerable attention also needs to be given to the large gap in knowledge services to capitalize on opportunities that utilize different means including word of mouth (through community leaders), radio, TV, hotlines and/or mobile applications or SMS messages.



## DESIGNING TAILORED AND MEANINGFUL FINANCIAL SERVICES.

When thinking about employing financial solutions for resilience, the broad range of products need to be considered; credit, savings, and insurance. It is needless to say that tailored credit solutions are needed for farmers with different capacities and modes of ownership to access modern agricultural methods. However, with credit, there needs to be meaningful financial literacy programs that can provide credible and effective information on risk, payment schedules and their alignment with income streams, alternatives to debt, if needed. Additionally, although saving is generally difficult with the low incomes of smallholder farmers, community-based and/or commitment and goal-oriented solutions (such as the *gm'ya*) could be the most convenient, especially if they target the younger population before they have familial financial burdens. Finally, despite insurance not being among the social norms in rural communities, it may be useful to better manage risk, depending on how it is designed. Therefore, the introduction of and awareness on insurance products for agriculture are needed endeavors. Nonetheless, the effectiveness of finance as a tool will be contingent on the availability of other factors and cannot be targeted by policy or programming as if in a vacuum.

Finally, it is always crucial to stress on the importance of consultations and voice when designing solutions. This research provided a brief encounter with multiple topics that intertwine with resilience but focusing on specific solutions will still require continuously putting farmers and rural communities at the center. If there is ever a chance of enacting transformative solutions it would be by linking them to a meaningful understanding of how rural underdevelopment is linked to inequality and the national and transnational sociopolitical context.





**“بفكر في حلول كتيرة  
بس بحس انني بحلم”**

*“I think of many solutions,  
but I feel like I am dreaming”*

# References

- CAPMAS. (2018). Household income, expenditure, and consumption survey, HEICS 2017/2018 [Data set]. <http://www.erfdataportal.com/index.php/catalog/168>
- CBE. (2022a). Inflation history [Data set]. <https://www.cbe.org.eg/en/EconomicResearch/Statistics/Pages/Inflationhistorical.aspx>
- CBE. (2022b). Financial Inclusion Strategy (2022-2025). Retrieved from <https://www.cbe.org.eg/en/Pages/HighlightsPages/The-Central-Bank-of-Egypt-launches-the-Financial-Inclusion-Strategy-2022-2025.aspx>
- FAO. (2016). Country profile – Egypt. Retrieved from <https://www.fao.org/3/i9729en/I9729EN.pdf>
- Heijman, W., Hagelaar, G., & Heide, M. V. D. (2019). Rural resilience as a new development concept. In EU Bioeconomy Economics and Policies: Volume II (pp. 195-211). Palgrave Macmillan, Cham.
- Helmy, I., & Roushdy, R. (2022). Household Vulnerability and Resilience to Shocks. In C. Krafft & R. Assaad, R. (Eds.). *the Egyptian labor market: a focus on gender and economic vulnerability* (pp. 295-325). Oxford University Press.
- IFAD. (2021). Rural development report: Transforming food systems for rural prosperity. Retrieved from <https://www.ifad.org/en/web/knowledge/-/rural-development-report-2021>
- IFAD. (n.d.). Egypt. Retrieved January 22, 2022, from <https://www.ifad.org/en/web/operations/w/country/egypt>
- ILO. (2019). ILOSTAT explorer [Data set]. <https://www.ilo.org/shinyapps/bulkexplorer8/>
- Kim, G., Kang, W., & Lee, J. (2020). Knowledge structures and components of rural resilience in the 2010s: Conceptual development and implications. *Sustainability*, 12(22), 9769.
- Moore, D., Niazi, Z., Rouse, R., & Kramer, B. (2019). Building resilience through financial inclusion: A review of existing evidence and knowledge gaps. *Innovations for Poverty Action*.
- Myrdal, G. (1984). International inequality and foreign aid in retrospect. *Pioneers in Development*, 151-165.
- Scott, M. (2013). Resilience: a conceptual lens for rural studies?. *Geography compass*, 7(9), 597-610.
- UNDESA. (2021). World social report 2021: Reconsidering rural development. Retrieved from <https://www.un.org/development/desa/dspd/world-social-report/2021-2.html>
- UN Women. (2018). Profile of women in rural Egypt. Retrieved from <https://egypt.unwomen.org/sites/default/files/Field%20Office%20Egypt/Attachments/Publications/2018/05/Profile%20of%20rural%20women%20%20final%20version.pdf>
- World Bank. (2021). Egypt climate risk profile. Retrieved from [https://climateknowledgeportal.worldbank.org/sites/default/files/2021-04/15723-WB\\_Egypt%20Country%20Profile-WEB-2\\_0.pdf](https://climateknowledgeportal.worldbank.org/sites/default/files/2021-04/15723-WB_Egypt%20Country%20Profile-WEB-2_0.pdf)



## Reach out to us

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