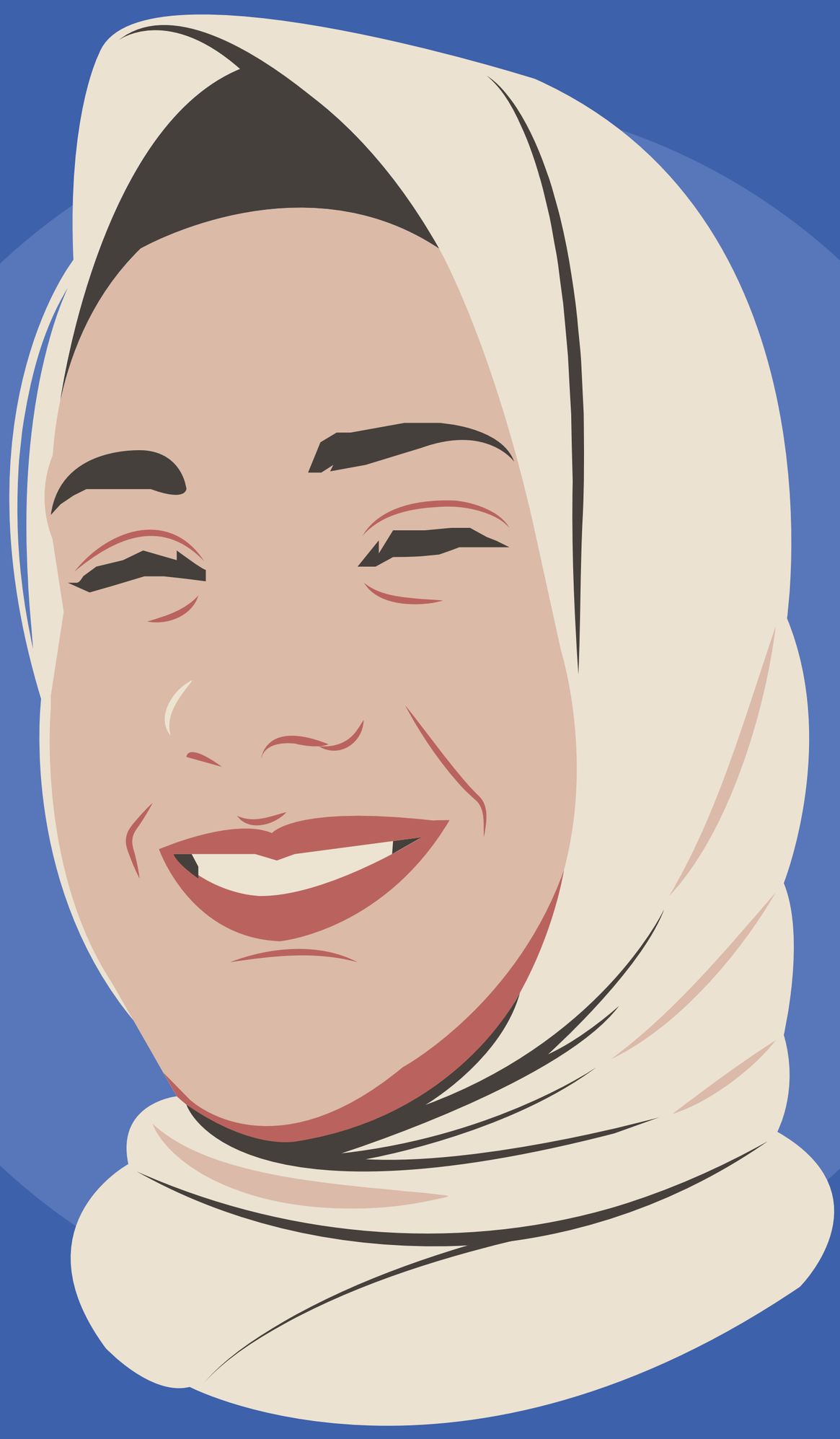
Empowering Smallholder Dairy Farmers to Improve Rural Livelihoods and Contribute to Egypt Food Security

The Alban Baladna project
Since 2010



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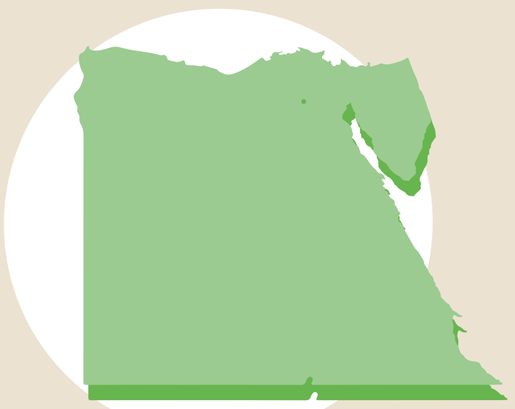
The Egyptian Milk Market at a Glance

Egyptian smallholder dairy farmers play a central role
when it comes to securing
FOOD AUTONOMY and **RURAL LIVELIHOOD**

Indeed...

65-72%

of Egypt's demand is met by domestic milk production - with the remaining gap filled by milk powder imports



80%

of the milk supply is produced by dairy smallholders

Most smallholders have two or three cows and less than one hectar

~28%

of Egypt's total workforce is involved in the agriculture sector

but...

Egyptian smallholder dairy farmers are faced with a range of
intertwined environmental, economic and social challenges

1

Increasing environmental challenges

Pressure on natural resources

- **Competition:** Agriculture competing with population growth & industrial demands putting pressure on land and water resources
- **Water scarcity:** Annual water deficit of around seven billion cubic metres

Impacts of climate change

- **Rising temperatures:** Average temperatures have increased by 0.34°C per decade since 1960. Higher temperatures can stress dairy cows, reducing milk production and increasing disease risk
- **Soil salinity & erosion:** Seawater intrusion due to rising sea-levels affecting agricultural lands' health, impacting crop yields and lowers the quality of forage for dairy cattle

Impacts of cattering activities

- **Greenhouse Gas Emissions:** Smallholder dairy farming in Egypt has a significant carbon footprint, primarily because the carbon intensity is elevated due to the low milk yields from cows
- **Water management:** Important water losses because of bad water management at farm level in regions already under water stress

2

Coping with complex social & economic realities

Lack of trainings on sustainable practices

- **Knowledge to be reinforced:** Only ~20% of smallholders have received formal training or education in sustainable farming techniques
- **Gender-based barriers:** Women often face stronger difficulties in accessing knowledge impacting their productivity

Difficult access to needed resources

- **Access to finance:** Difficulties accessing affordable credit limiting farmers ability to invest in their farms
- **Collective approach:** Few smallholders are part of cooperatives, which can limit their access to collective bargaining and support
- **Cost of supplies:** Feed prices are raising

Challenging social realities

- **Below Poverty Line:** ~30% of the rural population were still below the poverty line in 2019
- **Gender equity:** Only 2% of Egyptian women own land and they tend to spend 12 times the amount of time their male counterparts spend on unpaid care work
- **Cultural practices and peer pressure:** Both can significantly shape farming choices

Difficult access to higher markets

- **Higher markets:** Farmers struggle to reach higher markets due to lack of market information, inadequate transportation, and limited processing and storage facilities
- **Value chains:** Farmers are the most vulnerable and lowest paid actors within long and complex value chains - intervention by middlemen can prevent farmers from receiving a fair price for their milk.

Having a direct impact on

Livestock productivity & milk quality

- Average production in Northern African countries around ~10 litres/cow/ day vs. over 25L in most productive countries
- Insufficient fat and protein content observed in the milk

Smallholders revenues

- Weak increases in margins directly impacts farmers' earnings

Climate change

- Carbon intensity is too high due to low yields from cows

To adress some of these challenges...

...a coalition of public and private partners joined forces in 2010 to empower Egyptian smallholder dairy farmers

The **Alban Baladna** project was born

Key Pillars to Support Smallholders Activities at Farm Level

Egyptian dairy smallholder farmers join the project and receive comprehensive support

Collective trainings

- **Trainings to enhance livestock productivity and milk quality:** Nutrition and watering for cows, cows welfare, reproduction

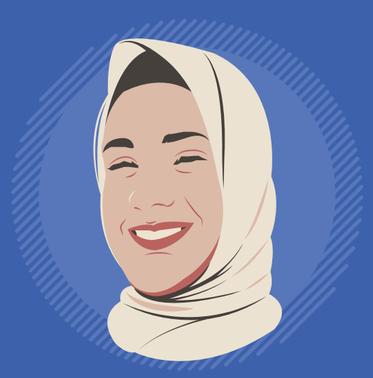
Animal care services

- Vaccinations, medicine and vet consultations
- Acces to artificial insemination services and genetic improvements

Access to needed resources

- **Finance:** Farmers can receive payment in advance to help them with cash flow
- **Equipment:** Water troughs installations, portable milking machines...
- **Feed:** Feed purchase, reformulation and autonomy

To ensure a successful implementation of the above, <u>women</u> play a key role:



Community Leaders engagement

- Community Leaders are the liaison between Milk Collection Centers and farmers
- They play a critical role to:
  - Changing rural farmers' mindsets to begin formally selling milk, previously considered a taboo
  - Conducting outreach to new farmers to benefit from the project
  - Coordinate the provision of farmer services - e.g., vaccination campaigns
  - Disseminating knowledge within local communities

Women empowerment

- Through the training of 8,100+ women farmers, Alban Baladna contributes to:
  - Actively empowering women and recognizing their active contribution to the agriculture and rural sector
  - Increasing women's productive and entrepreneurial potential, and boosting their decision-making abilities
  - Boosting the overall performance of the Egyptian agriculture sector by improving efficiency and productivity of women farmers

Key Pillars to Support Smallholder Farmers Activities at Distribution Level

Postproduction activities

are of equal importance for the project success

[Postproduction acitvities: milk handling, collection, storage and transportation]

Adapting and upgrading milk collection infrastructure:

Option 1

Farmers sell their milk to Milk Collectors

Implementation of Milk Collectors

- Vast majority of collectors are women. They buy milk directly from farmers and sell it to Milk Collection Centers. This system helps farmers sell their milk easily and creates new jobs opportunities for women

Option 2

Farmers deliver their milk to Collection Points or Collection Centers

Renovation of 24 Milk Collection Points and 6 Milk Collection Centers

- Helps to improve milk quality and decrease losses
- Supports and enhances farmer's activities by proposing: Financial support, animal care, feed...
- Associated service hubs help to create the best conditions for farmers to thrive

Service Hubs

Feed

Technical training

Veterinary

Financial services

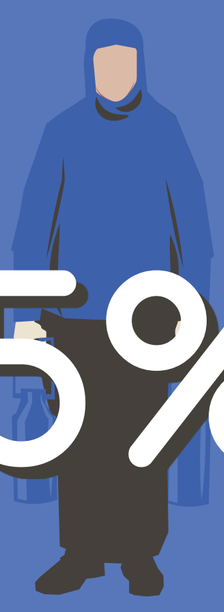
Comprehensive support at farm level and postproduction ecosystem structuration helps to secure farmers' revenues & offers opportunities to grow their activities

Better farming practices to increase production

Access to higher markets to sell milk

Leading to a Positive Impact on the Whole Ecosystem

Social

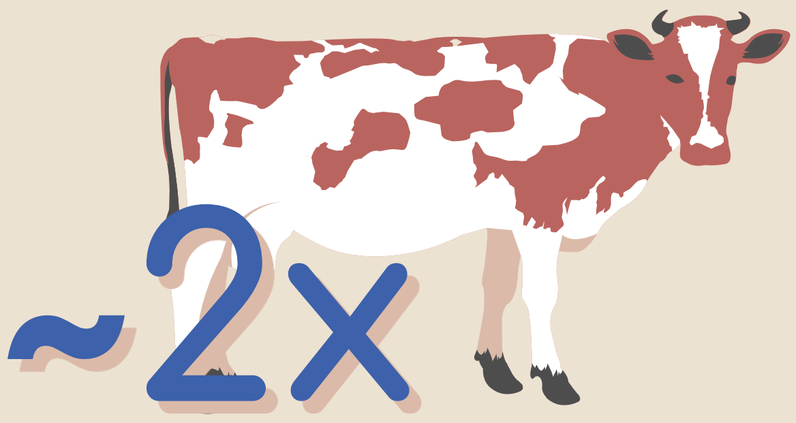


95%

of the 8,500+ farmers empowered by the project since 2011 are women

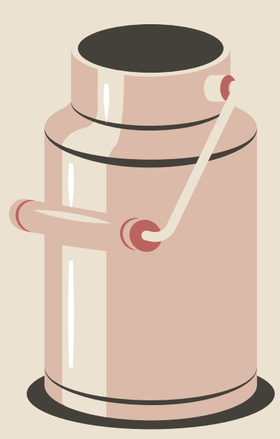
27,700+

farmers' family members benefited from increased or secured revenues since the project inception



~2x

the average daily yield per cow has been multiplied by two between 2020 and 2023



From 90% to only **6%**

of milk rejected during quality control, helping to increase milk sourcing and incomes of farmers

Food security

60+

The support provided to smallholders at both farm and post-production levels has created **60+ new job opportunities** in the community - such as the role of Milk Collectors

"Before, my husband was the one working and providing money. I was only milking the cow and giving it to the trader. Now I'm running the milk sales, managing the finances - I went to being a housewife to a businesswoman."

-Sabra, Farmer, Halabia MCC