

Sahara

Climate change and small farmers challenges

Marwa Hussein

Program Director, Agriculture and Natural Resources

CARE Egypt Foundation

Theory of Change

Program Goal:

BY 2030 1 MILLION SMALLHOLDER FARMERS, PEOPLE WORKING IN THE AGRICULTURE SECTOR AND THEIR FAMILIES IN RURAL AREAS ARE MORE RESILIENT AND ABLE TO FACE THE SOCIAL, ENVIRONMENTAL, AGRICULTURAL AND ECONOMIC IMPACTS AND CHANGES

Program Impact Group:

Small scale farmers and rural families that are headed by women.

Program sub-impact Groups:

Key stakeholders, women working in the agriculture sector, small farmers and their families ,daily workers in the agriculture sector.

Theory of Change:

CLIMATE JUSTICE:

Small farmers and their families are empowered to be more resilience and adaptation to face the effects of the climate change

ACCESS TO FOOD, WATER, AND NUTRITION (Food Security):

Poor and marginalized people working in the agriculture sector have better access to fresh food, water & healthy nutrition

ECONOMIC IMPROVEMENT :

Poor and marginalized people working in the agriculture sector have increased access to profitable and value added markets



She Feeds the World (SFtW)

Donor: CARE US / PepsiCo.

Partners: MoSS, MoH, MoWRI, MoA

Budget: \$ 3.7 Million include Care US share

Duration: 2019– 2024

Target Beneficiaries: 10,000 direct beneficiaries, 325000 indirect beneficiaries, 10000 female farmers& their families (65000), 500-1000 potatoes farmers.

Objective: Improving the livelihood and food quality for 10000 members of small productive families (about 65,000 individuals -especially families that include women of childbearing age (15-49 years)and children under the age of two years, in Beheira, Giza, Minya and Beni Suef.



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Water is Life

Donor: PepsiCo. Egypt

Partners: MoSS, MoH, MoWRI, MoA

Budget: EGP 7.1 Million

Duration: one year

Overall Objective: Reach a water replenishment target of 400 million of liters by the end of the project. Through transforming 45 Feddans from flood irrigation systems to modern irrigation techniques.



Improving Livelihood Conditions and Economic Returns for Small-Scale Farmers in The Field of SDT

Donors: DROSOS

Partners: Moss, MoA, civil society organizations

Budget: \$750000

Duration: 2020 – 2023

No cost extension until April 2024

Target Beneficiaries: About 21,000 individuals based on 4.2 person per family. # of Indirect beneficiaries 21000 and the direct ones 5000

Objective:The project has the overall goal of improving the livelihood conditions and economic returns for female farmers and owners of small holdings. This project addresses the problems of poverty and rural unemployment, with special emphasis on Women.



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GLOBAL G.A.P- Scaling up of FFBS

Donor: CARE US

Partners: MoA, directorate of agriculture, civil society associations

Budget: \$150k

Duration: May 1, 2023 – April 30, 2024

Target Beneficiaries : 150 Small farmers

Objective: Scaling up of FFBS Train & certify 150 Tomatoes Farmers on Global GAP and farmer field business schools



Climate Smart Agriculture For Life(CAS4L)

Donor: EU

Partners: MoSS, MoA, MoE

Budget: 1 million euros

Duration: 2020 – 2023

Target Beneficiaries: 8-10 civil society organizations-50 youth (aged 18-30)- 5000 smallholder farmers in Assyut & Beni Suef

Objective: empowering civil society organizations to implement social impact initiatives on the shift towards smart agriculture adapted to climate change. Enabling youth to effectively use the mechanisms of social accountability in climate change adaptation efforts and mitigate its effects.



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Sustainable Agriculture Service Enterprise Network in Egypt

Donors: CARE NL / Embassy of Kingdom of The Netherlands

Partners: MoSS

Budget: EUR 300,043.43 including CARE NL

Duration: 2021-2024

Target Beneficiaries: 50 young agribusiness professionals- 10 agribusiness focused business models

Objective: Improved efficiency and performance of the agricultural sector in Egypt.



MoSS (Forsa Project الرزق للجميع -El Rezq Lel Gamee)



Donors: MOSS

Partners: 2 NGO

Budget: 56,222,398 EGP

Duration: 2022-2023

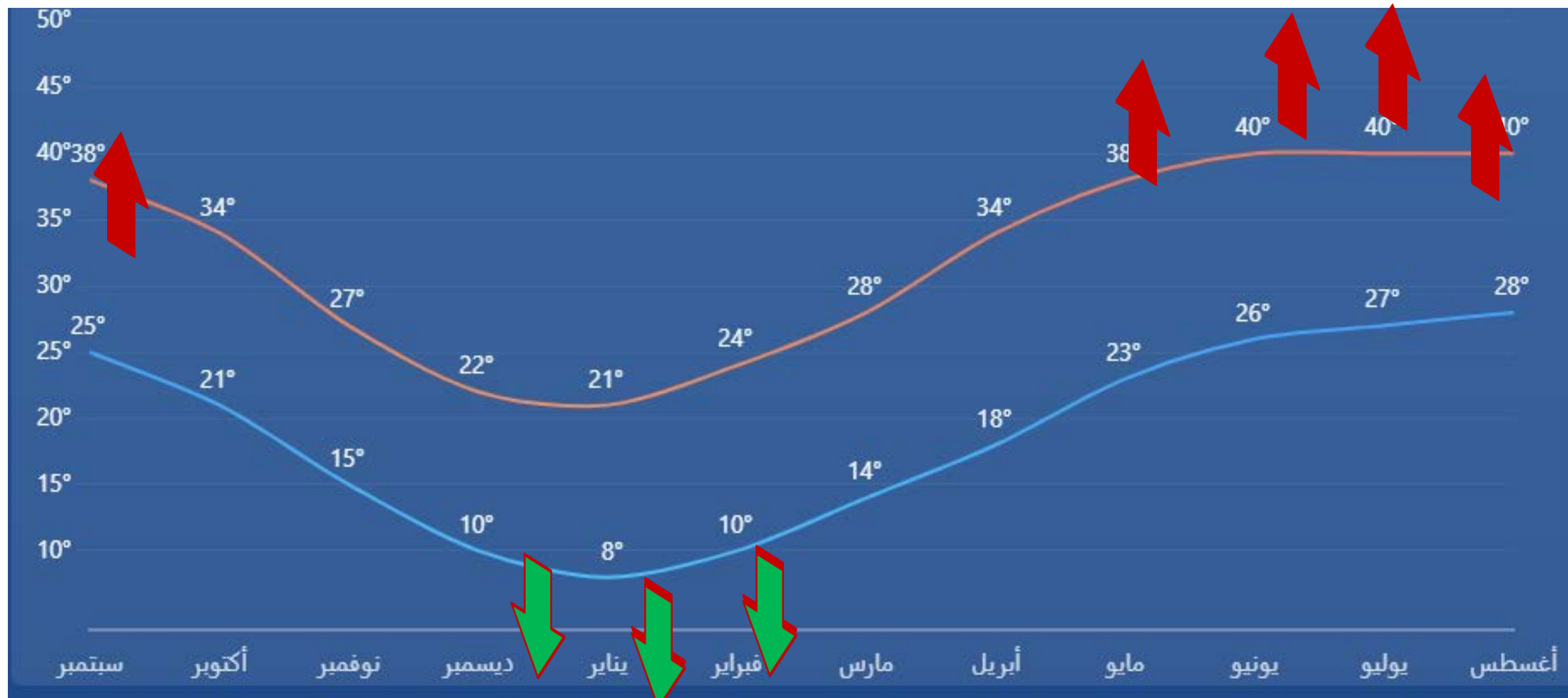
Target Beneficiaries: 3604 for poor people in TAKAFOL & KARAMA program

Objective: supporting family of takaful & Karama beneficiaries in Benni Suif (3604 beneficiaries).



- ❖ The Egyptian Agri sector is highly vulnerable to the impact of climate change, mainly due to its dry climate and depending on irrigation and high water demands.
- ❖ The climatic changes directly affect the crop yield and decrease it. So decreases revenues and affects the farmers' livelihoods.
- ❖ The climate change also affects the agriculture calendar
- ❖ Adapting to climate change focuses on maintaining productivity despite changes in weather patterns.
- ❖ Increasing the resilience of the crop to climate change focuses on reducing exposure, sensitivity, and adaptive capacity.

Agriculture calendar



Frost effect on Tomatoes



Low temperatures, the occurrence of frost for a long period, and warm weather during the day - with it the chance of fungal infections increases, the most important of which is the late leafhopper, and the leaves may be completely burned, as in the picture.



Heat waves effects



Seedling failure, plant death, and replanting in September 2021



High temperatures during the summer for a long time, with increased activity of the *Tuta absoluta* insect

Heat waves effects

The spread of agricultural pests, especially the Tuta absoluta insect, the destruction of the crop and the high cost of control Decreased fruit quality due to sunburn
The crop matures quickly and the increase in supply leads to lower prices This is followed by a supply gap and a significant rise in the price of tomatoes.





Best Practices and Success Stories



Climate Smart Village

Added values
and processing
of Pomegranate
and Mango



Distribution of climate resistant, drought and heat tolerant seeds in Beni Suef and Assiut

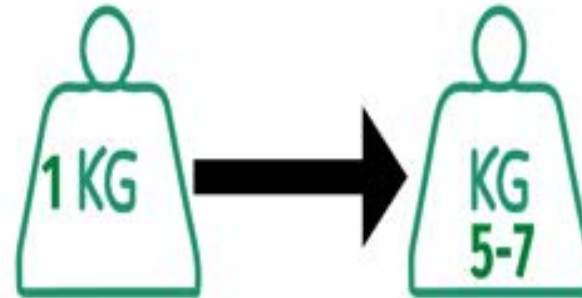


Climate Smart Agriculture for life Best Practicies

"Home Barley Cultivation in Asyut Governorate"



Trained 130 Women on
Barley Cultivation
at Home



Increased Barley
cultivation project
revenues by 5 times .

1 Kilo of Barley
produce 5-7 kilos of
alternative food for
animals



هذا المكان ذكي مناخيا - جمعية بادر

مركز الانذار المناخي المبكر
مشروع زراعة ذكية مناخيا من
اجل الحياة
مركز المعلومات المناخية
وحدة الارصاد الجوية الزراعية
بجمعية بادر لتنمية الصعيد

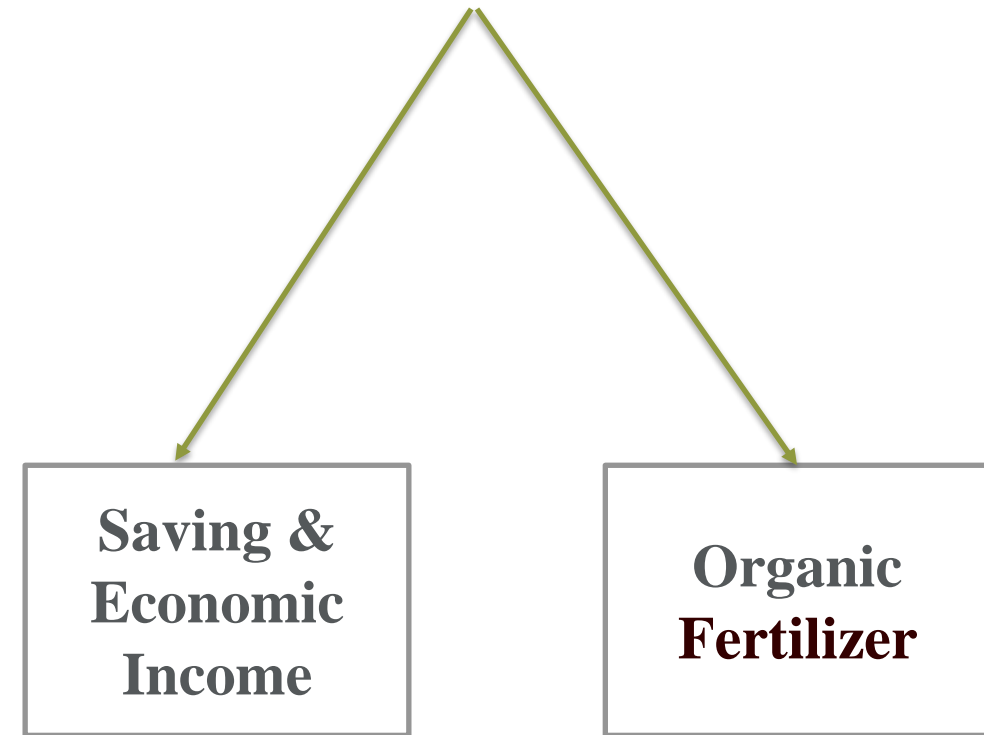
مسجد التوبة والعروة

هذا المكان ذكي مناخيا - جمعية بادر





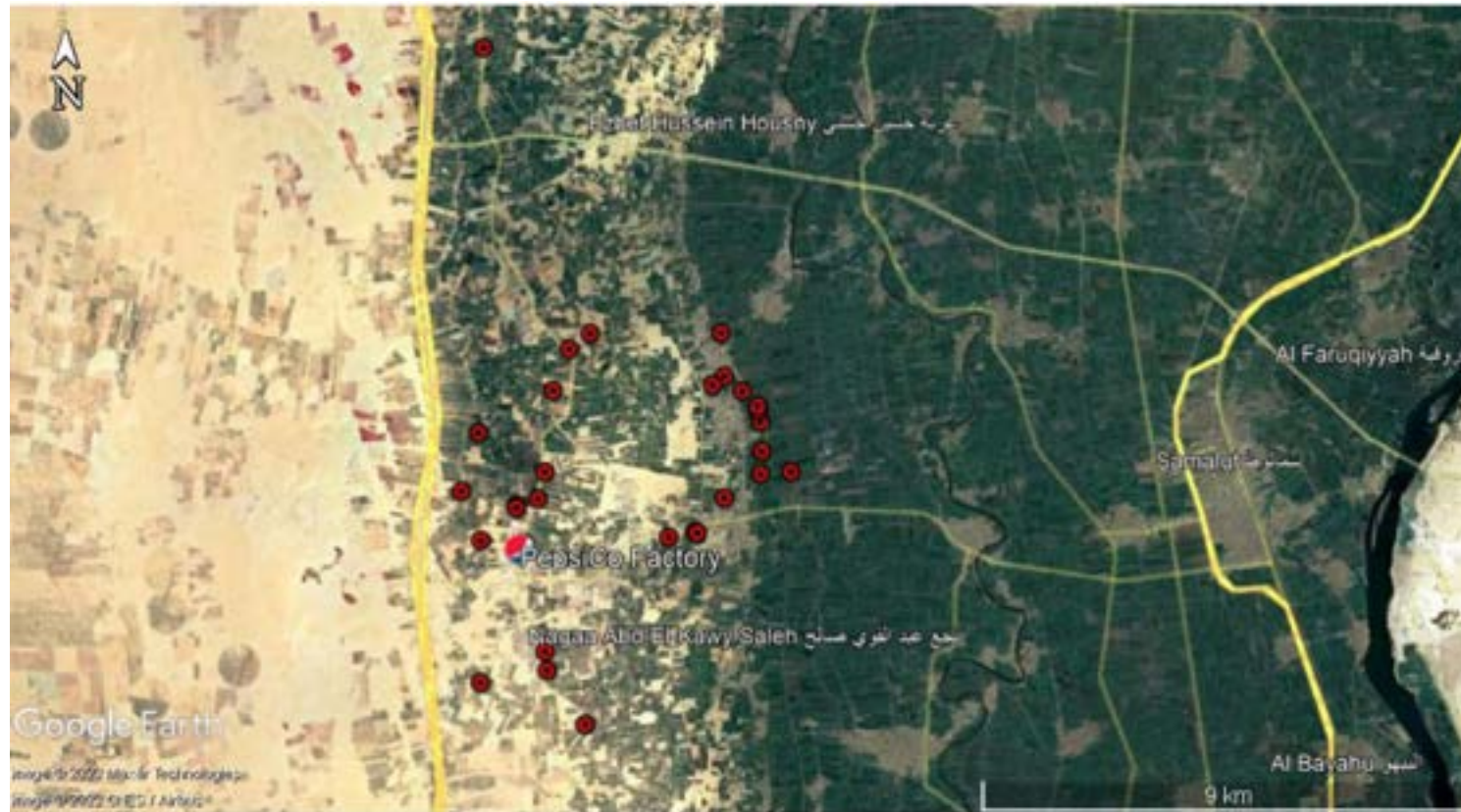
Compost Manufacturing



Water Preservation and Replenishment (Water Smart)

- CARE selected 30 feddans belonging to 30 farmers (21 men and nine women) to test improved irrigation methods: 24 feddans received drip irrigation and six received sprinkler irrigation.
- 41 feddans have adopted modern irrigation systems (i.e., drip or sprinkler) of which 30 are funded by PepsiCo Foundation through the project and 11 feddans are supported through the farmers' own investment.
- Seven indirect participants adopted modern irrigation systems in 14 feddans for winter seasons at their own expense in the two seasons.
- A total of 1,153 farmers (115% of the target) were trained in water-efficient irrigation, and they are now adopting new techniques and practices that resulted in more water saved.





The locations of the 30 fields that were upgraded to modern irrigation systems

The following table shows the quantities of saved water in Minya governorate for till date:



Overall water savings to date	
Total water savings during summer 2022	173.93 million liters
Total water savings during winter 2022	246.54 million liters
Total water savings for winter 2023 ¹	204.40 million liters
Overall total	624.95 million liters



Table 1: total water saved during winter 2023	
Total water saved from rom the upgrades to modern irrigation	102.5 million liters
Training on irrigation best management practices (BMP)	46.25 million liters
Additional savings from nearby 14 feddans of motivated farmers	55.6 million liters
Total water savings for winter 2023	204.4 million liters

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**Thank you for
your attention**



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