



Urban Agriculture in the Greater Cairo Region

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für Internationale
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Workshop on Implementation of
Nature-based Solutions to tackle climate change
**Session 2a: Cities, urbanization - The role of
NbS to face urban challenges**

Marseille (France)
22-24 January 2019

Introduction

PDP is an Egyptian-German development measure implemented in cooperation between **MoHUUC** and **GIZ** on behalf of **BMZ** with a co-financing from the **EU**.



Current Phase: 12/2010 – 6/2019

Objective: Public administration and civil society organisations collaborate in improving services and environmental conditions for the poor urban population.

Among PDP's components is a Climate Change and Urban Resilience component that aims to improve the capacity of local residents to adapt to the impacts of climate change through small-scale measures and awareness measures.

As part of its Climate Change Adaptation Strategy, the PDP implemented 'socio-economic measures', which specifically aim at supporting local communities in informal settlements to participate in urban agriculture activities as a means to provide income generating opportunities while improving the microclimate.



Introduction

Issue of Climate change: heat stress, food security, social and economic development.

- **Type of ecosystem:** urban areas (unplanned informal settlements).
- **Type of NbS:** Green infrastructure.
- **Project leader and partners:** GIZ Participatory Development Programme in Urban Areas, technical partner (consultant), local CBOs and community members.
- **Calendar:** Rooftop Farming Pilot project implemented between 2014 and 2015, Rooftop Farming Hubs project implemented between 2017 and 2018.
- **Funding:** German Federal Ministry for Economic Cooperation and Development (BMZ) (100%).

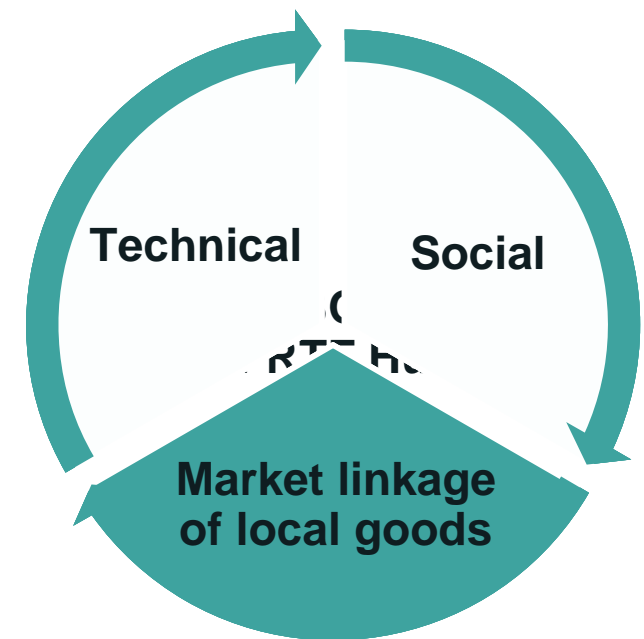
Objectives

- **Objectives of the session**

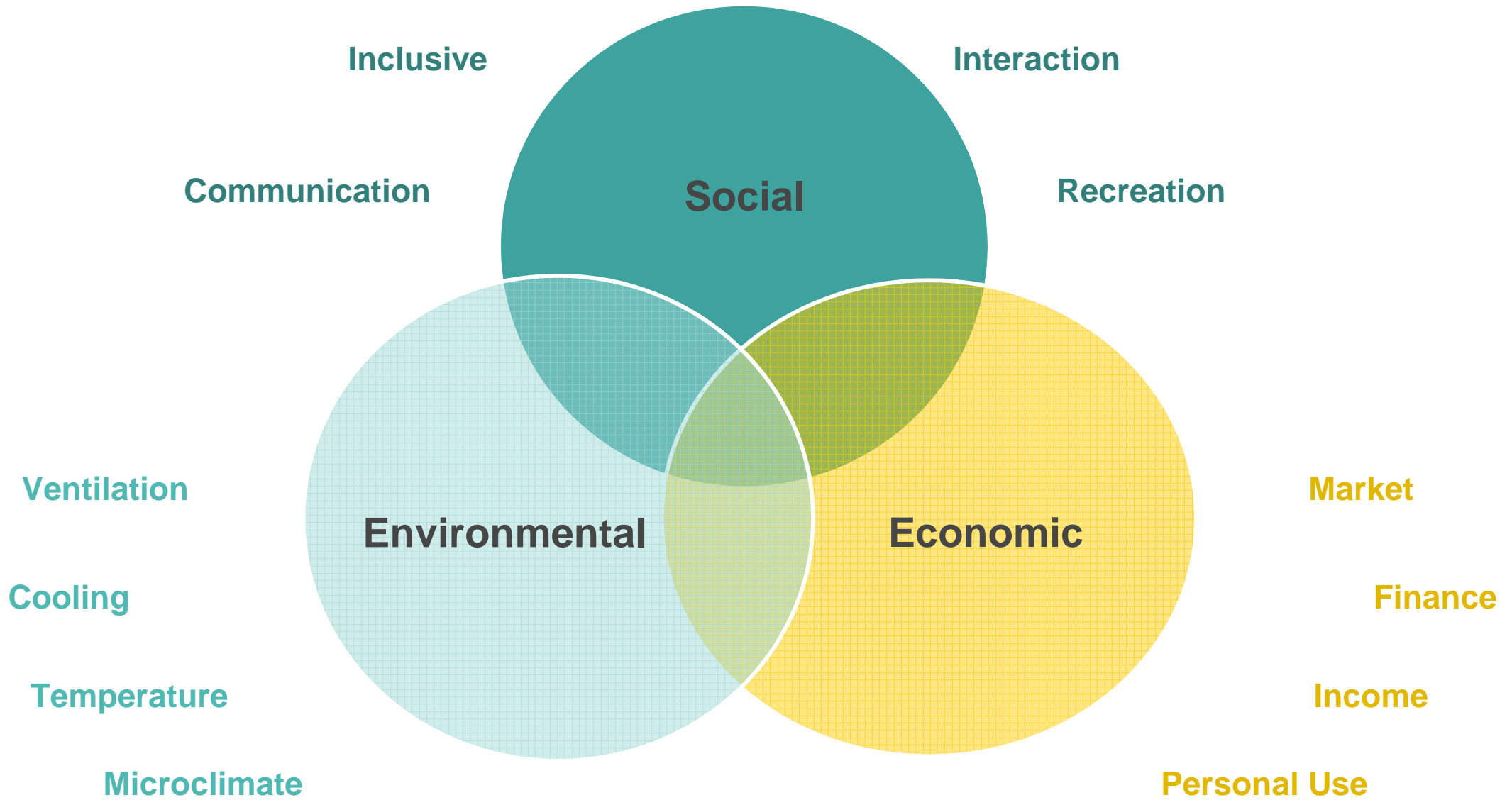
To demonstrate that a local social-business model and a community of practice are essential in the implementation of rooftop farming and urban agriculture as NBS projects.

- **Objectives of the project**

Through embedding RTF knowledge and practice within two locally active CBOs in two targeted areas, the hubs serve as:

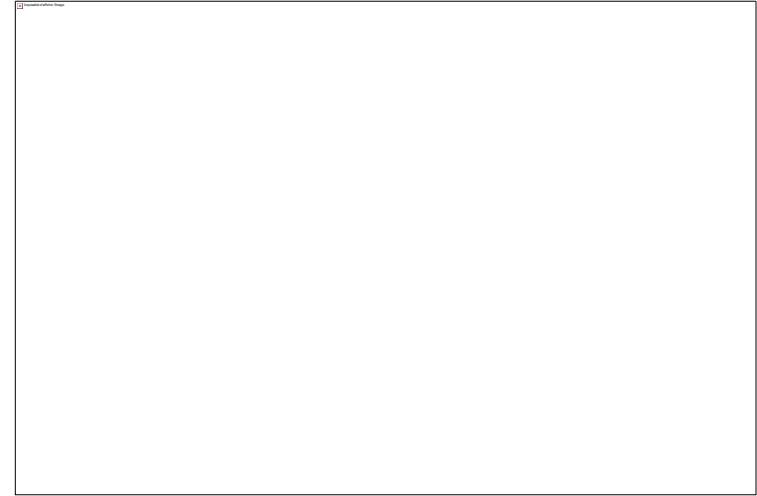


Results



Implementation challenges

- Selection **criteria** limit participation
- Timings of the **training** sessions
- Beneficiaries' **commitment** and drop out
- **Cultivation** issues (soil mixture, seeds, grass)
- Maintenance and **crop care** (nutrient and watering)
- Interrupted and delayed **monitoring**
- **Funding** and sustainability
- **Heat** waves and sand storms
- Pest and birds **attacks**
- Increased **water** bills

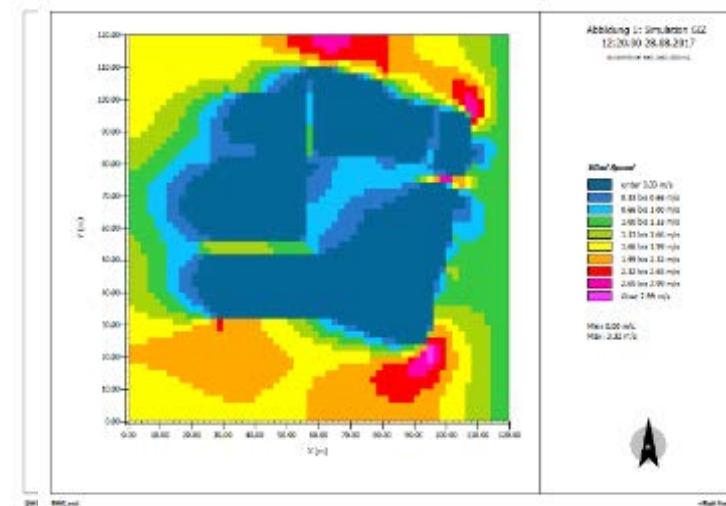


Best practices

- **Capacity development** through theoretical, technical and practical trainings
- Remote **monitoring** should be applied throughout the implementation process
- Locally **institutionalised knowledge** is easily accessed
- Geographic distribution promotes **communities of practice**
- Financial contribution induces **ownership** and commitment
- Crop choices should be based on proper **market research** and planning
- Sensitivity to the **socio-economic conditions** is crucial in implementation

Conclusions

- Cost-benefit analysis of a sustainable social business model is necessary to determine most financially viable scheme through studying:
 - Types of produce
 - Farming techniques
 - Market linkages
 - Co-financing schemes
- Parametric studies to measure the impact of RTF on the micro-climate through simulations, measuring micro-climatic aspects before and after project implementation.



What is next

Mainstreaming Climate Change Adaptation in GIZ Urban Development projects.

Cooperation with University of Pennsylvania students' project to partner up with the RTF hubs and stakeholders to grow and build on our existing impact, as well as widen the outreach based on our best practice.



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Thank you

For more information:

<https://Egypt-urban.net/>

<https://www.facebook.com/PDPeg/>

<https://panorama.solutions/en/solution/urban-rooftop-farming-heat-wave-buffering-greater-cairo-region-0>

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