



URBAN AGRICULTURE IN CASABLANCA (Morocco)

ACTION BRIEF

CODE: CAS-AB7

URBAN AGRICULTURE AND INFORMAL SETTLEMENTS

TOPICS:
RESOURCES
GOVERNANCE
CAPACITIES

CHALLENGE

The goal of this measure is a dovetailing of agriculture with settlement areas in order to improve the resulting synergies in peri-urban areas and to steer its development. Migration to Ouled Ahmed is driven by the need for affordable housing at a location close to the city. Particularly in peri-urban informal settlements the generation of productive, green and attractive spatial structures through Urban Agriculture offers possibilities to counteract urban sprawl and

surface sealing in the region, and can be conceived and exploited as an instrument for a steering urban development. The area of Ouled Ahmed is currently subject to a considerable pressure of transformation. Investors have recently begun to build a social housing estate – 30.000 apartments for approx. 120.000 people around Ouled Ahmed under the frame of a Moroccan program to eliminate informal settlements.

ACTION

The activities were chosen in agreement with local stakeholders and carried out in collaboration with local actors and inhabitants. Thus, they can be considered as solutions to pressing suburban problems.

1. SCHOOL GARDEN

The school garden in the elementary school of Ouled Ahmed is an educational tool to educate children in agriculture, healthy nutrition, nature and environment. An e-learning program, shaped as games was developed and tested. Furthermore, the school was connected with the climatology database WISE. This allows teachers and students to access precise local climatology data.

2. SOLIDARITY FARM

The “ferme solidaire” is a community garden initiated by the project and is located on an area of 1600 m² in the Douar. The garden is used to

teach local women in organic farming, give them the opportunity to grow vegetables and herbs for their households and to generate income for the women. The land is aside the primary school. Earlier, the waste water of the local hammam which is situated over the street was sprinkled on the surface and caused frequent floodings of the school’s area.

3. CONSTRUCTED WETLAND

The hammam waste water consists primarily of high amounts of low polluted bathing water. In the constructed wetland it is treated in order to re-use it for irrigation. The treatment is performed by a gravel-plant filter which was constructed on the solidarity farm to demonstrate a low-tech low cost technology.

The treatment capacity is 10 m³ per day which is roughly 1/3 of the Hammam’s total effluent. The organic compounds (COD) are reduced by 80 %.



Solidarity farm



constructed wetland



School garden

Nitrogen and phosphate remain in an amount that is useful for fertilising the garden plants. Inhabitants were involved in the planning process, construction work and maintenance. The

monitoring is carried out by a PhD-student of the university Hassan II, Casablanca.

RESULTS

STATE OF IMPLEMENTATION

The three subprojects have been successfully implemented. Currently, it is being discussed to include the project into the local development plan. The school garden activities are recognised by the regional education administration and are candidates of the Moroccan program “eco ecole”.

LOCAL USERS / TARGET GROUPS

The inhabitants of Ouled Ahmed are drivers of the process. The solidarity farm is used by local women. For eight families it covers the personal consumption of vegetables and also generates a small income. Starting from the school, children and parents become interested and involved. Another target group are engineers and architects in administration and universities.

IMPACTS AND MULTIPLICATION

The school garden and the farm are little oases and became focal points for social exchange and activities among inhabitants, particular women. It offers them the chance to become active and

improve their quality of life. They started to organise themselves. The school garden and the farm are a show case for micro-gardening like roof and back yard gardening and it sprawls slowly throughout the Douar.

LONG-TERM CONSOLIDATION

It is intended by the project and local actors to involve the municipal government and administration to secure the school garden and solidarity farm and foster micro-gardening in Ouled Ahmed. The mushrooming of social housing around Ouled Ahmed offers interesting opportunities for interrelations, e.g. marketing of products, multiplication of the constructed wetland for irrigation of street trees and others. The treatment of hammam waste water using a constructed wetland and reuse for irrigation bears a high potential as a low-tech water treatment technology not only for other informal settlements in the peri-urban area of Casablanca but throughout Morocco and other Arabic countries as well.

CONTACT

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