EURO-MEDITERRANEAN REGIONAL PROGRAMME for Local Water Management ME8/AIDCO/2001/0515/59763-P 016

SWaMMA Project

Solid Waste Management in Mostafa Agha

Let us live healthily in a clean environment with clean water

Improving irrigation water quality and flow

SWaMMA aims to improve the health and livelihoods of the rural community in Mostafa Agha, Egypt and provide a pilot project reference for other areas in the Mediterranean basin.

WaMMA Project Mission: To introduce a domestic and agricultural solid waste solution to Mostafa Agha in order to improve irrigation water quality and flow in canals and provide benefits to the community.

Anticipated outcomes of the project include:

- Improved water quality in irrigation canals:
- Improved irrigation water flow to fields:
- Improved sanitation in Mostafa Agha;
- Increased awareness of solid waste issues in the canal and for the



- Development of sustainable long-term waste management program;
- Development of a sample project that can be replicated in other villages.

Since its conception in early 2005 SWaMMA has followed a structured project methodology comprising 5 main phases: identification, feasibility, planning, delivery and completion.

SWaMMA is now focussing on the completion phase that will continue until September 2006 and includes activities such as ensuring the continuation of the project (creation of a Community Development Association and project impact evaluation).



"Sustainable and replicable" is the key to the success of SWaMMA project. Importantly, SWaMMA has only funded the acquisition of initial equipment and supplies, and some training and awareness raising programs (school students, women, farmers etc.). This necessitated local, regional and national collaboration in the realisation of the project. Local actors carried out most of the activities. Since the beginning of the project in early 2005 community, regional and national support for the project has been high.



SWaMMA has built on this by creating institutional structures and lasting stakeholder relationships, institutionalising a practical solution and building the core capacities required in the community to ensure the ongoing operations into the future.





SWaMMA forms a part of the ISIIMM Project

(Institutional and Social Innovations in Irrigation Mediterranean Management).

www.isiimm.agropolis.orgThis project is funded by the European Union





Selecting a site for the project

or any pilot project, it is essential to carefully identify and verify the feasibility of the target site before implementation. The SWaMMA project carried out an analysis and lengthy feasibility study of three potential sites across the ISIIMM case study areas: Al Berba in Minya; Seila in Fayoum and Mostafa Agha in Behera. Although all three sites showed clear needs for solid waste management, Mostafa Agha was selected based on pre-defined criteria such as:

- Irrigation must pass through an individual village that is separated from other pollution sources
- 2 Appropriate and reasonable support from local stakeholders, including support on gender and health issues
- 3 Small enough to be implemented within the 50 000 euros budget constraint
- 4 Easy ongoing evaluation of project impacts

Mostafa Agha is a village situated in the northwest of the Nile Delta in the Abo Homos District of the Behera Governorate. With a population of 3000 farmers and their families maintaining their

Mostafa Agha

livelihoods through

the cultivation of rice, cotton and wheat. Mostafa Agha has to deal with an estimated 740 tonnes of agricultural waste per season and 1.5 tonnes/ day of domestic waste. The combination of the size and location of Mostafa Agha along with its lack of existing infrastructure for solid waste collection and treatment and the consequent effects of the

waste on the Al Resga irrigation canal that runs through Mostafa Agha, made a strong case for ISIIMM to select Mostafa Agha as the site for the Solid Waste Management project. Socially and institutionally, the enthusiasm and support of the local communities, organisations and authorities made Mostafa Agha an excellent site for the ISIIMM pilot project on solid waste management.

SWaMMA Project on cover

Why target solid waste in a water resource and irrigation project?

Water quality and flow in irrigation canals is an issue that affects agriculture, sanitation and living standards in rural Egypt. Apart from irrigating fields, polluted irrigation waters are often also used for washing, cooking and drinkina.

Solid waste in rural Egypt is typically derived from 2 key sources: i.) Agriculture and ii) **Domestic**. Solid waste in irrigation canals accumulates as the canal passes through each town or village. These villages often do not have sufficient technical infrastructure to deal with solid waste. This problem is exacerbated by the lack of social awareness and action and appropriate institutional structure for solid waste management.

To address this issue in Mostafa Agha village, the SWaMMA project is implementing a water quality improvement project for irrigation canals through better management of agricultural and domestic solid waste. This project comprises a physical solution and institutional and social activities that tie in with the IWRM issue of gender and other key global issues such as youth and sanitation.

Regional **Monitoring Support Unit** (RMSU) visits the **ISIIMM Project**

René Kersauze, the **Deputy Coordinator** of the RMSU made his first visit to the ISIIMM Project during 22-24 May 2006. The meeting provided the medium for a meaningful exchange

and established a better understanding of the progress, roles and opportunities as the ISIIMM Project moves into its final year within the EU MEDA-WATER framework.

Sept. 2006 **April 2006**

Identification

Feasibility

Planning

Delivery

Completion

Project brief

Jan. 2005

Feasibility Report

March 2005

Implementation plan

July 2005

Project implementation Progress Reporting

Nov. 2005

Projet Review/Evaluation Handover ongoing operations **Projet Progress**







Institutional solutions

- Training and Awareness campaigns (school communities, women focus groups, farmers)
- Cost recovery through household fees and selling compost
- Division of the community into manageable units
- Creation of Local and Regional Committees
- Establishment of Community Development Association
- Management and operations performed and financed by the local community
- Support and creation of linkages between communities, authorities, NGOs and other projects.

Activities	No. of Events	No. of Attendees
1.Awareness Campaigns a- For Farmers b- Females focus groups c- School campaigns	7 days 7 days 3 months	100 75 200
2.Technical Training	1 month	100 Farmers
Meetings between Local Committee and Regional Committee	3 Times	13 members
3. Local Committee Meetings	Weekly since Jan 2006	9 members
4. Regional Committee Meetings	6	4 members

The inauguration

The official inauguration of the SWaMMA Project took place on the 13th May 2006 in Mostafa Agha village.



In front of hundreds of people from the community of Mostafa Agha the Governor of Behera, His Excellence Adel Labib expressed his support for the project and for further development in the future. Speeches were also made by Dr. Mohamed Nawar (Director of the Centre for Rural Development and Research Studies), and

Dr. Michel Soulié (ISIIMM Project Head). Various key stakeholders also attended the event including the Under Secretary of Irrigation, the Under Secretary of Agriculture, the Head of Abu Homos City Council, Members of Parliament, the Director General of Extension Agriculture, the Director of Training in Agriculture Department, Head of Local Unit, the Inspector of Irrigation, the General Director of irrigation, members of the CRDRS, representatives of the Fayoum community and other projects.

The inauguration was covered by national television, and national and regional

newspapers. Students displayed their school projects and a tour was made of the village that showed the enormous progress that had been made towards cleaning up the village and institutionalising solid waste management in Mostafa Agha.



Thank you

To Dr Mohamed Nawar, Mahmoud Al Almir, Ahmed Farouk and Ayman Hasaballa of the ISIIMM Egypt-Behera team who are responsible for local coordination and the groundwork in laying the foundations for the success of the SWAMMA Project

Also to the community of Mostafa Agha, the Local Unit at Gawad Hosny, the City Council of Abo Homos, the Behera Governorate, the Ministry of Agriculture, the Ministry of Water Resources and Irrigation, and all the other stakeholders who contributed through time, effort and resources to the SWaMMA Project.

Interview with

Fatma Attia

(Ministry of Water Resources and Irrigation, Egypt)



What potentials do you see in a pilot project such as SWaMMA for irrigation and water resources; and for the Egyptian rural community in general?

The problems of pollution in the country at various scales are a result of various factors/sources. In my opinion, the main sources are industrial and agricultural (pesticides and fertilizers). However, we cannot solve everything at once.

This is why the project is a good start to illustrate the following: Possibility of solving a pollution/ environmental problem in a participatory way; Illustration and analysis of various options for solving the problem; Impacts on the rural community (health, life style, etc.); and Costs and benefits.

After the project is operational, results can be disseminated to other areas (local) to illustrate the impacts through visits to the project area and not through presentations. This is why some works have to be made to consider this project a model/pilot. This is the only means to enlarge the scale to both regional and national (not in one shot or one day).

ISIIMM news

(also available in PDF, see ISIIMM website)

«Promoting an integrated and balanced management of water resources by reconciling respect for the environment with economically viable irrigated agriculture»

ISIIMM

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What do you consider are the key challenges for the durability and replicability of SWaMMA and how do you think the Ministry of Water Resources and Irrigation could support such projects?

The main issue is the sustainability. Otherwise, it will be a big loss, not only to the community where it has been implemented, but also to the big project.

This requires that the community, through WUAs be involved in all steps, e.g. the initiative should have come from them not offered. However, this can be solved by giving them a larger role in the future actions and responsibilities. No incentives, they should know and acknowledge the impacts.

The main factors challenging the projects are related to both the ownership of the community and the possible support that can be offered by the state.

What role could the state play in assuring the sustainability and replicability of SWaMMA?

First, the project should respond to the state policy on environmental protection and enhancement of rural livelihood. Which is a reality although not formalized. Second, representatives from main state's institutions should be involved from the beginning otherwise they will try to show it is a failure, this is very natural.



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SWaMMA Project partners

Agropolis International

The EU MEDA WATER Programme through Agropolis is the main sponsor of the SWaMMA Project and the primary source of funding for SWaMMA's equipment, supplies, awareness raising and training activities.

www.agropolis.fr

VERSeau Développement

A non-profit association based in Montpellier, France - VERSeau is a key partner that assures the overall management, administration and evaluation of the SWaMMA project.

www.verseaudeveloppement.com

Centre for Rural **Development and Research Studies (CRDRS)**

The CRDRS is the main Egyptian partner assuring the management, coordination and implementation of the SWaMMA project at the local and national level.

Local Committee

A local committee consisting of respected members of the Mostafa Agha community is crucial in planning and designing the project and mobilising the community to implement the project.

Regional Committee

The regional committee brings together key local stakeholders: Head of Abo Homos City Council (Committee Chair), Director of the Agriculture Extension (Ministry of Agriculture, Behera Governorate), Inspector of Irrigation (Behera Directorate) and the Head of the Gawad Hosny Local Unit.

Egyptian Water Partnership (EWP)

The Egyptian Water Partnership aims to "Promoting sustainable management of water resources at national and local levels, through partnership".

The EWP contributed water-learning kits for the school awareness raising campaigns.

www.egyptianwaterpartnership.org

Interesting links about solid waste management

• Community Base Solid Waste Management and Water Supply Projects, J. Anschütz (1995)

www.waste.nl

• Community Base Solid Waste Management in Yogya, Indonesia, References and Resources, D. Wensauer, A. Parsamanesh (2004)

www.capcollege.bc.ca