

Rajshahi WASPA Learning Alliance Meeting

Developing Participatory Action Plans for Wastewater Management for Agriculture

23rd May 2007

Introduction

The Learning Alliances Workshop of the Wastewater Agriculture and Sanitation for Poverty Alleviation (WASPA) Project was held in Rajshahi on 23 May 2007. The objectives of the workshop were to formalize the formation of Learning Alliances and to develop visions and strategies to address the issues arising in Rajshahi in relation to waste management and the use of wastewater in agriculture.

The workshop was convened by NGO Forum for Drinking Water Supply and Sanitation (NGOF Forum) and International Water Management Institute (IWMI) under the EU Asia Pro Eco Fund. It was attended by various stakeholders from Rajshahi including government officials, industry representatives, farmers, NGOs, health professionals and the press.

Welcoming the workshop participants Mr. S.M.A. Rashid, Executive Director, NGO Forum, said that wastewater is considered as wealth for the farmers and keeping this important notion in mind the WASPA project is being implemented with the participation of stakeholders who are involved with the production, management and use of wastewater. He mentioned that Learning Alliances are an important part of the project and it is the responsibility of the Learning Alliance members to ascertain appropriate ways to test solutions for sanitation and wastewater management so that wastewater can be used in agriculture without affecting the health of farmers or their crops. He sought cooperation from the participants in making the workshop a success.

Professor Dr. Md. Mujibur Rahman, Director, International Training Network (ITN) Bangladesh, and the Special Guest of the workshop, mentioned that the use of wastewater in agriculture is profitable because of the existence of the necessary organic elements but he emphasized that it can have harmful effects and therefore it must be used in a safe and controlled way. He stated that there are different ways for treatment and depending on the characteristic of the wastes appropriate measures should be undertaken. Professor Rahman said that it should be

everybody's responsibility to keep the environment clean and put back the necessary organic elements to the soil. For example he mentioned that organic elements are removed from the land and water from the river during agricultural production, but that these should be returned to the respective places from where they are taken from.

Ms. Alexandra Clemett, Researcher, IWMI, said that the main purpose of organizing the workshop is to get the people of different backgrounds together with a view to developing appropriate plan for solutions to the wastewater problems. She mentioned that Learning Alliances are about addressing issues of wastewater use in agriculture which includes wastewater production, management and use, as well as issues around sanitation and agriculture. She also stated that these are issues are not often addressed in one meeting; however to find effective ways of managing wastewater for agriculture, all relevant sectors must be considered, and those who are involved in these sectors need to work together. Ms. Clemett anticipated that through the workshop a realistic action plan would be developed which would contribute to the improvement of the environment in Rajshahi City.

Mr. Abul Bashar, Superintending Engineer, Rajshahi Circle, Department of Public Health Engineering (DPHE) and the Chief Guest of the workshop, emphasized on using wastewater for agricultural purpose as it allows the farmers to purchase less chemical fertilizer from the market and thereby save money. He said it is not possible in the developed countries to throw away wastes here and there as there are laws for this. The people in Bangladesh should also adopt the practice like the people of developed countries. Mr. Bashar underscored the need for reconstruction of the sewerage system as he thinks that without this it would be difficult to treat wastewater. He highlighted on the importance of Learning Alliance formation and expressed this opinion that it would be able to play the anticipated role in the WASPA project implementation.

Dr. Laxmi Kanta Sanyal, Deputy Director, Rajshahi Medical Collage Hospital and the Chairperson of the workshop, said that wastes are wealth whether they come from the human being or from other sources. However people who are using wastewater without treatment are putting their health at great risk and therefore measures should be undertaken to use wastewater after proper treatment. In connection with this he explained that solid and clinical waste generated in the hospital is incinerated.

Following the inaugural session of the workshop, Mr. Rizwan Ahmed, Team Leader for WASPA Bangladesh, gave an introduction to the WASPA Project and shared the workshop objectives. Which were to:

The Key issues of his presentation were:

- Goal and objectives of the project.
- Project site briefing at a glance.
- Relationship between the wastewater and agriculture.
- What is LA and why it is important regarding this project.
- Preliminary selected list of the LA members.
- Positive side of using wastewater in agriculture and its difficulties.
- List of the accomplished activities of the project till the date.

The session was followed by a presentation by Mr. Md. Maksudul Amin, Technical Specialist, WASPA Bangladesh, on the problems identified by the stakeholders who had been interviewed in Rajshahi. Mr. Amin explained that not all of the findings had been confirmed and that the project team was undertaking a number of assessments that they would present to the LA in the future. The issues identified by the stakeholders and LA members were grouped for the purposes of the project in three areas or themes:

1. Residential and Commercial;
2. Hospitals and Industries;
3. Wastewater Farmers.

The issues that he discussed, which had arisen from the stakeholder analysis phase of the project were:

Residential and Commercial

- Households without septic tanks dispose wastewater into drains
- Disposal of grey water by households
- Lack of awareness of impacts
- Septic tanks are expensive
- Solid waste collection is not 100% in all wards
- People throw waste in canal even when served by collection services
- Bad smell of canals
- Insect breeding increase in the canals in the residential areas
- Open drains cause aesthetic problems
- High nutrients content in water

Hospitals and Industries

- Drain water with chemicals, oil and high BOD;
- Disposal of untreated industrial waster;
- None of industries has treatment plant;

- Poor implementation of laws and regulations for treatment of waste;
- Industrial waste is not a priority for law enforcement authority;
- Treatment facilities are expensive;
- Hazardous waste collected and dumped together with household solid waste;
- Regulations on hazardous waste are not properly followed;
- Insufficient frequent collection of hazardous waste;
- Part of the hazardous waste from clinics is dumped into drain;
- Drain water with high BOD, coliform and pathogens; and
- Hospitals have septic tanks but part of the wastewater goes into drain.

Wastewater Farmers

- Farmers depend on wastewater for livelihood;
- No alternative sources of water;
- High prevalence of water-related diseases (skin rashes) as compared to clean water farmers;
- Solid waste in the wastewater causes difficulties with irrigation;
- Lack of awareness of wastewater risks among farmers;
- Lack of extension support for wastewater management;
- Farmers have risks of contact with pathogens causing diarrhea and diseases; and
- Farmers are not organized.

When the participants had had sufficient time to discuss the issues raised, they were asked to develop long term visions for each of the three themes. Once the whole group had agreed on the vision they were divided into three groups, in accordance with the themes, and were asked to consider what strategies could be used to achieve them. Towards the end of the workshop the three groups were asked to come back together and to report to the rest of the participants on their visions and strategies.

After the workshop the project team formalized the visions and strategies, and put them into a consistent framework, without losing the essence of the stakeholders' visions and needs.

Outcomes

This document presents the Visions and the Strategies developed by the Rajshahi Learning Alliance for three areas in their city:

1. Residents and commercial;
2. Wastewater farmers; and
3. Industries and hospitals.

The Visions and Strategies given here are taken from those given in the Learning Alliance meeting but have been translated from Bengali and the wording has been changed slightly. The sense of them has however been maintained and are presented here.

Vision	Strategies
1. To build well planned residential areas that have proper septic tanks connected to underground sewage systems and treatment facilities	RDA and RCC develop a realistic wastewater management plan.
	Separate collection of solid and hazardous waste, including market waste.
	Assist local government to ensure people follow laws.
	RDA and RCC should ensure that the construction of septic tanks is mandatory, even for non-pucca structures.
2. To ensure the supply of better quality wastewater to the farmers by following waste disposal laws and treating hospital and industrial wastewater	Coordination with relevant agencies in relation to wastewater management from industrial units and medical centers.
	Advocacy with organizations that are responsible for formulating and enforcing laws in wastewater management, to modernize existing laws and regulations.
	Establish a lobbying group comprising of general people and motivating the concerned authorities and individuals (factories and clinics) to properly carry out their responsibilities.
	Develop wastewater treatment plans for the industrial area
3. To ensure wastewater contains beneficial nutrients without harmful elements, to reduce health hazards from wastewater agriculture and improve yield.	Farmers to get organized
	Provision for wastewater treatment
	Provision for alternative water source
	Provision for a well planned drainage system
	Reconstruction of drains
	Training/orientation for farmers - Awareness raising among farmers about proper use of wastewater to reduce health risks and improve yields
	Coordination between government agencies and NGOs
	Awareness raising among consumers and reduction of contamination in markets