

Minutes of the meeting held at Winrock International India on June 24, 2004

Subject: First Round of Consultative Group Discussions and Presentations on the Findings of the Delhi Study

Participants:

Winrock International India

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Mr. Sunandan Tiwari
Mr. Shashikant Chopde
Miss Karishma Aneja

Spatial Decisions

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Guests

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AGENDA

- 1. Round of Introductions**
- 2. Introductory Presentation** (Vinay Tandon): The introductory presentation laid out the context within which the study has been formulated, raised some broad issues that need to be addressed, and provided a rationale for arranging Consultative Group meetings (referred in the presentation as Consultative & Action Group meetings) and raised questions on the role that such a forum could play towards influencing policy.
- 3. Project Overview** (Sunandan Tiwari): This presentation provided an overview of the project in terms of the objectives, project activities, study sites and project partners.
- 4. The Delhi Study** (Ritu Khanna): A situational analysis of urban wastewater production, treatment and utilisation by different sectors in Delhi was presented. Specific references were made to the reuse of wastewater for agriculture, and the impacts on livelihoods and health. The preliminary findings of the study were also shared. Potential remedial measures were also presented.
- 5. Discussions**

DISCUSSION POINTS

- **Planning strategies:** currently there is growing shift towards sustainable planning that includes addressing the issues of Services, Land use and Transportation in tandem as compared to earlier when greater emphasis was laid on transportation. Under this approach there can possibly be improved planning for future drainage networks and wastewater treatment.
- **Use of ‘bio-indicators’:** Biological indicators are a valid, relatively simple and cost effective method for assessing and monitoring physio-chemical parameters of a water body. Some of the examples provided were: scale structure and fin size of fish as a bio-indicator for water quality; presence / absence of certain indicative plants for soil and water quality. It was reported that ‘plant association’ studies have been carried out on the Yamuna flood plains, details of which are available with Prof. Suneja. It was suggested that appropriate bio-indicators be identified and monitored under this study.
- **Need to extensively work on health and environmental impacts of wastewater:** This was mentioned in the context that ill treated wastewater application could have severe effects on the soil characteristics. In this regard it was also mentioned that nutrients in wastewater will benefit only certain types of crops and therefore these nutrients and the corresponding crops will have to be identified so as to make wastewater-based agriculture more efficient and productive. It was reported that the Indian Agriculture Research Institute has carried out studies on the impacts of pollution on vegetables and that these studies would provide useful insights for this project.
- **Looking ahead:** it was suggested that this project should try and identify ‘next generation’ issues regarding the use of wastewater for agriculture. This exercise would help in coming up with appropriate remedial measures that could be presented to policy makers and practitioners. It was envisaged that an important output of this study would be a set of guidelines for the Delhi Government regarding the improved management of wastewater.
- **Undertaking demonstration plots:** that field-test and demonstrate the efficacy of the suggested remedial measures for the appropriate management of urban wastewater was suggested. The rationale behind this suggestion was that measures undertaken in other countries to reduce the adverse impacts of wastewater use are not easily applicable / not accepted in the Indian scenario and therefore, a demonstration in Indian conditions would greatly help in influencing policy makers. It was suggested that in the course of the study potential sites for demonstration plots be identified.

PROPOSED FOLLOW-UP ACTIONS

- Develop a status paper on the wastewater situation in Delhi
- Organise a Consultative & Action Group meeting with increased participation from various key stakeholders in Mid July.

- Explore the utilisation of bio-indicators for assessing and monitoring the impacts of wastewater on the environment and on the health and livelihoods of dependent communities
- Other reuse options for wastewater, which provide increased livelihood opportunities for the urban poor with minimized health risks such as floriculture, aquaculture to be explored.
- Identify the lacunae in the existing policies of wastewater reuse and propose necessary changes / amendments
- Need to work towards the larger objective of restoring the ecology of River Yamuna