EXECUTIVE SUMMARY

Aakash Ganga Implementation (Rooftop Rainwater Harvesting Scheme)

2010

Proposal to Government of Rajasthan &Investors For Drinking Water & Garden Irrigation in 50-100 Villages

BY

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Executive Summary

Aakash Ganga (AG), a rooftop rainwater harvesting scheme, is economically, culturally, and operationally sustainable. During 2003 – 2008, Sustainable Innovations (SI), a US-based not-for-profit corporation, perfected AG through implementation in 7 villages. It has modernized the centuries-old rainwater harvesting practices[1] and realized efficiencies in community participation, cost recovery, technology deployment[2], scientific methodologies, and innovative social enterprises[3].

SI and its implementation partner Indian Institute of Health Management Research (IIHMR) are proposing to:

1. Implement AG in 100 villages in two phases each of 50 villages spread over three districts, namely, Churu, Jhunjhunu, and Nagaur, of Rajasthan to provide safe drinking water to 250,000 – 300,000 people.
2. Connect the villages over Internet to facilitate management of water resources.
3. Set up a laboratory to test up to 1,000 water samples per month.
4. Set up a self-funding organization for operation and maintenance.

The 100-village implementation will make Rajasthan the beacon of widespread rainwater harvesting by:

- **Building social enterprises**: These enterprises will be managed by local communities and social entrepreneurs. The State would be a facilitator or promoter of water resource development.
- **Achieving financial efficiency:** AG will affect recovery of capital and operational costs through a combination of beneficiary contributions, user fees, and revenue generation. The cost recovery will enable social enterprises to grow organically – no repeat infusion of capital by government or donors.
- **Deploying advanced technologies**: AG will deploy advanced technologies, for example, satellite images to replace civil engineering surveys and IT network for monitoring water quality and utilization.

AG is proposing to implement the project as a Public-Private-and-Community Participation (PPCP) or social enterprise in 30 months at the total cost of Euro 9.6 Million with:

- Community Contribution (12%) Euro 1.1*
- Foundation Grants & Private Donors (18%) Euro 1.8
- Government of Rajasthan Contribution (70%) Euro 6.7

Total: Euro 9.6 * x Million Euro's

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[1] "*Dying Wisdom — Rise, Fall, and Potential of India's Traditional Water Harvesting Systems"* Anil Agarwal and Sunita Narain, Center for Science and Environment, New Delhi, April 2005.

[2] "*Ground Water Management and Ownership*" Planning Commission, September 2007, recommends use of information technology, remote sensors, and geographical information system.

[3] The Rajiv Gandhi National Drinking Water Mission (RGNDWM) advocated use of "scientific methodologies."

Further, AG group will:

- Invest expertise of deploying advanced technologies (satellite imaging, IT network, and sensors) for community-based social projects.
- Endow innovation, optimization, and process re-engineering for rainwater harvesting.
- Bring experience of building social enterprises for self-sustainable development and operation
- Expertise in garden and fertilizing training; irrigation equipment
- Initiate a similar process as is described in 'learning alliances' please see: www.irc.nl with proper monitoring and documentation that can be published.

Rajasthan Government will:

- Make a policy decision for implementing Aakash Ganga in 100 villages of the Churu, Jhunjhunu, and Nagaur districts.
- Designate an officer, of the rank of Special Secretary or above, for liaison purposes.
- Commit to a firm date for the start of the project.

Figure 1: Satellite Image of Harinagar

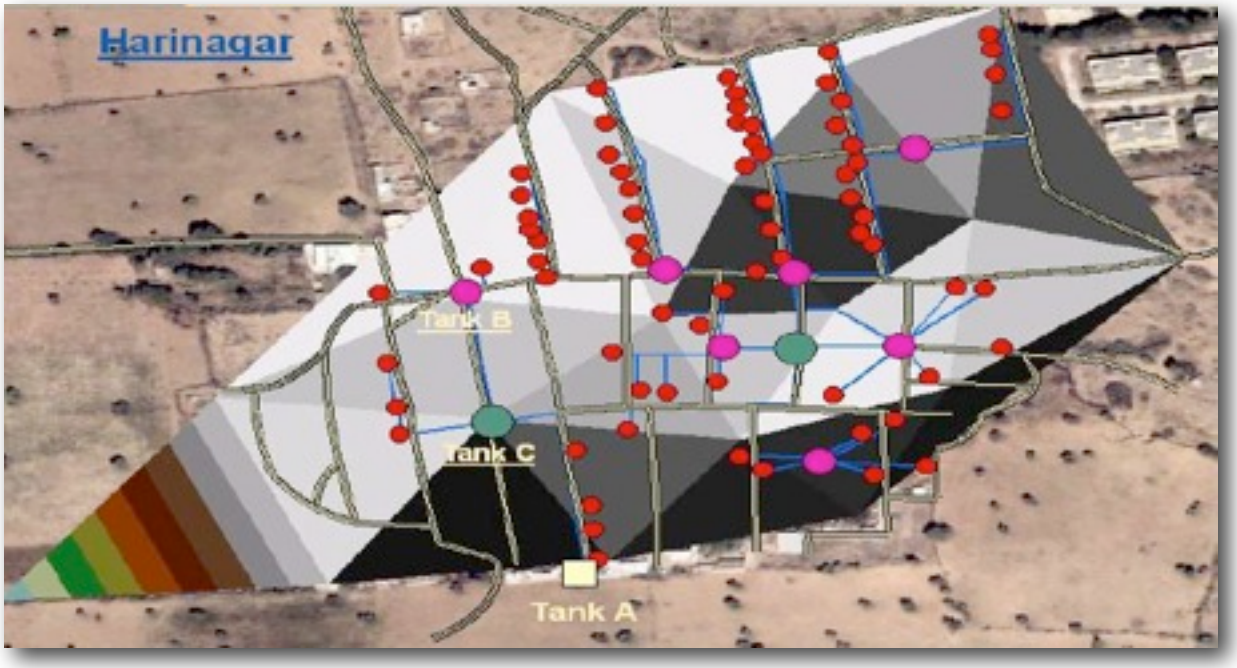

Figure 2: Automated Design of Aakash Ganga Network

Photograph 1: House Reservoir, Raila

Photograph 2: Shared Reservoir, 400,000 Liters

Photograph 3: Shared Reservoir with Plantation