

Participatory Groundwater Management and Climate Change



One Day Seminar
On

**Groundwater Management in India –
Issues and Challenges**

Organized by

National Law University, Delhi

On 21st June 2014

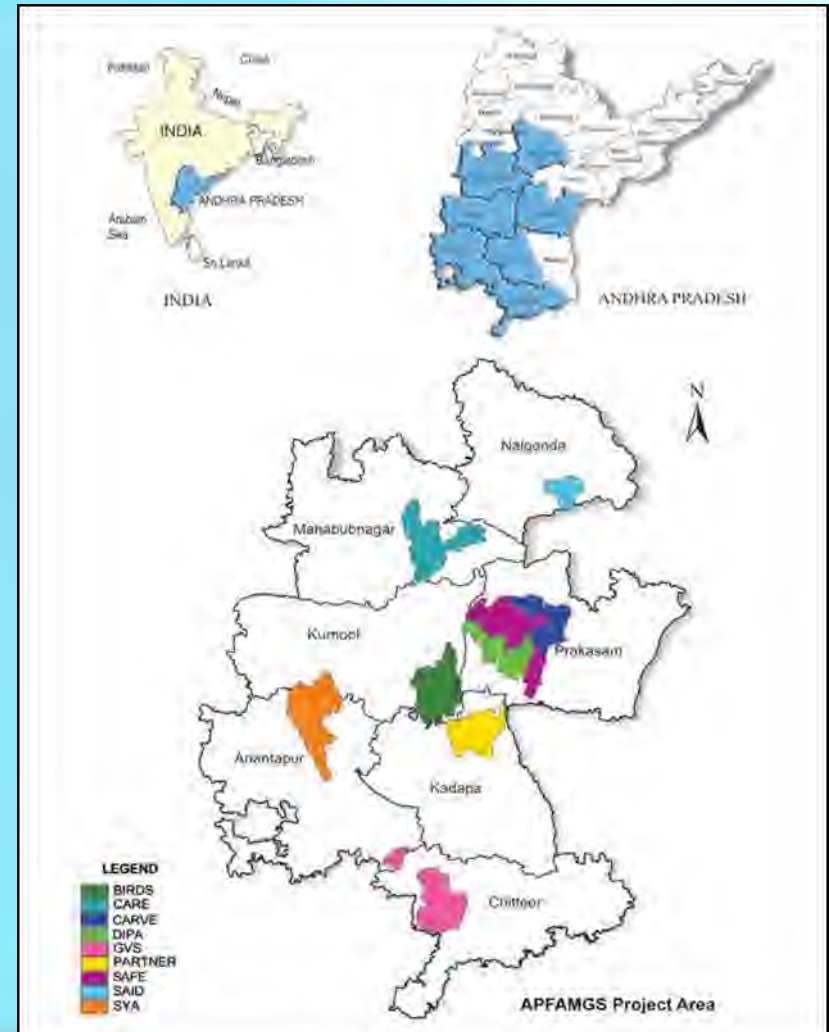
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APFAMGS - Background



- Food and Agriculture Organization (FAO) is implementing the Andhra Pradesh Farmer Managed Groundwater systems (APFAMGS) Project as a Nationally Executed (NEX) project over 5 years (2004-09).
- The Implementation is through a federation of 63 registered farmer Institutions guided by 9 NGO's.
- Operational area of the project is spread over 40 mandals forming part of 303 Panchayats in 7 districts.
- The operational unit is Hydrological Unit (63 HU's) spread over 638 habitations.





Project Premise

APFAMGS project's approach is to empower people's institution to identify solutions to manage groundwater distress

Demystify science, offer skills, capacity and knowledge (no infrastructure support/ incentives)

Strengthen people's institutions to build pro-active partnerships between up-stream and downstream water users

Group action ensure farmers work unitedly towards managing available groundwater resource optimally

Fully informed Farmers take tough decisions voluntarily (sacrifice for collective gain)

Women's participation in decision making ensures improved groundwater governance



Achievements - Hydrological Network



4333 farmer volunteers (men and women) collect data regularly from

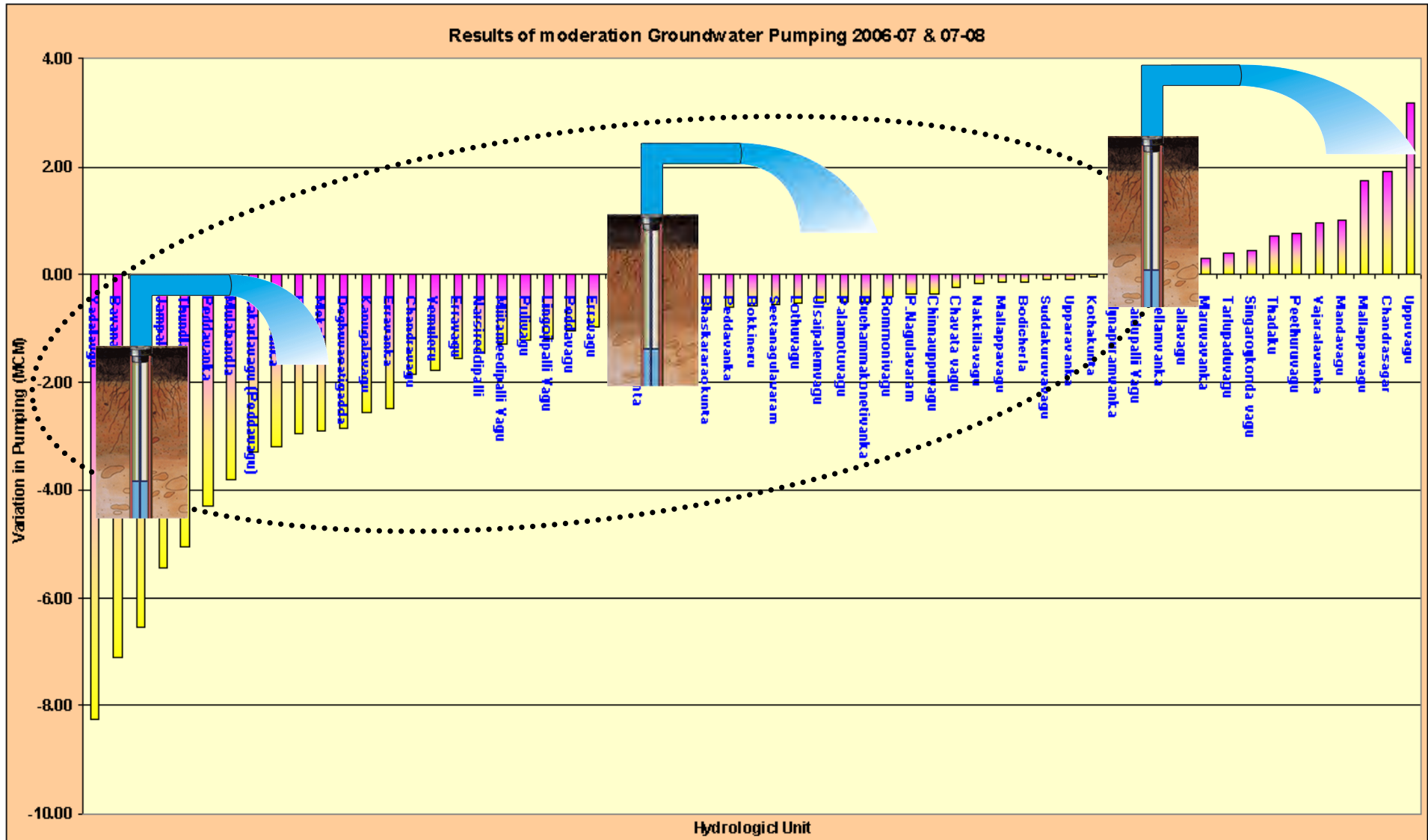
- 190 rain gauge stations (every 5 sq kms)
- Groundwater levels from 2109 monitoring wells (every sq km)
- well discharge measurement from 969 monitoring wells
- Surface flow from 63 flow gauging stations
- Groundwater quality from 300 drinking water source (seasonal)
- Data organized as Computerized data base
- Data sharing with Government and institutions



Results- Restraint in groundwater pumping



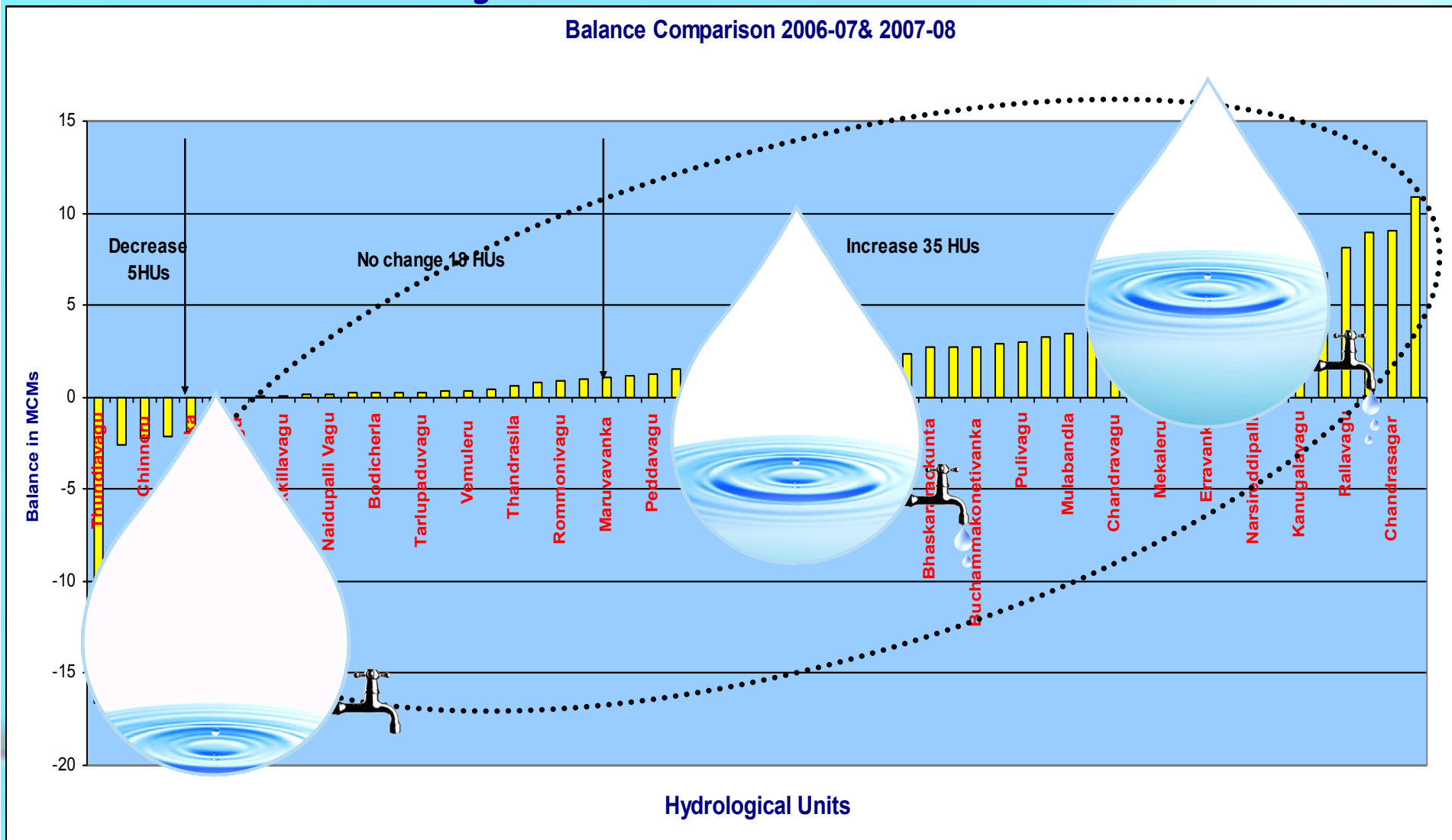
Groundwater pumping for agricultural use significantly controlled over the four years



Improved Groundwater Balance



Groundwater Balance favorably altered in 53 Hydrological Units led by Demand Side Groundwater Management

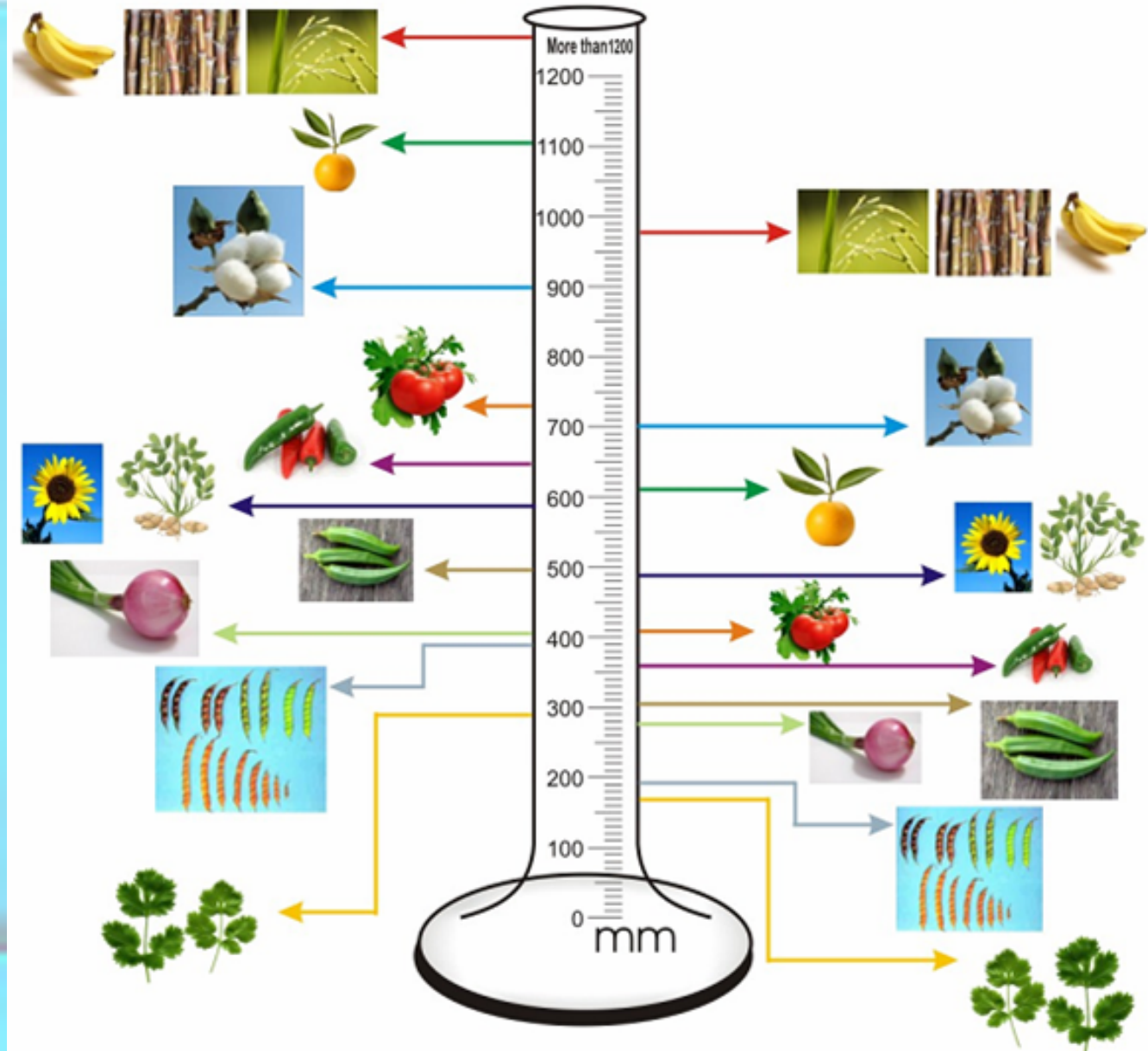


Quantification of Water Savings

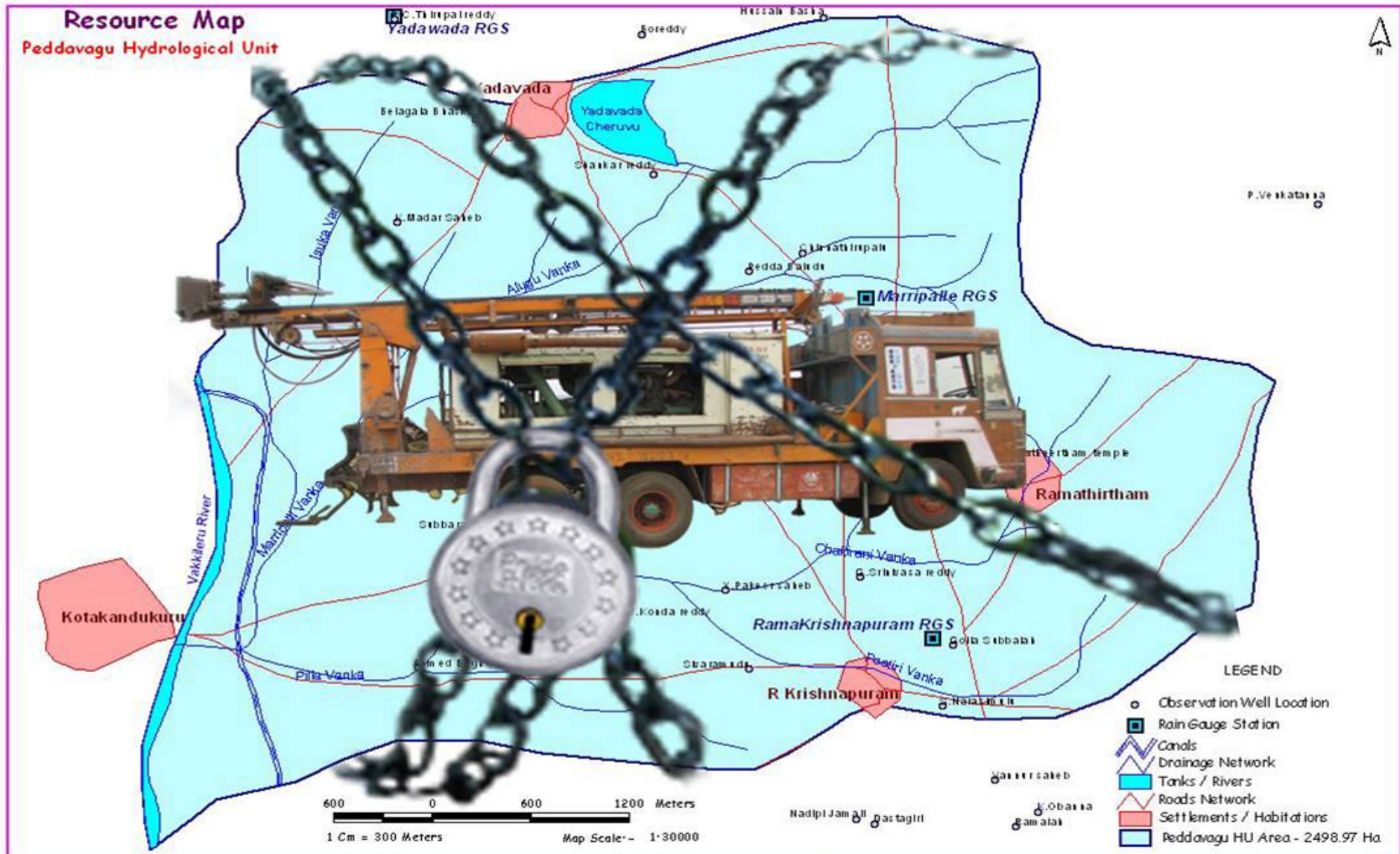


Water savings through devices and efficient irrigation
32 MCM

Efficient paddy / reduction in paddy area
53 MCM



Check Growth of new wells



IT enabling Demand Side Groundwater Management by Community



Rural Information Kiosk

Taking IT to farmers for improved understanding of crop water efficiency in areas subjected to groundwater distress - an FAO-India initiative

- Kiosk translates farmer collected data as graphics, animation and audio for getting a perspective on the cropping system at farm, drainage basin.
- GIS provides a visual perspective to cropping systems, groundwater availability.
- Responds to farmer queries on impact of crop changes on groundwater availability.
- Rugged and mobile.



Project Web Site <http://www.apfamgs.org>



Demystifying Science for Sustainable Development

Andhra Pradesh Farmer Managed Groundwater Systems Project



Gender mainstreaming

Current News

[FAO Evaluation Mission Visit](#)

[5th Project Steering Committee Meeting](#)

[DA's Review Workshop](#)

Nationally Executed Partnership project between BIRDS and FAO of the UN

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Andhra Pradesh Farmer Managed Groundwater Systems (APFAMGS) Project's key premise is behavioral change leading to voluntary self regulation. In seven drought prone districts of Andhra Pradesh, India, thousands of farmers residing in 638 habitations spread over several hundred kilometers have voluntarily taken number of steps to reduce groundwater pumping, for tiding over problem of groundwater depletion.

Launched in July 2003, the APFAMGS project is a partnership with farmers for implementing Demand Side Groundwater Management concept. This project demonstrates an alternative model to the Supply Side approach which calls for spending billions for creating new structures. [more](#)

Final FAO Evaluation Report



PROJECT PARTNERS

BIRDS | CARE |
CARVE | DIPA | GVS |
PARTNER | SAFE |
SAID | SYA | PRIYUMI |
World Ed

Savior's Birthday

*Christmas
and
New Year
Dance Performances*



HRIS+
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is a store house of habitation level database

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