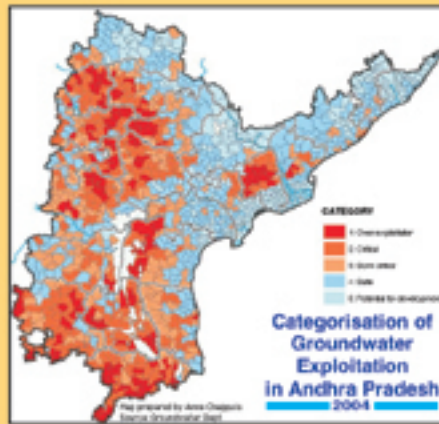


Social Regulations for Groundwater Management



Crisis in Semi-arid Regions of Andhra Pradesh

- 60 % crop area (28 million ha) is irrigated through groundwater
- Number of wells increased from 1,000,000 to 2,200,000 during 1980-2005
- Between 1990-2005, groundwater levels fell by 10 m
- Groundwater exploitation exceeded safe draft in many areas
- In last 2 years, 200,000 bore wells drilled as result of continuous droughts and skewed state subsidies
- 4,500 suicide deaths in indebted farmers in last 7 years (25,000 farmers in India)



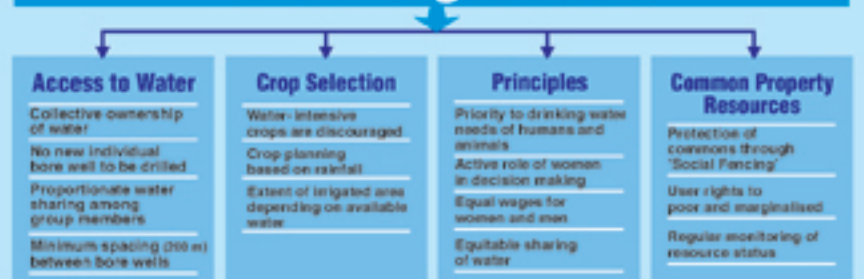
Application of Concept

Activities implemented in 5 project villages

- Community dialogue and capacity building
- Building community institutions
- Participatory hydrological monitoring by communities
- Water balance estimation (demand & supply assessment)
- Process of negotiations based on equity, access and right
- Advocacy and lobbying
- Sharing and managing water resources
- Regulations to fulfil everyone's basic needs



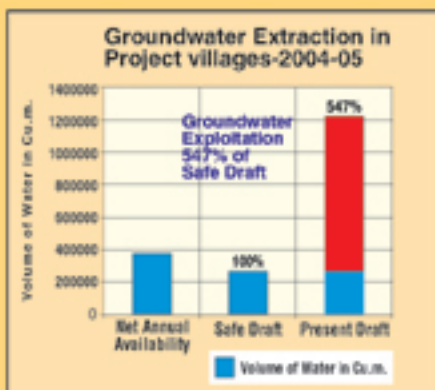
Social Regulations



Problem Analysis

Problems in 5 project villages

- Drastic depletion of groundwater resources
- Depletion of ground-water adversely impacting livelihoods
- Existing programs focus on supply side management rather than demand management



Impact of Regulations

- Potable drinking water ensured to all families
- Farmers share water from bore wells
- Efficient use of water through micro-irrigation systems
- Farmers shifted from water-intensive crops to irrigated dry crops
- Additional land brought under protected irrigation by sharing water
- Over-exploitation of groundwater reduced
- Community equipped to cope with droughts



Concept

- Treat water as a common property and usage through sharing mechanism
- Bringing out regulations based on equity principles to ensure fulfilment of basic needs
- Efficient use of water through prioritisation of needs



The Changes



Learning

- Collective action essential at community level to address resource depletion
- Resource sharing for equitable access to all
- Institutionalise sharing system for sustainability

Way Forward

- Imbibe the concept - water is a common property
- Apply a rights based approach to ground-water
- Equip community with information to effectively manage resources
- Promote policy changes towards viewing water as a right
- Facilitate negotiations for prioritisation and equitable allocation of water
- Promote and strengthen local self-governance of water resources