Participatory Groundwater Management

5. Promoting Micro Planning

Micro Planning

This case is based on capacity building under the Water Conservation Mission in Andhra Pradesh

In this program:
970 villages prepared a micro plan approved by local government over a period of eight months
With the help of 13 NGO's

In 98% of the plans local regulatory measures were identified
In 94% local investments were identified

Why Micro Planning

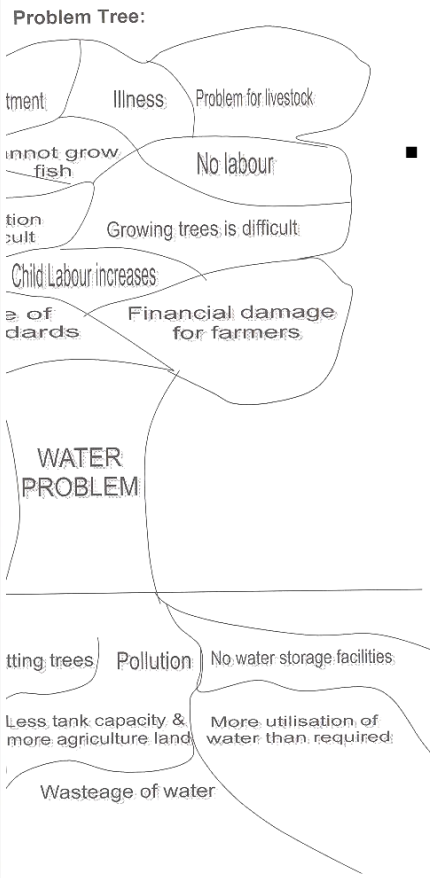
- To put local groundwater management on the agenda
- To identify measures – both in local regulation and local investment
- To create ‘peer’ effects

Promoting Micro Planning – how?

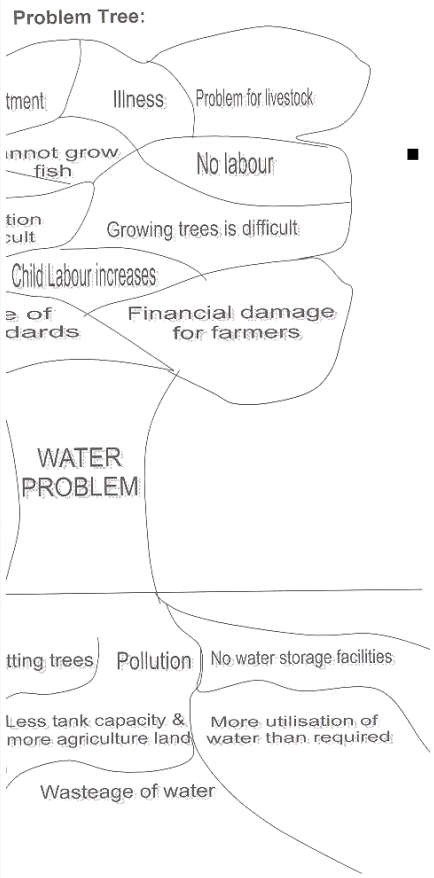
Three steps:

- Raising awareness
- Preparing action plans
- Creating peer network

Creating awareness



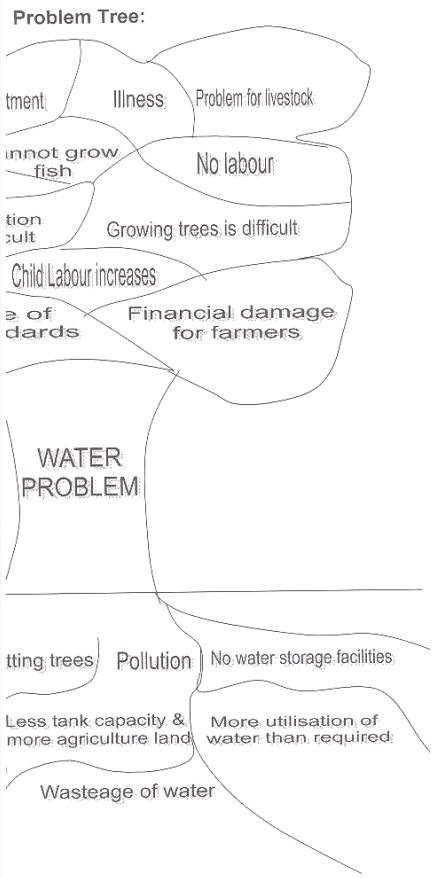
- One day training:
  - Problem tree analysis
  - Games
  - Discussion on legal and institutional arrangements as they formally exist



Important

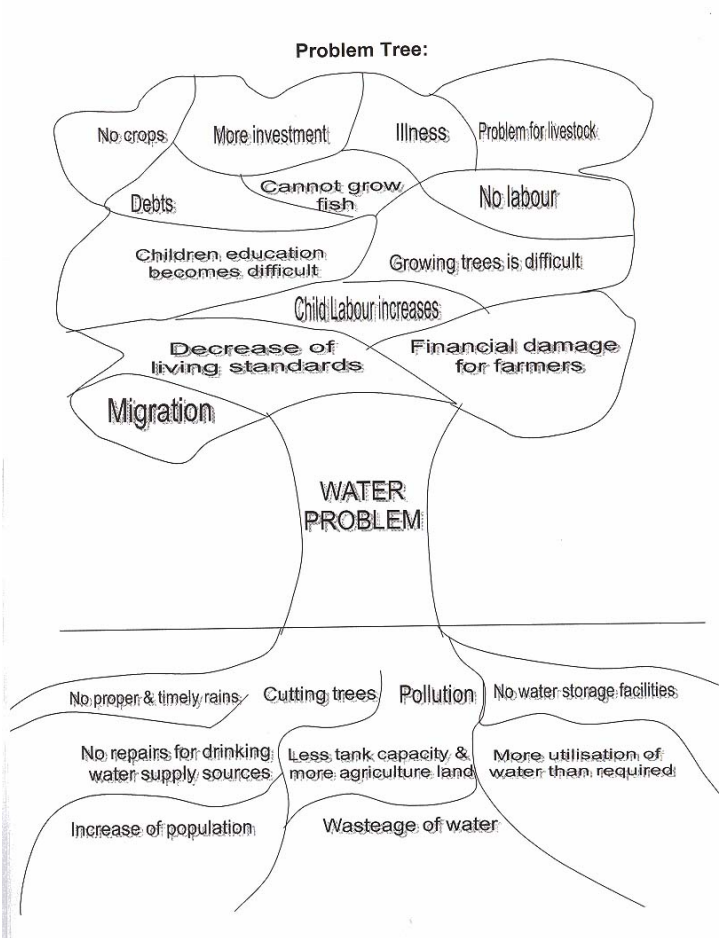
- Whom to invite?
  - Those who matter
  - Men and women
  - What status to give to the training?
  - Plan to be endorsed

Problem tree analysis



- Jointly identify water related problems
- Formulate them clearly
- Identify how they are linked – causes and effects
- Identify solution tree by reversing problems into solutions

Problem tree

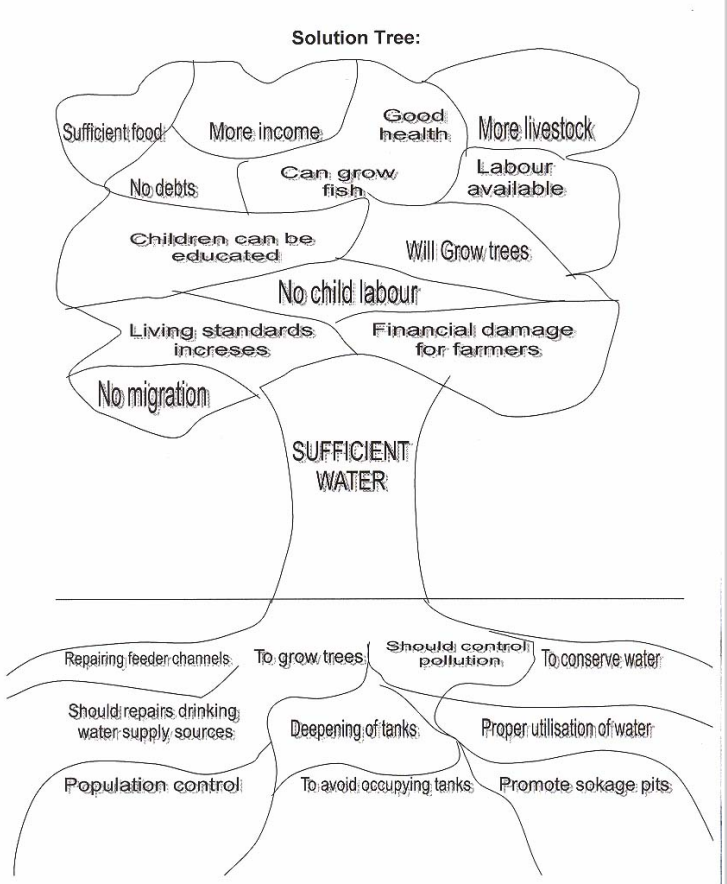


Problem tree analyzes causes and effects

7. Group discussion of men members on "problems tree"

Solution tree

And leads to solution tree



Legal and institutional awareness

- Many legal provision and institutional arrangements exist
- But usually no one knows - so no one will use
- So explain to water users what legal instruments they have

Step 2: Micro Planning

- Suggested program
  - Refresher of awareness building
  - Transect walks
  - Trend analysis
  - Participatory water budgeting
  - Resource map
  - Micro planning

Transect walk

- Systematic route through the area
  - Stop at each water point, structure or gully
  - Stop at each drinking water/ sanitation facility
- Making observations at all water points
- Summarize findings

Transect walk

Trend analysis

- Discuss with group situation now and in the past
- Take 3-4 points in time and discuss:
  - Population numbers
  - Livestock numbers
  - Type of crops
  - Type and number of wells
  - Condition of tanks, terraces and other structures
  - Depth of water table
  - Quality of water

Trend analysis

Resource map

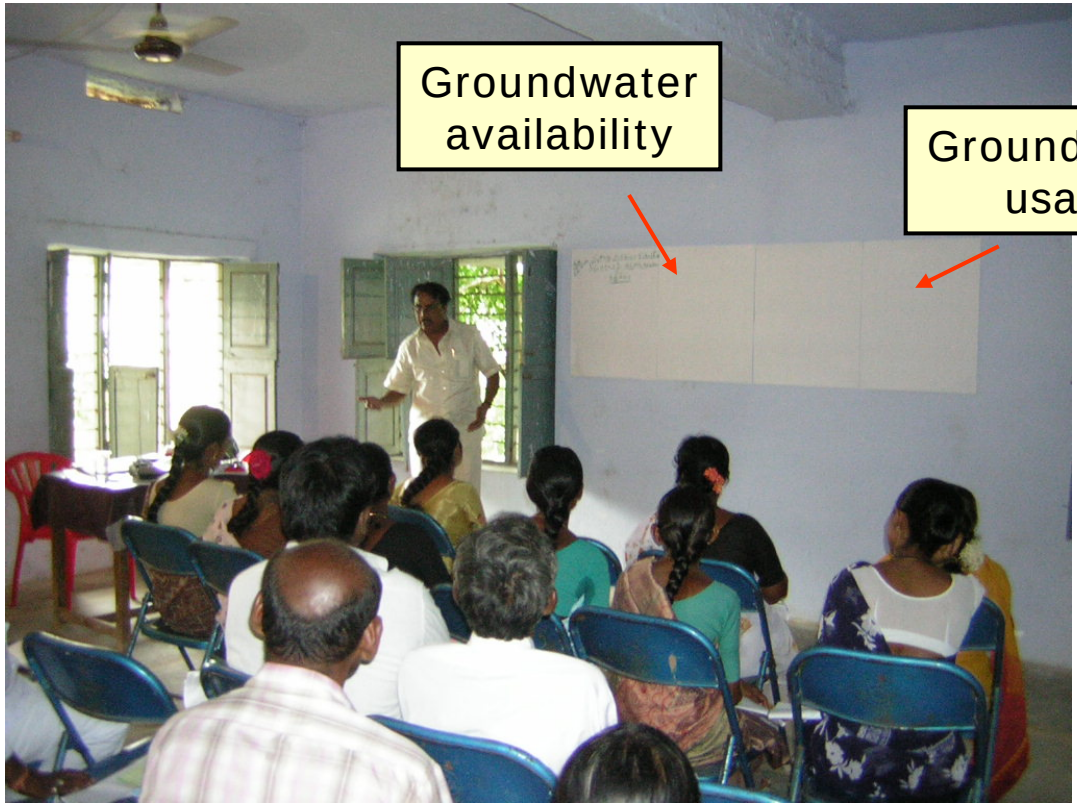
- Prepare village resource map using paper or coloured powder
- Indicate (in different colours)
  - Roads
  - Main building
  - Wells (plus condition)
  - Water harvesting structures
  - Local streams

Resource mapping

Participatory water budgeting

- Prepare a simple water balance for the area, calculating:
  - Rainfall and recharge co-efficient;
  - Water consumption:
    - Cropped area (main crops) times water consumption
    - Number of domestic users times use/capita
    - Number of animals times use/ capita

Participatory water budgeting



Preparation of micro-plans

- Compare results from trend analysis, water budget, transect walks and resource maps
- Identify actions:
  - Social regulation
  - Investment
  - Maintenance of water structures
- Micro-plan to be endorsed by local council

Preparation of action plans

Step 3: Create peer network

- Create peer effects – bring together representatives of several areas in subbasin in festival mode
- So that they start to:
  - Share experiences
  - Identify common issues
  - Experience mild competition (why are others doing better than we)

Step 3:
Create peer network

A local thematic **fair** is
a good way of bringing about
the **exchange of experience**
and **inspire** people to do
better or at least as good as
others in groundwater management

Contributors

Most of the training modules were prepared by F.W.M. van Steenbergen (MetaMeta), but there are several who contributed to the development of the modules: A.A. de Groot (MetaMeta), W. Boehmer (Arcadis), M. Cheebane (Development Alternatives), S Govardhan Das (APFAMGS), S. Dixit (ICRISAT), J. Hoogesteger-van Dijk (Wageningen University), K.V.G.K. Rao (Vision Task Force Andhra Pradesh), G. Lichtenthaeler (GTZ), M. Nooij (MetaMeta), T.M. GowriShankar (Remede), R.W.O. Soppe (WaterWatch), H.M. Sweeris (MetaMeta). Financial support was given from the Interim Support to the Water Conservation Mission, implemented by Arcadis Euroconsult.

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