Evolution of Institutions through Natural Resource Management activities

Presented by:

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Timbaktu Collective

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Focus area 1: Rules, regulations and systems for improved water resource management
Anantapur District

Lands of Anantapur Dt

- Largest in the state
- Second most drought prone in the country
- Declared Arid
1990 – Three friends purchased 32 acres of dry barren land to heal and revitalise it – They called this piece of land TIMBAKTU

1991 – A voluntary organisation called Timbaktu Collective was formed

1992 – The Collective began work in 10 villages near Timbaktu with 3 team members

2006 – It is now partnering over 120 villages with a population of about 40,000, with 75 team members

An old Celtic symbol – Mother Earth, rebirth, womb
The Timbaktu Collective works in Anantapur district in the Rayalaseema region of Andhra Pradesh, a southern state of India.

Once part of one of the most powerful and rich kingdoms of South India – the Vijayanagara Kingdom.

Anantapur district is today one of the most impoverished and drought-affected districts of India.
Activities of the Collective

• Ecological Restoration

• Empowerment of Women, Dalits & the Disabled,

• Livelihoods (especially income generating options for the marginalised),

• Organic Farming

• Alternative Education for Children

• Local Self Governance,
Our work -

Agricultural development

Empowerment of Women & Dalits

Organisation of Youth & Disabled

Alternative education

Eco restoration

Local self governance

in celebration of life
Mustikovila Village

- Population 1529
- Total Land 11,687
- Revenue Waste Land 6750
- Area of Tank 440
- CBOs 17
  - Women’s SHGs – 13, Farmer Group 1, VSC 1, Youth Group 1, Group of People with Disability 1)
Kalpavalli Forest

Goal: Regeneration of common lands and restoration to the common people

Strategy: Empowering marginalised communities to rejuvante and take responsibility of village commons – soil, water and forests.

Kalpavalli in 1993

Kalpavalli in 2006
Sign Board to Kalpavalli
Kalpavalli Forests

- The KALPAVALI forest has 8,500 acres of common lands.
- This activity originated in Mustikovila village.
- Currently Mustikovila holds 1,500 acres as part of Kalpavalli.
Kalpavalli Activities

- Making fire breaks
- Sorting Seed for dibbling
- Seed dibbling by School Children
- Digging Trenches
Burujulu for Demarcation

Counseling shepherds

Stone Mulching

Kalpavalli Activities

Grafting
Kalpavalli Activities

Rock filled check dams

Contour trenching

Rock filled check dam
Land Development work in Mustikovila

Earthen field bunding

Pebble & Stone bunding
Benefits from Kalpavalli

Broom Making

Transporting Grass

Tapping Toddy from Date Palms

Bunch of Dates
in celebration of life

Kalpavalli Samkhya

❖ General Body Membership - 1700
❖ Committee members - 130
❖ VSCs - 8
Besides VSCs, the Collective has promoted women’s groups, youth group, dalit group and disability group besides working on strengthening the panchayat.
In partnership with the Collective, the VSC has

- Partially desilted the Mustikovila Tank with about 500 acres command area
- Applied this silt to over 400 acres of degraded agricultural land, increasing productivity by 25%
By 2003/2004 the farmers had not been able to take any crop for three years.

Like the year before the tank received enough water to irrigate a 4 months paddy crop for 2 ½ months;

The local administration refused to open the sluice gates.

Mushtikovila Tank command area – 2002 / 2003
In response to this situation the farmers with support from the Collective set up regulations for use of water:

- Water should be applied only during the day;
- The existing Nirugantis (managers of sluice gates and water use) should be given the total freedom to decide on which field should get water and when;
- Farmers should not interfere in this process and pay them as per tradition.
- The sluice gates should remain closed during the night and two extra Nirugantis should be employed as watchers for the same;
- These two Nirugantis should be paid Rs. 1000 per month by the the farmers once they get the crop;
Thus managing water, 372.25 acres of paddy and 47.45 acres of sunflower were grown – The only 420 acre stretch of green during 2003/2004 (Rabi) in Anantapur district which was reeling under a massive drought;

The average yield per acre was 22.60 bags of paddy after paying all expenses;
8412.85 bags of paddy;

If converted to cash, the farmers would have got a minimum price of Rs. 472 per bag – Rs. 39,70,865 in all;

Sunflower grown in 47.45 acres has yielded Rs. 2,01,620;
Mushtikovila Tank command area – 2003 / 2004

- **Approximately 1116 cart loads** of paddy grass was received. Minimum selling price for this is Rs. 800 per cart load – Rs. 8,92,800 in all;

- **About 400 milch animals** received this grass through the year, yielding Rs. 5,00,000 worth milk after family consumption;
Employment generation was also huge – approximately **30,000 work days**, which if converted to money terms was approximately **Rs. 12,00,000**;

We have not been able to calculate the value of cow dung and the manure prepared;

This has been a real eye opener for both the Collective and the farmers;

Over ten million Rupees revenue and at no cost to the government, not a penny, no dam, no loss of forest cover, no loss of agriculture land, no displacement of people, no electricity, no pipelines, no canals etc etc.....
Water management was taken up for the first time, in response to a crisis situation. The **lack of awareness** among the farmers regarding the non-flooding cultivation of paddy was a stumbling block in managing water effectively from the early stages of the crop.

The **traditional irrigation arrangement** under tanks for paddy, puts constraints on irrigating individual fields. Irrigation channels need to be reorganized, depending on the location of individual fields and nature of the soil.

Community mobilisation needs to be taken up to involve all the stakeholders both men and women. Along with them mechanisms have to be worked out;

Farmers in different parts of the command area need to receive right share of the water, depending on the specific needs of the field.
The Neerugantis need to be trained in the cultivation of the paddy by non-flooding method as they play the crucial role in the management of water. This will help better coordination amongst the Neerugantis, in providing the right share of water for all the farmers in a just and equitable way.

The women need to be trained specifically to understand the different aspects of proper transplanting techniques.

There is need for the active involvement of the farmers from the different parts of the command area and form a committee which will have representation of all the stakeholders to decide the rules and regulations, as well as the handling of the disputes as and when they arise.

The Pedda Neeruganti, who is responsible for the management of the Tank, appointed by the Revenue department, under the local MRO, must be trained to handle the new paddy cultivation practices. He must, along with the farmers, work out the irrigation arrangements before hand for proper water management.

The active involvement of the local Panchayat can go along way in getting this practice recognised by the local administration.
Advantages of Non-flooding cultivation of Paddy:

✦ The savings in water required for cultivation by 40% of the traditional method.

✦ The paddy plants grow more sturdier and are less prone to pests and diseases, thus reducing the need for application of poisonous chemicals and fertilizers as the percolation losses are minimized.

✦ Increased tillering caused increase in the yield.

✦ Reduced input costs due to savings in the chemicals applied.

✦ Alternative wetting and drying of the soil helps in the improvement of the soil fertility owing to profuse rooting.
Neeruganties
Common properties are best taken care of by the common people.

Promotion of leadership that is efficient, transparent and accountable to the common people.

Watershed must be tank centric, radiating from the waterbody outwards and integrating management of soil, water and forests.
This presentation was made as part of “Capitalization of Experiences Water Land & People”, an initiative of the Swiss Agency for Development and Cooperation (SDC) facilitated by Intercooperation and implemented in Bolivia, India and Mali during 2005-2006. It aims at sharing and deepening the knowledge base of SDC and partners on issues related to integrated water resource management.