

# Andhra Pradesh Community Based Tank Management Project

Newsletter- 3

January - March 2010

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## Editorial

APCBTMP is completing three years of implementation. Progress against targets has been satisfactory. This has been appreciated by the Government as well as the World Bank in the recent Aide Memoires.

The Mid Term Review of the Project is scheduled around June 2010. This important review will concentrate on the physical and financial progress on each component and activities of the project. Specific recommendations to remove bottlenecks and strategies to bridge gaps in implementation, if any, are expected to be arrived at.

At this crucial juncture of implementation all stakeholders should rise to the occasion and make it a success.

This newsletter provides a snapshot of the variety of activities being successfully implemented. Stories of some pioneers from the field are presented to inspire all stakeholders.

## Project Highlights

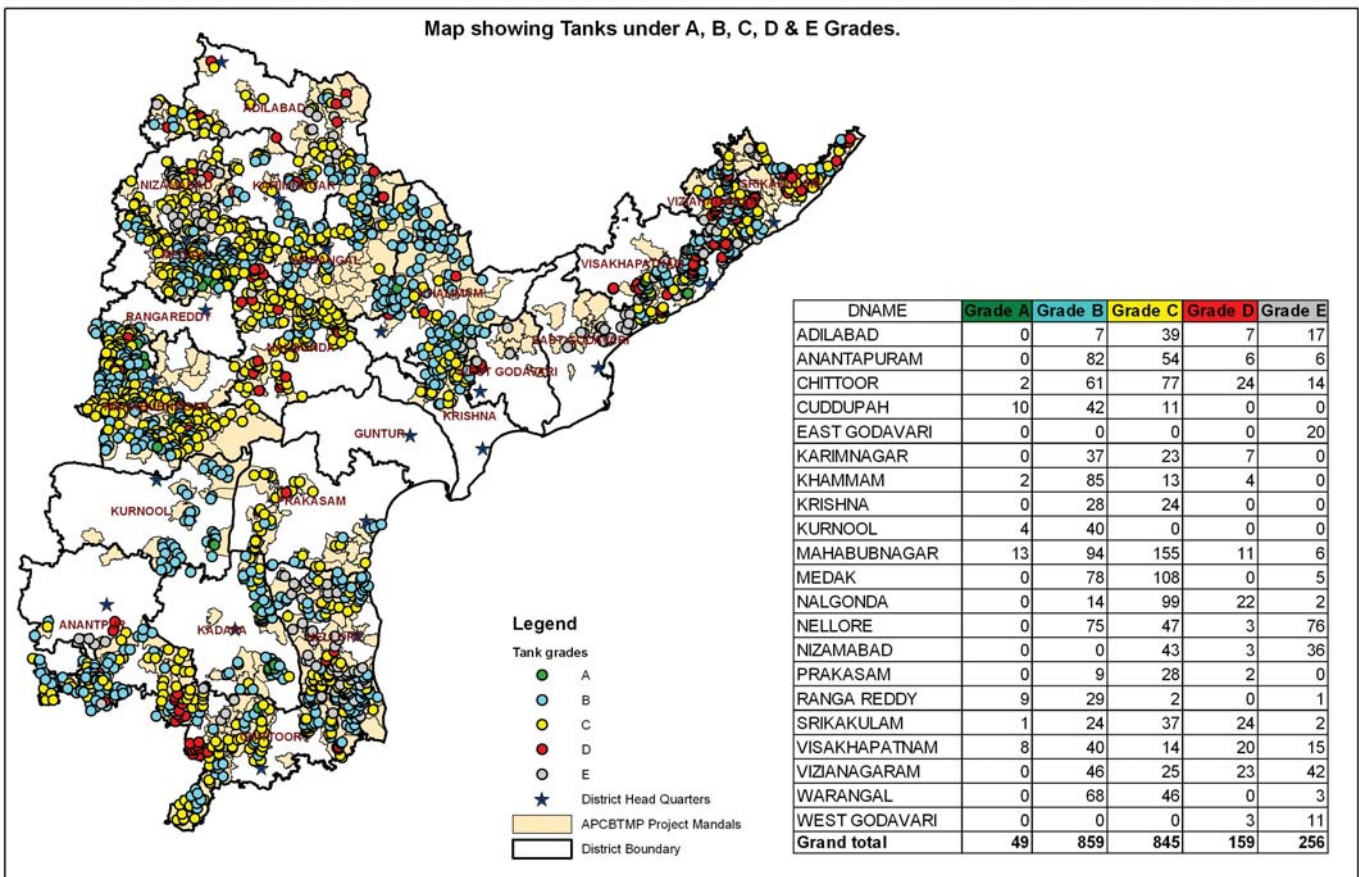
- FAO-WB stock taking mission appreciates the structure and functioning of project M&E
- Training of Trainers for Agri-business completed for 7 districts
- Administrative sanctions accorded for 1864 tanks
- WUA Works grounded in 1647 tanks
- 100 percent works completed in 185 tanks
- 1520 volunteers trained in PGM
- 293 lakh fish fingerlings stocked in 288 tanks

## Upcoming Events

*Training of trainers for Components 1 and 2 starting in April 2010*

### A.P. Community Based Tank Management Project

Map showing Tanks under A, B, C, D & E Grades.



Cover Photo: Farmer using cono weeder in SRI Paddy in Kaminayunipalli village, P.Panjani Mandal, Chittoor Dist.

# Overview



## APCBTMP: Districtwise WUA Self Rating

#	District	WUAs Rated	WUAs' Self Rating				
			A+	A	B+	B	C
1	Adilabad	4	2		1		1
2	Anantapur	90		34	1	33	22
3	Chittoor	47	4	27		16	
4	Kadapa	63		19		42	2
5	Karimnagar	65		52		13	
6	Kurnool	44	5	38		1	
7	Khammam	102		41		61	
8	Krishna	7		6		1	
9	Mahabubnagar	174		21		81	72
10	Medak	167	35	84		36	12
11	Nalgonda	137			74	63	
12	Nellore	110		59		42	9
13	Nizamabad	46			4	40	2
14	Prakasam	36		8		15	13
15	Ranga Reddy	21	1	15		5	
16	Srikakulam	85		7		78	
17	Vizianagaram	102		11		83	8
18	Visakhapatnam	63	14	29		18	2
19	Warangal	115		11	72	31	1
	<b>Total</b>	<b>1478</b>	<b>61</b>	<b>462</b>	<b>152</b>	<b>659</b>	<b>144</b>

Components	Unit	N*
<b>Institution Development</b>		
Support Organizations involved	N	256
Tanks allotted to Support Organizations	N	1995
Tank Improvement and Management Plans (TIMPs) prepared	N	1675
WUA management committee members trained	N	23934
WUA Subcommittee members trained	N	23274
Paraworkers trained	N	3861
Corpus fund ( in Rs.)	Lakh	295
<b>Improvements of Minor Irrigation Tanks</b>		
Administrative approvals accorded	Tanks	1864
Technical sanctions	Tanks	1734
WUA works grounded	Tanks	1647
Tender works grounded	Tanks	924
• 100% works completed	Tanks	185
• 75- 100% works completed	Tanks	43
• 50-74% works completed	Tanks	53
• 25-49% works completed	Tanks	48
• 01-24% works completed	Tanks	44
<b>Participatory Groundwater Management (PGM)</b>		
Tanks selected	N	315
PGM groups formed	N	1965
PGM group members	Men	16249
PGM group members	Women	15113
Farmers trained in PGM	N	1520
PHM Volunteers collecting data	N	465
<b>Agricultural Livelihoods Support Services (ALSS)</b>		
Demos completed	N	1354
Kisan melas organized	N	522
Fingerlings stocked (in 288 tanks)	Lakh	293
Gopalamithras trained	N	320

\*Data upto 31 March 2010



# Institutional Development

## Power of Unity - Encroachment Removed

**Appalaraju cheruvu**, Gummalapadu village, Ravikamatam mandal, Visakhapatnam district has a total ayacut of 118 acres and 330 ayacutdars. Selected for renovation under APCBTMP, a budget of Rs. 11.89 lakh (Rs. 8.8 lakh by tender and Rs. 3.09 lakh worth by WUA) was sanctioned as per the TIMP.

While doing PRA for TIMP preparation, some stakeholders raised the issue of encroachment in the tank bed and on tank bund with trees grown on it. The tank bund on one side had been encroached with big trees grown on it by a family from the adjacent village. Of the tank area of 11.95 acres, 11 acres were occupied by this family since many years. The tank is located in Survey No-2, but the family of Mr. Susibilli Satyaro occupying the land belongs to Chinapachali village which is located in Survey no-1.



Mr Koppaka Srinivasa Rao, the WUA president declared: "This is a challenge before us. Let us be united and take the opportunity provided by APCBTMP to solve this problem."

The WUA President and EC members approached the MRO and requested removal of the encroachment before starting the works under the project. The MRO office surveyed the tank and identified the tank boundaries. They also demarcated the foreshore area. The WUA then started removing the trees in the

encroached area. The Susibilli family, that had encroached the tank, protested vehemently and booked a police complaint against



the WUA. They approached the MRO and questioned why the WUA members have illegally started removing trees from the tank without prior intimation to him.

The MRO told Mr Susibilli Satyaro: "You have been enjoying the benefits for 40 years without paying any tax to the Revenue Department or to the WUA. The entire land belongs to the WUA. I suggest that you vacate the area voluntarily."

Not heeding to the suggestion of the MRO, Mr Satyaro filed a case in Chodavaram Civil Court against the WUA members (case No RC/--1979/02/09).

During this time, the ZP Chairperson visited the tank with police escort and initiated discussions with both the parties for a compromise. After long discussions between the parties, the Susibilli family agreed to remove the trees – Five tamarind trees and 60 palmirah trees -- and vacate. They vacated the occupied land, i.e., 2.6 acres, without any compensation.

Having removed this major hurdle successfully, the tank rehabilitation work has started in full swing.

The WUA president and the ayacutdars declared in unison: **"We will make Appalaraju cheruvu into a model tank. We stand united in this effort."**

### FAO-WORLD BANK STUDY COMMENDS APCBTMP

**In a recent study of over 40 Agriculture and Rural Development projects in South Asia region, the FAO and the World Bank commended APCBTMP as a unique project:**

APCBTMP recognizes the **centrality of CBOs** (Water Users Associations – WUAs) in all project interventions and processes, made possible through adoption of truly participatory systems and processes – Clear definition of roles of stakeholders to achieve project objectives

**In partnership with a large number of Support Organizations (NGOs)** in project implementation, capacity building of WUAs and their monitoring

**A clear monitoring system and strategy for learning and improvement** at every level. **Internal Monitoring & Evaluation system clearly defines activities and responsibilities as well as sharing the results with the project team**

# Tank System Improvement

## The Mylangam Story - 142% ayacut Irrigated

My name is Mylangam pedda cheruvu. I am very old, at least 600 years. However, I am young and beautiful again. This is through the recent initiatives by the WUA have made me young and beautiful again. Today I am providing water to 136 farmers cultivating 490 acres. The Ankamma temple, renovated by the WUA President Mr Duvvuru Gopal Reddy using personal funds, has become a local pilgrimage centre. Nowadays people are often gathering around me under the luxuriant green cover the flame of forest and Maddi (*Terminalia Tomentosa*) trees for community functions and celebrations, especially after the harvest.

During the last few decades, I was able to provide water to only 266 acres though ayacut was 355 acres. This was due to my old age and poor health. Only two of my three channels were functioning. Similarly my surplus weir was damaged.

All this changed for the better when I was selected for renovation under APCBTMP. The WUA started the programme with the support of RRDS. Through a series of participatory exercises, the WUA Water Management Committee finalized the action plan (TIMP) and submitted to the District Project Unit for approval.

My bund was full of thorny plants and bushes. It was very difficult for people to even walk on the tank bund. All the jungle has been cleared and the entire bund renovated. Now bullock carts and tractors can easily move on the tank bund.

My surplus weir and three sluices were repaired and properly locked. The WUA water management committee supervises water supply without any wastage.



Two feeder channels - Athi Gunta, providing about 30% water and surplus from Maddilagunta Tank” providing 20% of water - have been repaired and restored by the WUA. The rest 50% water I get through inflows after rains.

With all these renovation and restoration I am able to provide water to cultivate ground nut, chilly and paddy even for the rabi season. Now I can nourish the total ayacut of 355 acres and for an additional 145 acres of assigned land to poor farmers. My mission is so fulfilled!

My life’s mission of being a nurturing mother to all is now being fulfilled.

### Tips for proper Operation and Maintenance (O&M) of Tank System

O&M	DOs	DON'Ts
<b>Repairs to Weir</b>	In case of heavy leakages from body wall of weir repair duly providing skin wall to appropriate length  Construct skin wall duly providing anchor bars	In case of heavy leakages from body wall of weir, do not repair by means of pointing or plastering  Don't construct skin wall without providing anchor bars
<b>Repair to Sluice</b>	Greasing and repairs to shutters/plug & rod has to be taken up invariably before operating them  Immediate repairs to sluice walls with pointing or plastering in cement mortar to the extent of crack/leakages developed	Do not operate sluice shutter/plug & rod without greasing/repair  Do not neglect to repair cracks developed in sluice walls
<b>Feeder channel</b>	In case of desilting/excavation of canal, the required standards must be maintained  In case of works for breach closing, only tested soils must be used	Do not desilt/excavate channel below standards  In case of breach closing work do not use earth for banking without testing
<b>Irrigation channels</b>	Silt excavated from canal should be dumped on downstream slope of canal bank	Do not deposit excavated silt on front/top of the bank

## Agricultural Livelihoods Support Services

### SRI Balapeer Shows the Way

Eight farmers have been converted to take up SRI paddy in the recent rabi. Balapeer, a poor farmer was the inspiration for this dramatic change. He had demonstrated SRI paddy in his half acre demo plot during the last kharif. He had made a neat profit of Rs. 5,600 from his demo plot.

Paddy cultivation is not new to farmers of Perimella Cheruvu, Kondur village of Weepanagandla Mandal in Mahabubnagar district. They did it the same way year after year, least bothering about improving productivity or saving water or increasing profits. As they say, “paddy is the lazy man’s crop.”

Balapeer was introduced to SRI Paddy cultivation method in a program organized by BALAVIKAS, the Supporting Organization. Mr. Purnachandra Reddy, MAO, of Weepanagandla Mandal provided the technical inputs to lead farmers and other progressive farmers. He covered aspects of: (i) Seed bed preparation, seed treatment, handling of the seedlings during transplantation; (ii) Main land preparation and marking; (iii) Water management and weed management at critical stages of the crop; and (iv) How to conserve water in paddy cultivation under tank irrigation system. The farmers were educated practically on the application of these new technologies in a SRI demo plot.

Balapeer was eloquent in explaining how he became a SRI farmer: “After undergoing the training, I cultivated Bpt 5204 paddy during kharif 2009-10 in half acre land as a demo crop. I used the SRI implements provided by the project. I applied nutrients and irrigation



Farmers on field Trainings

as learnt in the training. I got 11.2 Quintals of paddy from my half care demo plot compared to 8.4 Quintals from control plot. I spent 650 less on cost of cultivation. I got 7,840 Rupees more from half acre. Isn't it great? I reduced costs by one dose of fertilizers and pesticides, no weeding charges as I used the Cono weeder. But most savings was on seed cost. Instead of 20 kgs of paddy seed costing about 350 rupees earlier, I used only one kg seed for my half acre demo. **Seven of my neighbours are going for SRI paddy using Tellahamsa variety in the next rabi.**”

**With more SRI farmers, the area under SRI paddy has increased more than twenty times from half acre in Kharif 2009-10 to 11 acres in Rabi 2009-10.**

### Gollamada farmers shift from paddy to jowar

The farmers of Peddacheruvu, Gollamada village, Kuntala Mandal Adilabad district diversified from paddy to Jowar (60 ha) and Bengalgram (6 ha) under rainfed conditions at tailends as per training given by the concerned SO and Agricultural officer.

The farmers Peddacheruvu of Gollamada cultivated irrigated dry crops by sensing that the water in the tank was not sufficient for cultivation of rice. The ayacutdars of the tank diversified from rice to sorghum (80 ha), Bengal gram (5 ha) and Sesame (5 ha) under rainfed condition.



Shifted from Paddy to Jowar

## Narasa Reddy: A pioneer in organic farming

Narasa Reddy has seven acres of land under the Konaiahgaripalli tank ayacut, Pullampet mandal, Kadapa district. Recently he travelled on an exposure visit to Bengaluru organized by the District Project Unit Kadapa under APCBTMP. He learnt several good practices demonstrated by the Green Foundation on organic farming such as: Vermicompost, Jeevamrutham, and Panchagavya. Impressed by the advantages of organic farming, he has become a pioneer in organic farming in his village.

Narasa Reddy explained: *“I have started a vermicompost unit in 6x3 metre area in my field using agriwaste and vermiculite. My investment of 300 rupees on producing organic manure is very low compared to the 2000 rupees what I was spending on buying chemical fertilisers.”*



Applying jeevamrutham to Papaya plants

Narasa Reddy has also started preparing jeevamrutham for his papaya plants. *“I have already applied jeevamrutham twice directly to the roots and between the rows in my papaya field.*



Narasa Reddy Preparing Jeevamrutham

*producing vermiculite.”*

*Earlier, when I used chemical fertilizers plant growth was just normal. But, after applying jeevamrutham on papaya plants, my papaya plants are growing very well. I am spending only 300 rupees on*

### Recipe for preparing Jeevamrutham

Required items/ingredients:	Procedure:
Drum	Add 17.5 litres of water to 1 litre of cow urine, 1/4 kg of jaggery, 1/4 kg of gram flour, a little soil. Mix all the ingredients and stir thoroughly. Cover the mouth of the drum with a cloth and keep in shade. Stir the mixture thrice a day for 4 consecutive days.
17.5 litres of water	
1 litre cow urine	
¼ kg jaggery	
¼ kg gram flour	
1 kg cow dung	
A small quantity of fertile soil from undisturbed or fenced area.	

Jeevamrutham will be ready for use from the 4<sup>th</sup> day onwards and exhausted within seven days of preparation.

## Best fish from Pakki in Bobbili –Value increases from Rs. 18,000 to Rs. 14,00,000

Visitors are surprised to know that restaurants in Bobbili serve some of the best fish recipes. This is in no small measure due to the abundant supply of fresh fish from the tanks around Bobbili. The Patha Bobbili Fishermen Cooperative Society, formed in 1975 with 226 members in Pakki village one such success. They grow fish in the Rayanagiri tank with 241 ha (603 acres) ayacut cultivated by 632 ayacutdars. The tank is being renovated under APCBTMP and selected for fisheries interventions. The total Water Spread Area (WSA) is 80 ha (200 acres) and effective water spread area is 40 ha (100 acres).



FCS members checking fish growth and WB Expert Mr. Mario Pidini observes fish size and appreciated the excellent results

The fishermen generally grew released fingerlings of size 0.88 inches (20 mm), i.e., fry size. Stocking about 3,000 each of Catla and C Carpio they used to harvest about 600 kg of fish and sell it @Rs.30/- kg, earning about Rs. 18,000 per year.

Under APCBTMP, 35 FCS members were trained in fish production and marketing by the Fisheries Department and 15 visited Srikakulam to study various production technologies such as rearing of spawn (hatchlings) in the small grafil happas (pens) in the tank before releasing in the main tank. The major change in intervention is to release fingerling size fish seed in the tank. In all 60,000 (Catla 24,000, Rohu 12,000, C carpio 24,000) stunted finger lings were released. Fish growth is regularly monitored by FCS members.

The expected harvest in April 2010 is about 40,000 kgs. The average yield will be 500 kg/ha WSA. The total value of the fish harvest will be Rs. 14 lakhs!!



# Participatory Groundwater Management

## Chittibabu, a pioneer in groundwater sharing

**Yerra Chittibabu** (63) is a pioneer in common property management. He lives in Damanellore village, Sullurupeta mandal, Nellore district. He owns three acres of ayacut land under the Dama Nellore tank. The tank, with 119 acre ayacut, is being rehabilitated under APCBTMP.

Chittibabu recollected: “During dry spells, all farmers suffered due to insufficient water in the tank. In 2000, to cope with this tricky situation, I invested 80,000 Rupees to drill a borewell. We struck water at 140 feet depth, yielding about 4 inch water.”

Chittibabu explained: “Using tank water when available and supplemented by my borewell, I am irrigating two acres of my land both in kharif and rabi seasons. But my neighbours are not so lucky. Their crops used to wither away due to unreliable flow from the tank. Seeing their pitiable condition, from the beginning itself, I volunteered to give them water. I am giving water for one acre each to Parvatamma, Gyanamma, Subhasini and Subramanyam and for one and half acres to Chandraiah. After all, my bountiful well is nature’s gift, which happens to be on my land.”



Chitti Babu & Kishore measuring yield



Water Sharing Group

**Subhasini said:** “Without water from Chittibabugaru’s well, I used to get only about 20 bags of paddy. But now I get 30 bags from my one acre.”

**Subramanyam** acknowledged: “Chittibabugaru never asked us to pay for the water he gives us.”

**Gyanamma added:** “But we are very grateful to him. We help him in his field operations for about 30 days a year.”

**Chandraiah** summed up: “We have good common understanding about who requires water and when. And we have all benefitted by Chittibabugaru’s vision and generosity.”

**Chittibabu**, who has now become a PGM leader, has larger visions:

**“If, the APCBTMP provides us assistance for pipe lines, I am ready to share water from my borewell continuously with my fellow farmers, even for a second crop.”**

### PGM Capacity Building

Chittibabu, now a PHM volunteer, explained the PGM process in Sullurpeta.

“When the project initiated the PGM activity, my well was selected for PHM. I underwent training to estimate groundwater balance in our tank influence zone and how to measure water levels and discharge from my well.”

“With my son Kishore’s help, I measured static water level pumping water levels using the Water Level Indicator. We measured, discharges in a 100 liter drum using a stopwatch. It took only 13 seconds to fill the drum!! We calculated that our borewell is yielding around 30,000 liters per hour.”

“Dr Venkat, our Training Resource Person, nicely explained the concept of PGM. He mentioned that the project has some provision to give pipelines for water sharing to minimize flow losses and increase the cropped area.”

“If, the APCBTMP provides us assistance for pipe line, I am ready to give my borewell water continuously to my fellow farmers, even for second crop,” Chittibabu concluded.

**PGM will succeed where enlightened leaders like Chittibabu show the way.**

For information and grievances

Toll free number: 1800-425-0554 between 11:00 am to 5:00pm

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