

SUPPORT TO COMMUNITY FOR DROUGHT RELIEF MEASURES

In line with the aims of Indo-Swiss Participative Watershed Development Project, Karnataka (ISPWDK) and our own strategy of development through institution building, the semester April – September 2001 was to focus on nurturing and strengthening the people's institutions, particularly the Village Development Society (VDS). Apart from capacity building efforts to community-based organizations (CBOs) and intensifying sustainable agriculture interventions, there were plans to support the ongoing non-land based activities (NLBs) and Income Generation Programmes (IGPs). All these plans were conceived taking the Nature for granted based on the near normal rainfall in the recent past. However, the Nature reasserted its overwhelming dominance and exposed our limitations as the drought unfolded gradually all over Karnataka.

Problems, it certainly posed. Yet, the drought provided PRAWARDA an opportunity to prepare the people to face such crisis in future. Most of the activities, planned before the semester, were successfully implemented. In addition, PRAWARDA came to the rescue of farmers through some appropriate and innovative interventions to tackle drought-related problems and bail them out of possible disaster. While the CBOs were assisted in mobilizing fodder for the livestock to meet the urgent need, employment generation activities in the

We could conduct field visits, organize a workshop, plan an action plan with the community, prepare a 'Drought Relief Proposal' and start implementing the activities all in a matter of three days.

It would not have been possible without the invaluable support and assistance we received from Programme Support and Management Unit (PSMU), Bangalore through SDC-IC, New Delhi.

form of drought-proofing measures were also taken up. Following is a report on PRAWARDA efforts in tackling the drought situation.

THE ONSET OF DROUGHT

The monsoon began 2-days late for the season 2001-02 with the rains lashing the district (in fact, the whole state) during the 2nd week of June. Following good rains from 9th to 14th June, most of the farmers went ahead with sowing expecting normal rains. However, the cloudy weather stayed without a drizzle for over a month. Whenever it looked like raining, the heavy winds blew the rains away. Half the *kharif* season was over without rains.

About 86 per cent of the *kharif* sowing was completed by mid July. The seeds failed to germinate in some parts of the district owing to prolonged dry spell.

The major commercial crops of the district green gram and black gram wilted. There were clear signs of jowar and tur (pigeon pea) being affected.

The rainfall received up to mid July was 125.2 mm as against 216.2 mm last year. The taluk-wise rainfall received by mid July was as follows:

Taluk	Rainfall (mm)
Bhalki	91.6
Bidar	125
Aurad	143
Humanabad	61.2
Basavakalyan	107.6

Source: Prajawani, 16-07-2001

With about 15–20 per cent sowing still pending in mid July, it was reported that 50 per cent of the crops sown had been severely affected in the district.

In the eight districts of north Karnataka

- 4.2 lakh agricultural labourers had migrated,
- 60 oil mills were on the verge of closing,
- 1.45 lakh cattle had been sold in a single month,
- the meat price had come down to Rs. 60 from Rs. 100 a kg.

Bheekar Bara, Prajawani 25-07-2001. pp: I & III

Migration of agricultural labourers, acute shortage of drinking water, and fodder scarcity were affecting the people and the livestock and they were the main stories in the newspapers. 'Butti jatre',

(Basket fair), a special ritual to assuage the Gods and similar activities were becoming the norm of the day.

At this juncture, keeping a close watch on the situation, the PRAWARDA team undertook field-visits to Mantala, Sastapur, Hanumanthwadi, Nirgudi, Yerandi and Chikkanagaon in order to take stock of the drought situation within the Mullamari watershed. It was clear from the field observations and discussion with people that the major problem was the non-availability of fodder for livestock, while drinking water problem was not acute.

PEOPLE'S ACTION PLAN TO TACKLE DROUGHT

Priority areas were,

- Arrangements to meet fodder scarcity, and
- Employment generation, particularly for women agricultural labourers.

To triangulate our field observations, a workshop was organised at PRAWARDA project office on 27th July 2001 to get more insight into the drought situation and to develop a **people's action plan**. Representatives

from VDSs, Apex bodies and Watershed Management Committees (WMCs), in

all, 70 farmers (52 men and 18 women) participated in the workshop. The workshop reaffirmed that fodder scarcity needed immediate attention. However, the women participants also revealed the impact of drought on the households, especially those of the agricultural labourers, small and marginal farmers. Lack of rains had put a halt on farm activities playing havoc among agricultural labourers, particularly the women who used to be busy in weeding operations during this time of the year. Since many of the women had borrowed loans from Self-Help Groups (SHGs) and bought milch animals, they were finding it difficult to repay the loans. In this context, there was a demand for employment from women. Since the problem of unemployment seemed to affect women in particular, a separate meeting was organised at Mantala for all the SHG representatives under three Apex bodies.

Over 250 women attended the special meeting from 3 Apex bodies in the Phase I area. Right through the meeting their intention was clear. 'We are prepared to work, give us work'. Fodder, though, was talked about, their **first priority was to get employment** since this forced unemployment had brought lot of hardships for them. They said they were unable to contribute even weekly savings in SHGs leave aside repaying loans.

When asked about buying fodder as was being done in other villages, the women said that they were buying sugarcane trash (green) locally. Because of dried up wells the farmers were not able to irrigate their sugarcane crop and some farmers had started selling it as fodder. Since drought was getting severe in the region, there was a ban on inter-state fodder transport. Hence, the women asked for cattle feed (as it is not bulky compared to fodder, is more nutritious and had no restriction on inter-state transport). A few women even suggested growing fodder on a couple of acres if they were given seeds. They were asked to locate such farmers who had water source to go ahead with fodder cultivation.

However, employment was the main concern of the women. They insisted PRAWARDA to generate employment opportunities.

The suggestions made by PRAWARDA were,

- Digging of farm ponds,
- Tank desilting, and
- Nala repair

The women were motivated to approach the government to seek drought relief measures to be taken

up through SHGs. More than 120 representatives from over 10 Apex Bodies, including *Maheshwari, Adishakthi, Annapura* Apex bodies in Phase I villages, approached the Assistant Commissioner, Basavakalyan demanding the drought

relief measures to be routed through SHGs and Apex bodies instead of government departments.

After discussing various options a comprehensive action plan was developed to meet both the demand for fodder as well as employment. The major interventions planned were, Support to CBOs to open “Fodder Booths” and Drought proofing measures through employment generation.

ACTION PLAN FOR DROUGHT RELIEF MEASURES

1. INTERVENTION: Support to CBOs to open “Fodder Booths”

The intervention was planned with the following objectives:

- To assist CBOs in arranging fodder and to stop farmers from selling cattle to slaughterhouses at throwaway prices in desperation,
- To provide feed supplement (mineral mixture) to sustain health and productivity of cattle, and
- To create awareness and prepare CBOs to manage disaster.

The very next day after the emergency workshop, the Governing Council (GC) members from Hanumanthwadi and Nirgudi approached the project with applications for assistance to mobilise fodder. They were asked **to concentrate on poor**

farmers getting benefit on priority. The VDS members in Hanumanthwadi and elsewhere succeeded in convincing the big farmers to wait since such farmers had sugarcane crop to feed their livestock. Selection of needy farmers, collection of their contribution and even searching for fodder and negotiations were all done by VDS representatives. It was interesting to see the people using public address system to announce the drought relief programme in the village and mobilize contribution.

An amount of Rs. 3000 as project support was agreed upon for transporting a load of fodder, which was bought and transported from villages near Yadgir, Jewargi and Shahapur taluks of Gulbarga. The remaining expenses like cost of fodder, loading and unloading, food expenses of people etc., were all borne by the people themselves. During the very first week of this activity, it rained sporadically in the project area and also in the areas from where fodder was being bought. More loads of fodder, though required, could not be transported since the lorries could not enter the wet fields where the fodder was stored.

The significant observation made through this activity is that, with meagre project assistance the people could contribute a large amount in cash despite facing such a crisis.

Table 1. The details of assistance extended towards fodder transportation.

Sl. No.	CBO	No. of lorry loads	Benefits derived		Cost		
			No. of families	No. of animals	LC# (Rs)	PC* (Rs)	TOTAL
1	VDS Hanumanthwadi	5	77	415	25800	15000	40800
2	VDS Nirgudi	3	62	300	15750	9000	24750
3	Basaveshwar Apex, Chikkanagaon	5	80	440	18385	15000	33385
4	VDS Ilhal	4	69	360	17500	12000	29500
	TOTAL	17	288	1515	77435	51000	128435

#LC-Local contribution, *PC-Project contribution.

VDS members took lead in

- ❑ Selection of needy farmers,
- ❑ Convincing big & better off farmers to wait,
- ❑ Mobilizing local contribution (over 60 % contribution came from people),
- ❑ Searching for fodder in neighbouring district,
- ❑ Transportation & distribution.

This success could be attributed to the emergency situation, as there was an acute shortage of fodder, and also to the timely support and motivation that they received from the project.

There was also a huge demand from all the CBOs to provide fodder seeds for cultivation. Twenty quintals of African Tall fodder maize seeds were provided to over 100 farmers for cultivation, 10 quintals each in *rabi* and late *rabi* seasons.

2. INTERVENTION: Drought proofing measures through employment generation.

The intervention was planned with the following objectives:

- ❑ To create employment opportunities so that the farm women & agricultural labourers earn their livelihood,
- ❑ Stop desperate migration,
- ❑ To conserve soil and water and to enhance groundwater recharging.

Despite some good rains in last week of August and early September, the PRAWARDA staff went through the planned exposure visit to MYRADA, Kodli with

representatives from VDS, WMC and Apex bodies to familiarize them with various soil and water conservation structures like Sunken pond (Earthen Nala Bund). Since it was difficult to find community lands to dig sunken ponds (as in Kodli), and to take up employment generation activities in different project villages simultaneously, a different idea of digging “**Recharging/Farm ponds**” emerged out of the experience of PRAWARDA staff. The staggered farm pond of

30 feet length, 30 feet width and 10 feet depth was designed to store the rainwater and help recharge nearby wells. The farm ponds were to be dug on the upper side of open wells for this purpose. A farm pond was dug in Sastapur for demonstration purpose, as the farmers did not know much about them.

The VDS played the role of nodal agency in implementing this activity. The GC members selected the farmers interested in digging farm ponds in their respective villages. A survey of selected sites was made with VDS members and farmers and an amount of Rs.5000 per farm pond was fixed as project contribution. The remaining cost was to be met by the farmers. The total cost of farm pond ranged between Rs. 5390 to Rs. 9625 depending on soil type. The average local contribution was over 35 per cent, which was contributed in the form of the farmers themselves contributing labour as well as paying wage labourers in cash. A total of 124 farm ponds and 3 sunken ponds were supported in 6 villages. Out of 124 farm ponds, one was dug in a common land in Nirgudi adjacent to the well that provides drinking water to the entire village.

Though the response in the beginning was lukewarm, the farmers soon realized the importance of such structures in groundwater recharging and soon the demand from farmers went past our initial expectations. Hence, the programme had to be extended to the next semester ((October 2001-March 2002). Three sunken ponds were constructed by the people in common lands of Nirgudi. Two of these structures conserve water in the streams of two different perennial water springs while the other halts water runoff from a ravine. Each structure is capable of holding about 2 lakh litres of water.

Table 2. The category wise farmers and cost details of farm pond activity

Sl. No.	CBO & Village	Category wise beneficiaries				Total	Costs (Rs. in Lakh)		
		MF	SF	LF	BF		LC	PC	Total
Farm /Recharging ponds									
1	VDS Hanumanthwadi	-	15	7	2	24	0.60	1.20	1.80
2	VDS Nirgudi	4	24	17	1	46	0.73	2.30	3.03
3	VDS IIIhal	3	5	4	-	12	0.25	0.60	0.85
4	VDS Bandenawazwadi	-	9	13	-	22	0.32	1.10	1.42
5	Kaveri WMC, Sastapur	-	2	1	-	03	0.04	0.15	0.19
6	Channabasveshwar Apex, Mudabi	3	12	2	-	17	0.24	0.85	1.09
	TOTAL 1	10	67	44	3	124	2.20	6.20	8.40*
Sunken ponds/Earthen nala bunbs									
1	Paandhari					1	0.08	0.24	0.32
2	Paankhori					1	0.07	0.22	0.30
3	Siddanakhori					1	0.09	0.26	0.35
	TOTAL 2					3	0.24	0.72	0.97
	GRAND TOTAL						2.44	6.92	9.37

* Total cost including decimals

MF: Marginal farmer (<2.5 acres), SF: Small farmer (2.5-5.00 acres), LF: Low medium farmer (5.01-10 acres), BF: Big farmer (>10 acres), WF: Woman farmer
Table 3. Village wise details of employment generation

Sl. No.	CBO & Village	Employment (in labour-days)		
		Women	Men	Total
Farm /Recharging ponds				
1	VDS Hanumanthwadi	2309	2178	4487
2	VDS Nirgudi	3306	3616	6922
3	VDS Ilhal	802	899	1701
4	VDS Bandenawazwadi	1555	1555	3110
5	Kaveri WMC, Sastapur	94	167	261
6	Channabasveshwar Apex, Mudabi	1180	1512	2692
	TOTAL 1	9246	9927	19173
Sunken ponds/Earthen nala bunbs				
1	Paandhari	296	235	531
2	Paankhori	305	177	482
3	Siddanakhori	310	225	535
	TOTAL 2	911	637	1548
	GRAND TOTAL	10157	10564	20721

Each farm pond has generated, on an average, an employment of 154 labour-days i.e., 19173 labourdays, at almost 50 per cent each for men and women. Out of 123 farmers who dug farm ponds in their farms, 77 (62%) were small and marginal farmers. Similarly, the sunken ponds have generated an employment of 1548 labour-days at 59 and 41 per cent each for women and men, respectively.

ECONOMICS OF WATER CONSERVATION

A farm pond of 30 feet length, 30 feet width and 10 feet depth has a volume of 1.41 cubic metres and holds 1.41 lakh litres of water when full. A farm pond fills at least 6 times in a year (which was possible even during the late *rabi* season of this drought year) thus conserving 8.46 lakh litres of water, and 1049 lakh litres from 124 ponds annually. Another 10 lakh litres per sunken pond adds up to 30 lakh litres of water conservation. In all, nearly 1100 lakh litres of water conservation capacity has been created, which directly recharge the adjoining wells in many cases or even otherwise recharge ground water in the watershed.

It is estimated that 300 litres of water is required per day for producing 1 ton sugarcane i.e., annual water requirement per ton sugarcane is 1.095 lakh litres, rounded off to 1.10 lakh litres. Now, with 1100 lakh litres of water conservation capacity created by farm ponds and sunken ponds, it can be used to produce 1000 tons of sugarcane. At Rs. 800 per ton of sugarcane price the value of sugarcane that can be produced is Rs. 8 lakh (1000 tons* Rs. 800), which is about 15 per cent more than the money invested by the project (Rs. 6.92 lakh)

on creating these assets. Thus, the value of water conserved by farm ponds and sunken ponds is Rs. 8 lakhs.

SOME GAINS FROM THE DROUGHT RELATED INTERVENTIONS

As it was envisaged at the beginning of the semester, the institution building and strengthening did take place but not as we had planned. A crisis called DROUGHT gave impetus to the efforts of PRAWARDA and we ended up not only implementing almost all the activities but were able to cope with the aspirations of the people. We could successfully convert a

The gains:

- VDS have grown in strength in terms of planning and implementing programmes, crisis management, drought-proofing etc.,
- WMC in Sastapur got revived,
- Apex bodies led the SHGs to approach government for channelizing programmes through SHGs,
- People's & staff capacity in crisis management increased.

challenge into an opportunity. To quote some examples of indicators of success, Nirgudi village was way ahead when it came to VDS related activities so far. However, the VDS in Hanumanthwadi overtook Nirgudi in terms of planning and implementing drought relief measures. In no time the VDS members could mobilize local contribution and brought loads of fodder. Similarly, the WMC in Sastapur came alive after a prolonged dormancy and sought to mobilize fodder through its funds. The villagers' and staff capacity in drought proofing measures in particular and crisis management in general has increased.

The critical part of the entire intervention was that the people in Kaudiyal could not participate in the programme for various reasons. The village is dominated by labourers and have very few cattle in the village, hence they did not mobilise fodder. Similarly, although many farmers from Kaudiyal worked as labourers for digging farm ponds in neighbouring villages like Nirgudi and Hanumathawadi, not a single farm pond was dug in Kaudiyal. The reason was that the village is on the ridge of the watershed and has mostly a very hard laterite soil. The cost of digging would have been more than double the cost in other villages and because of this rock-like surface soil the farmers did not show interest in digging farm ponds. The village required some tailor-made strategies, which could not be worked out.

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CONCLUSION

The drought as a crisis was successfully tackled by PRAWARDA by facilitating people's participation at all levels of programme planning, implementation and monitoring. The interventions had tremendous impact in the sense,

- Fodder was mobilised quickly to meet the immediate requirement,
- Fodder development was done to obviate possible shortage in the summer,
- Over 20000 labour-days' employment was generated, which helped poor agricultural labourers, women and the marginalized thus addressing the gender and equity issues,
- 124 farm ponds and 3 sunken ponds were supported that in turn would act as drought-proofing measures in the long run by way of conserving over 1100 lakh litres of water, which in turn would recharge the wells, and
- The project investment was economically viable, and more importantly, it enhanced people's capacity in crisis management thus proving to be an effective participatory watershed management practice.

Dr. Arun Balamatti.