



FARMERS NETWORK FOR WATER SECTOR REFORMS IN SOUTH INDIA

R. Doraiswamy¹

ABSTRACT

This paper deals with practical experiences of one of the fundamentals of PIM i.e. Farmers Network for Water Sector Reforms (FNWSR) in South India undertaken by JalaSpandana. The basis to FNWSR is that the farmers are generally excluded from the process of policy formulation, and are mainly conceived as implementers of policies designed by others. It is posited that an explicitly multi-stakeholder policy process and balanced representation of the different interest groups in that, including farmers, will enhance the quality, acceptability and pace of water sector reform. In order to strengthen PIM through making PIM a farmers' baby, FNWSR was initiated in Karnataka and later extended to States like Andhra Pradesh, Karnataka, Tamil Nadu and Pondicherry, which have adopted PIM policy. The main objective of FNWSR is to facilitate farmers – the major stakeholders in irrigation to participate effectively in the political process of policy formulation and implementation. INPIM supported JalaSpandana to carry out FNWSR in 2004 and 2005. The results in terms of regular interaction with the concerned Ministry and Bureaucracy, pressure group to lobby for PIM, motivate fellow farmers to function efficiently at various levels of WUAs, etc seem alarming. In Andhra Pradesh, FNWSR succeeded in building pressure on the government and ensuring the continuity of WUAs. In Karnataka, the members of FNWSR succeeded in effective formation and functioning of project level WUAs institutions in four major irrigation projects. Similarly, in Tamil Nadu and Pondicherry, FNWSR have made significant impact on the structure and functions of WUAs and PIM.

1- Mr. R. Doraiswamy is working as water resource specialist at JalaSpandana – South India Farmers Organisation for Water Management, Bangalore, India. JalaSpandana is a non-governmental organisation formed by the representatives of water users associations in South India. It has head office at Bangalore and State offices in Andhra Pradesh, Karnataka, Tamil Nadu and Pondicherry. Contact: doraiswamy@vsnl.net, doraiswamy@rediffmail.com, www.jalaspandana.org, Phone: 91-80-22286161, 09448268401, Address: 72, 7th Cross, Chikkathayappa Street, Vasanthnagar, Bangalore 560052, India, www.jalaspandana.org.

1. INTRODUCTION

In South India, states like Andhra Pradesh, Karnataka, Tamil Nadu and Pondicherry have adopted Participatory Irrigation Management (PIM) either through passing an exclusive Act or enacting its existing Irrigation Act that emphasizes on PIM (Doraiswamy, 2003). The PIM policy formulation and implementation has been the business of the government agency in a top down approach. The government agency enjoy the discretionary powers in implementation of the PIM programme, which often lead to down play essential elements required for the success of the PIM. Farmers who occupy the central position in the Participatory Irrigation Management were not given prime importance in policy formulation and implementation. Moreover, mere enactment of policies that emphasizes on WUAs in itself is not sufficient to make PIM success, what matters significant is the successful implementation and periodic review of the policy.

Participatory Irrigation Management viewed from the larger context of decentralisation policies of the government suffers more from lack of political will to empower end users. The regular interventions of the governments as per the wishes of the political parties hampers the progress of PIM programme. In South India, the field experiences clearly shows that the interest shown to WUAs vary from Minister to Minister (who occupies water resources portfolio in the government) and from the government to government. This approach generates the gap between the government and users and to a large extent push farmers in to passive receiving end. As the success of PIM lies in equal and successful participation of all the stakeholders working in water sector, it is imperative that PIM becomes majority concern. In the process of PIM policy formulation and implementation, farmers need to take lead role and treat PIM as their baby and not some thing given from outside. Thus, Farmers Network for Water Sector Reforms (FNWSR) was conceived to facilitate PIM programme in South India.

In this paper, we discuss the emergence and success of farmers network and way forward in the context of PIM in South India, especially in states like Andhra Pradesh, Karnataka, Tamil Nadu and Pondicherry in South India. The first and second section deals with area profile, description of farmers network, need in general and in specific context of PIM policy. The third section illustrates how the FNWSR was carried out in South India emphasizing on the support received from International Network for Participatory Irrigation Management (INPIM). Fourth section deals with achievements, lessons and future perspective of applicability.

1.1. AREA PROFILE

Andhra Pradesh is geographically the fourth largest State in India (67.8 million acres) and the fifth largest, in terms of population. The population of Andhra Pradesh was about 75.7 million in 2001 with a population density of 272 inhabitants per square kilometer (Government of Andhra Pradesh, 2004). The rainfall in the state varies from 568 mm to 1159 mm. Agriculture in Andhra Pradesh is largely dependent on rainfall: more than 50 per cent of the cultivated area is rainfed. It is estimated that only 42 per cent of the gross sown area of nearly 11.36 million acres receives irrigation water at present. The state produced Vision 2020 document emphasizing on holistic approach towards water resources development (Naidu, 2000).

Karnataka is the eighth largest State in the country and is located in the Deccan plateau. The geographical area of Karnataka is 1,90,498 sq.km accounting for 5.81% of the total area of the Country. Up-to the end of March 2000 a total irrigation potential of 36,22,921 ha. (Including ground water is created). The annual normal rainfall is 1138 mm received over 55 rainy days. It varies from as low as 569 mm in the east to as high as 4029 mm in the west. About 2/3rd of the geographical area of the State receives less than 750 mm of rainfall (Government of Karnataka, 1995, 2002).

Tamil Nadu and Pondicherry is geographically eleventh largest State in India (130 lakh hectares) and has 7 per cent population of the country. The net area sown in Tamil Nadu is about 60 lakh hectares (ha) of which about 30 lakh hectares or 50 per cent get irrigation facilities from sources like canals (9.50 lakh ha), Tanks (9.00 lakh ha) and Wells, Tube wells (11.50 lakh ha).

The total area of Pondicherry is 293 Sq kms with a population of 6,08,338 according to 1991 census. In 2000, the net area cultivated is 24,402 ha, gross area cultivated is 42,398 ha and net irrigated area is 21,628 ha and gross irrigated area is 33,643 ha. There are 84 tanks systems distributed in Pondicherry and Karaikal regions of which 54 are tank systems and 25 are non tank systems. There are over 8000 tube wells, which irrigates the net area of about 15000 ha.

2. FNWSR DESCRIPTION

2.1. WHAT IS FARMERS NETWORK

Farmers Network is the powerful way of bringing farmers from different parts of the political boundaries and various levels of water bodies on to one common platform. This common platform enable farmers to play constructive role in the politics of water especially in the process of policy formulation and implementation. In other words, Farmers network is basically to gain access to water policy details, power politics, new technology and information relevant to water sector reforms. In this paper, farmers network refer to farmers using the water in the command area in various sizes of water bodies like major, medium and minor irrigation projects. This farmers network could not be called as Network of Water Users Associations as WUAs were not established in all irrigation projects in these States, either due to lack of policy or the delay in the process of policy implementation. Thus, the project FNWSR is conceived as a means to generate political vibration in the Participatory Irrigation Management domain. FNWSR is established at various levels of water bodies especially at irrigation project level, sub basin and basin level (JalaSpandana 2004, 2005).

2.2. WHY FARMERS NETWORK IN PIM

Although, there are several benefits accrued out of farmers network, in this section we focus on farmers network in the context of PIM. The development and management of irrigation sector in India, especially in South India is highly centralised by the Government agency. Participatory Irrigation Management or Irrigation Management Transfer calls for devolution of power, which gives rise to interest conflicting among various stake holders. As a result, section of the people particularly elected representatives and officers of Irrigation Department enjoying authority over irrigation

system find all means and ways to evade power transfer to WUAs (Hooja 2006). The history of decentralisation in India including the local government like Panchayat Raj Institutions (PRI) clearly shows that the already well established group like Member of Legislative Assembly (MLA) and Member of Parliament (MP) are not happy in loosing power over their constituencies especially on water, which is one of the powerful natural resources (Baumann, 1999).

Farmers are usually on the receiving end and are highly unorganized. To self initiate and volunteer to form themselves into network becomes rather difficult task as the farming conditions in South India is more on a subsistence level, the farm size varies from 1 hectare to 15 hectares per farmer. They lack common platform to negotiate and contest for rights, responsibilities and powers from their counterpart like Irrigation Department and other elected representatives. Farmers network enable to provide necessary and appropriate recommendations to the Government, which otherwise may not be captured in true and original sense (Alders et. al, 1993).

In South India, there are hardly any NGOs directly working with WUAs in major and medium irrigation systems. The normal practice adopted by irrigation department in eliciting information from the water users associations is to pool few WUA representatives in workshop organised at State level. This approach still becomes the task of irrigation department and never turns out to be farmers task on a regular continuous basis. It becomes imperative to establish farmers network to make PIM a majority farmers concern on a permanent basis (Aw and Diemer 2005).

Farming community in South India, is again not to be viewed as homogenous group. The farming community is divided in to several groups based on caste, class, region, location of the irrigation project in a river basin, etc,. In most of the villages in South India, the village hegemony is based on elite characteristics, which could be social, economic and political in nature. The past experiences have shown that small group of people in the WUAs control the entire functioning of WUAs, which is against the principles of PIM, thus hampering the success of PIM. It is pre requisite for the success of PIM to bring farmers on one common platform cutting across these boundaries.

FNWSR reduces the damage caused due to varied perceptions and interpretations made by different stakeholder groups on Participatory Irrigation Management. In South India, during the initial periods Participatory Irrigation Management and Irrigation Management Transfer was interpreted by section of the people as transfer of burden from Government to farmers. In addition, PIM was interpreted as an attempt made by the Department to divide farming community and further create conflict among water users. Moreover, the tendency among farmers in South India is that they believe and come to common understanding when fellow farmers speak positively. This is the better approach in sharing scarce resources and resolving water conflicts (Doraiswamy 2004). The field experience shows that farmer to farmer technology transfer is more efficient than any other agency attempting to convince farmers on several positive aspects of PIM. In other words, knowledge sharing between and among farmers from different irrigation projects help boost the success of the PIM programme.

The recent trend in water allocation and demand shows that there is increasing demand from various sectors like drinking, industries, environment, tourism, etc. It is imperative to farmers to safeguard the interest of farming community which is dependent on Agriculture to the extent of 65 to 70 per cent in India.

Farmers network plays constructive role in modernisation programme carried out in canal irrigation projects. Most of the modernisation programme in canal system focus on physical works with emphasis on technical aspects of irrigation. The social component especially involvement of water users is not given prime importance despite of WUAs existence in the project area.

3. CONTEXT OF PIM

3.1. PIM IN ANDHRA PRADESH

In order to improve irrigation performance, the Government of Andhra Pradesh took a progressive and innovative step to empower the farmers to manage and operate the irrigation resources through formation of Water Users Associations in the year 1997. An exclusive Act called Andhra Pradesh Farmers Managed Irrigation Act of 1997 was enacted, which provides the legal support for the functioning of these WUAs. At National and International Level, this is a major reform effort and is the first large scale exercise at delegation of water management powers to water users (Mollinga et al 2004). The objectives of this reforms are carrying O & M of the irrigation system and increase in agriculture production. The Act emphasized on formation of water users organisation at three level namely Water User Associations (WUAs), Distributary Committee (DC) and Project Committee (PC) for major irrigation projects, two tier structure (WUA/PC) for medium irrigation projects and single tier structure (WUA) for minor irrigation.

During 1997, the elections were held democratically and 10,292 WUAs with 46,755 TCs members and 172 DCs formed in the State. Each WUA consisted of 4-10 TC members and there was direct elections to both TC members and President. Initially, the tenure of WUA was for five years. Andhra Pradesh Economic Reconstructing Project (APERP) is taken up to the tune of 962.26 crores, which has Water Users Associations support component. These organisations have taken up O & M and Minimum Rehabilitation works.

The APFMIS Act 1997 was further amended by the Congress Government. Some of these amendments are co-opting the members of other elected bodies like PRI and MLAs and MPs in to WUAs. One of the positive aspect of these amendments is to make WUAs as permanent bodies with every two years one third of the Territorial Constituency (TC) member of WUA go out on rotation system and fresh elections conducted only in that TC area.

It is reported that there are several benefits accrued after the formation of farmers WUAs, some of them are bridging the gap ayacut of 10.07 lakh acres¹, no water problem or tension in tail end of the command area, farmers got 5-10 bags extra paddy, no crop submersion – flood waters quickly drained, the works were executed with speed and quality and there were no excess in estimated rates.

The water charges were increased more than three folds i.e. from Rs. 60 per acre (paddy crop) to Rs. 200 per acre. In order to carry out the O&M by WUAs, provision was made in the Act to re-plough the water charges collected in the WUA area on the basis of proportion.

1- As reported by I & CAD, GOAP

Table 1. Project/District wise WUAs in Irrigation Projects in Andhra Pradesh

Name of the District	No of WUAs				
	Major		Medium	Minor	Total
	Total WUAs	Project Wise WUAs			
Adilabad	33	SRSP-8 Kadam -25	38	260	331
Ananthapur	48	TBP HLC -48	22	305	375
Chittoor	0		12	580	592
Cuddapah	78	TBP HLC- 46 KC Canal	16	217	311
East Godavari	208	Thandava Project-12 Godavari Delta System -145 Yelluru Irrigation System-25 Chagalanadu LIS-26	17	211	436
Guntur	398	Nagarjuna Sagar Right Canal-255 Krishna Delta System-143	0	64	462
Karim Nagar	163	SRSP-163	18	495	676
Khammam	79	Nagarjuna Sagar Left Canal-79	38	381	498
Krishna	307	Nagarjuna Sagar Left Canal-100 Krishna Delta System-207	12	270	589
Kurnool	118	TBP HLC-6 TBPLLC-57 KC Canal-55	12	159	289
Mahabubnagar	39	RDS-34 PJP-5	5	520	564
Medak	0		14	550	564
Nalgonda	116	Nagarjuna Sagar Left Canal-86 Musli Project-30	9	596	721
Nellore	92	Pennar Delta System -68 Somasilla Project-24	43	630	765
Nizambad	85	SRSP-8 NizamSagar-77	16	279	380
Prakasam	165	Krishna Delta System-17 Nagarjuna Sagar Right Canal-148	24	300	489
RangaReddy	0		5	184	189
Srikakulam	100	Vamsadara Project-54 Narayanapuram Anicut System25 Nagavali System -21	6	416	522
Visakhapatnam	16	Thandava Project-16	18	331	365
Vizianagaram	4	Nagavali System-4	49	444	497
Warangal	85	SRSP-85	23	658	7566
West Godavari	149	Krishna Delta System-16 Nagarjuna Sagar Left Canal-2 Godavari Delta System-131	13	226	388
Total	2283		410	8076	10769

Table 2. Project / District wise Distributary Committee in Andhra Pradesh

S.No	Name of the Project	Name of the District	No of D.Cs
1	2	3	4
1	Vamsadhara Project	1. Srikakulam	8
2	Nagavali	1. Srikakulam	4
		2. Vizianagarma	1
		Subtotal	5
3	Narayanapuram	1. Srikakulam	5
4.	Tandava Reservoir	1. Visakappattinam	3
		2. East Godavari	2
		Sub Total	5
5.	Godavari Delta System	1. East Godavari	25
		2. West Godavari	20
		Sub Total	45
6	Yeleru Project	1. East Godavari	5
7	NSRC	1. Guntur	30
		2. Prakasam	18
		Sub Total	48
8	NSLC	1. Nalgonda	10
		2. Khammam	9
		3. Krishana	13
		4. West Godavari	-
		Sub Total	32
9	Krishana Delta System	1. Krishna	29
		2. Guntur	20
		3. Prakasam	2
		4. West Godavari	3
		Sub Total	54
10	Pennar Delta System	1. Nellore	6
11	Somasila Project	1. Nellore	5
12	K.C. Canal	1. Kurnool	8
		2. Cuddapah	6
		Sub Total	14
13	TBP HLC	1. Ananthapur	5
		2. Cuddapah	6
		3. Kurnool	1
		Sub Total	12
14	TBPLLC	1. Kurnool	10
15	RDS	1. Mahabubnagar	6
16	Nizamsagar	1. Nizamabad	10
17	Kadam Project	1. Adilabad	5
18	SRSP	1. Karimnagar	21
		2. Warangal	9
		3. Adilabad	1
		4. Nizamabad	-
		Sub Total	31
19	Musi Project	1. Nalgonda	6
		Grand Total	312

3.2. PIM IN KARNATAKA

In order to make the best utilization of available water, the State in June 2000 amended its Irrigation Act of 1965. The amendments emphasise irrigation management turnover from the irrigation Department to Water Users Cooperative Society (WUCs) at primary, distributary, project and State level. At present there are about 3000 WUCs registered under the Cooperative Act in the State and making progress in forming project level federations in major irrigation systems (Doraiswamy, 2001, 2005).

The WUCs are empowered to decide on the cropping pattern, fix and collect water charges based on the volumetric supply and conflict resolution. Further, WUCs are entrusted the task of carrying out Maintenance work and Water Management through formal Memorandum of Understanding (MOU) between Irrigation Department and WUCs. In addition, the WUCs were given other rural development works like laying roads to farm lands called as Our road our farms '*Namma Holla Namma Rasthe*'. WUCs are also encouraged to take up other income generating activities like fertilizers and pesticides dealings, and other agriculture inputs. At present, there are four project level water users institutions in major irrigation systems namely Malaprabha and Ghataprabha Irrigation systems in Krishna Basin in North Karnataka and Harangi and Kabini Irrigation Project in Cauvery Basin in South Karnataka.

Table 3. CADA Wuse WUAs Progress in Karnataka as of 31-05-2006 Area: in Ha

Sl. No	Name of the CADA	Area Irrigated	Target (No. of WUCs)	Achievement as of 31-05-2006					
				Registration		MOU		Handing Over	
				No. of WUCs	Corresponding area	No. of WUCs	Corresponding area	No. of WUCs	Corresponding area
1	Tungabhadra Project	363000	835	418	238000	147	96500	147	96500
2	Malaprabha & Ghataprabha	344739	600	552	274700	457	229858	228	229858
3	Cauvery Basin Project	416768	599	549	228795	228	120539	228	119083
4	Upper Krishna Project	259834	530	468	229438	362	177471	229438	362
5	Bhadra Reservoir Project	118737	298	290	115784	105	42545	115784	105
6	Irrigation Project Zone	36402	79	59	26143	22	8365	26143	22
	Total	1539480	2941	2336	1112860	1321	675278	1321	673822

3.3. PIM IN TAMIL NADU AND PONDICHERRY

Tamil Nadu initiated the formation of WUAs in 1980s. Further, in 1994-95 Agriculture Engineering Department undertook formation of WUAs under World Bank assistance more seriously by providing financial assistance. Later, in the year 2000, the Government of Tamil Nadu enacted New Act called Tamil Nadu Farmers Management Irrigation System (TNFMIS) Act on the same lines as that of Andhra Pradesh. According to TNFMIA Act WUAs will be formed at three levels of the irrigation system namely primary, distributary level and project level.

Table 4. District wise details of Elections to WUAs under WRCP in Tamil Nadu

S.No	Name of the District	District wise details of coverage of Elections			
		Total No of WUAs	Total No of Villages	Total No of TCs	Total Command
I.	Chennai region				(ha)
1.	Kanchipuram	276	306	1218	47905
2.	Tiruvallur	21	39	102	4248
3.	Vellore	229	391	1022	33472
4.	Dharmapuri	47	159	256	15791
5.	Tiruvannamalai	154	387	734	30753
6.	Villupuram	80	233	381	22461
7.	Cuddalore	78	313	430	25094
	Sub Total	885	1828	4143	179724
II.	Madurai region				
8.	Pudukkottai	1	1	4	84
9.	Dindigul	17	34	81	4637
10.	Madurai	56	433	337	72563
11.	Theni	32	65	176	11824
12.	Virudhunagar	9	35	53	7197
13.	Ramanathapuram	69	218	369	21577
14.	Sivagangai	82	246	402	34034
15.	Thuthukudi	66	152	317	16401
16.	Tirunelveli	162	536	793	65685
17.	Kanyakumari	46	158	285	25955
	Sub Total	540	1878	2817	259957
III.	Pollachi region				
18.	Erode	49	135	288	49993
19.	Coimbatore	101	507	603	119887
	Sub Total	150	642	891	169880
	Grand Total	1575	4348	7851	609561

T.C: Territorial constituencies.

The government of Pondicherry is carrying out community based tank rehabilitation programme under the financial assistance of European commission. The NGOs are engaged extensively to build the capacity of tank users. However, there is no State policy that emphasizes on PIM and empowerment of tank users associations.

4. IMPLEMENTATION OF PIM IN SOUTH INDIA

4.1. ANDHRA PRADESH

Andhra Pradesh, one of the States in India to enact an exclusive Act called Andhra Pradesh Farmers Managed Irrigation Systems Act of 1997 did not establish Project Committees although envisaged in the Act. It confined formation of WUAs to primary and distributary level of irrigation projects. As a result water users participation at main system management and its linkages with primary level WUAs, which is a prerequisite for system performance and water use efficiency did not materialize. The main system management and the decision making authority rest with the project engineers and district officers.

The procedures to conduct elections to WUAs is centralised, the decision to hold elections and its operational logistics was in the discretion of the State Government. One of the major draw back of such procedures on PIM is the break in the continuity of WUAs. After the WUAs completion of the first tenure, the State Government did not conduct elections even to primary and distributary level WUAs across the State and the management was taken over by Irrigation Department from WUAs. As a result, there was a gap in the continuity of WUAs.

The revenue collection in irrigation projects constitute central position on the sustainability of WUAs. In AP, irrigation is provided by Irrigation Department and revenue collection is carried out by Revenue Department. As a result of multiple department involvement, the collection rate was below 50 per cent. The sharing of data regarding the extent of water tax collection by revenue department is not appreciable. Further, the apportionment of water tax to WUAs, DCs and PCs are not regularly carried out by revenue department. Thus, WUAs are deprived of their due share of revenue generated out of water tax and reduces interest in the functioning of WUAs. As a result, the maintenance of irrigation system is directly affected (Vaidyanathan 1999).

4.2. KARNATAKA

In Karnataka, the registration of WUAs is carried out under State Cooperative Societies Act with the fixed range of command area for each WUAs. This policy applied to major, medium and minor irrigation projects. The model adopted in Karnataka was similar to Maharashtra model of cooperatives¹. This created serious problems in minor irrigation sector in pooling up more than 10 to 15 tank spread in the radius of 10 Kms to form one society. Initially, in major irrigation projects, the momentum of forming water users associations did not gear up due to cooperative principles.

1- Maharashtra adopted major reforms in water sector in 2005. It moved away from cooperative model to ensure total participation of the water users.

The formation of WUAs federation at project level requires high degree support from department officials. As the WUAs in Karnataka are registered under Cooperatives Act, the representatives of WUAs had to shuttle between the two departments. In addition, the absence of model bylaws caused immense delay in the process of formation of project level users institutions.

Although, PIM policy applies to all irrigation projects in the State, some of the officials of the irrigation department were not prepared to adhere to the policy contents. The representatives had to struggle obtaining the information on the implementation of the policy in some irrigation projects to convince the officers in their project. One such example is the water tax collection by the WUAs, representatives of federations had to show to their officers the signed MOU obtained from other irrigation projects.

The volumetric supply of water management in Karnataka over looks the issue of quota fixation and entitlements. Memorandum of Understanding signed between Irrigation Department and WUA with regard to water management is one sided. As the quota and entitlement is not clearly defined, the breach of MOU do not give any hold on the part of WUAs to make irrigation department accountable. The quota and entitlement is the pre requisite to achieve equity particularly in irrigation projects that has large tail end deprivation (Doraiswamy and Mollinga P, 2002).

As per the policy, the operation and maintenance of the canal network lies with the Irrigation Department. In order to ensure quality and quantity work, WUAs insist that it should be the responsibility of WUAs.

4.3. TAMIL NADU AND PONDICHERRY

In Tamil Nadu, PIM was not implemented with true spirit as envisaged in the PIM policy. The formation of WUAs confined to primary level despite of the policy mentioning about distributary and project level committees. Further, the formation of WUAs under the World Bank supported project called Water Resources Consolidation Project (WRCP) was extended to only those irrigation project that was covered under it. The formation of WUAs as per TNFMIS Act was not taken up in Cauvery River Basin, one of the major river basins in Tamil Nadu. In rest of the irrigation projects, the WUAs formed under Command Area Development (CAD) Programme continued. Thus remain the difference in the structure of WUAs formed under CAD programme and WRCP. The operation and maintenance work of the canal system is carried out by government department with little transparency in the process of tendering the works to contractors.

The TNFMIS Act was made uniform to all categories of irrigation projects. This created problem both in terms of structure and functions of users participation in tank system. Tank system is usually treated as social institution that belongs to village. The new policy tried to segment tank users associations on the basis of the fixed range of area to form the tank users associations. As a result in some cases tank users associations belonging to particular tank was divided and in most cases it became collection of several tanks that went against the traditional principles of tank management locally called as *kudimaramath*.

Although, farmers participation in tank restoration programme is well appreciated in Pondicherry, the State Water Policy is yet to be shaped. FNWSR generated good

amount of awareness among the farmers. The State is yet to detail PIM policy, for which the farmers are rising their voice.

5. INPIM SUPPORT TO FNWSR

JalaSpandana developed concept note to facilitate “Farmers Network for Water Sector Reform in South India” based on the very positive experience with farmers network approach, gained particularly in Karnataka through Pragathi a Farmers NGO. Upscaling and strengthening of farmers networks on water issues is felt necessary to increase the momentum of water sector reform. The concept note was further developed and transformed into project proposal with the support of Dr. Peter P Mollinga, Senior Research Fellow, ZEF, Bonn, Germany and Mr. J. Raymond Peter, the then Executive Director, INPIM, Washington D.C. JalaSpandana was fortunate enough to get the financial and other support from INPIM through South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERS) Hyderabad. The project was successfully implemented in Andhra Pradesh, Karnataka, Tamil Nadu and Pondicherry.

5.1. OBJECTIVES OF FNWSR

General objectives

- Contribute to a participatory water resource planning process by establishing Farmers Organization that can actively engage in discussion and decision-making on water resource policy formulation and implementation at different levels.
- Integrated Water Resource Management on social equality and equity through Farmers Organisation.
- Overall development of water resource sector and reduce burden on the State exchequer.

Specific objectives

- Establish and Strengthen a Farmers Organization in four States exclusively to work on water sector.
- Capacity building of office bearers and farmers in this Farmers Organisation
- Design and implement strategies and activities for effective water management.
- Preparation of Water Policy by Farmer’s Organisation

5.2. MAIN ACTIVITIES

Networking farmers

Establishing communication structure

Undertake capacity building

Define and undertake water sector reform initiatives and strategies

5.3. FNWSR DESIGN

The FNWSR was designed in such a way that the water users network could be established at various levels of irrigation system. In major and medium irrigation system depending on the size of the command area and the length of the canal, farmers workshop were organised to suit the convenience of the farmers. In tank systems, the workshops primarily focussed at district level. As most of the irrigation projects with in the sub basin and basin level are getting into conflict due to the centralised decision making regarding which project should go for irrigation during the season. Farmers network at sub basin was felt essential to address issues between the irrigation projects with in sub basin and basin. JalaSpandana organised series of state level workshops that facilitated farmers to directly interact and place their resolutions to the Ministers, bureaucracy and policy makers.

The workshops adopted methodology that facilitated farmers to review National and State Water policy, Participatory Irrigation Management policy and its implementation bottlenecks, roles and responsibilities of the farmers in making PIM successful programme and sustainable interaction with system managers. The workshop played constructive role in bringing farmers from tanks, irrigation projects and officers on a common platform to find ways and means to carry PIM forward in these States. In the process, Non Governmental Organisations were roped in to make PIM majority concern (Rooy 2001).

5.4. FNWSR INTERACTION WITH STATE OFFICERS

FNWSR maintained good relation with concerned stakeholders, especially department officials were carried out in all the three States. The officers like Secretaries of Irrigation, Officials of Water and Land and Management and Training and Research Institute (WALAMTARI), Hyderabad, Irrigation Management Training Institute (IMTI) Trichy and Water and Land Management Institute (WALMI), Dharwad, Engineer in Chief for WRO, Chief Engineers, Superintendent Engineers, Executive Engineers and Assistant Executive Engineers and other officers of Irrigation/Water Resources Organisation (PWD) and CADA were constantly interacted on issues pertaining to PIM.

5.5. PIM TOUR (YATRA)

JalaSpandana after visiting most of the districts in the respective states and building rapport with department officials and other professionals assessed the need for state level workshops of farmers on PIM. The field visits also showed the need to have a dialogue with the authorities involved in PIM programme in the States. The tour programme was organised with coordination and cooperation of regional organisations shown below in the tour plan. Mr. J. Raymond Peter, ED, INPIM participated in one such PIM Yatra undertaken in Andhra Pradesh, Karnataka and Tamil Nadu.

5.6. INFORMAL PROJECT LEVEL COMMITTEES

JalaSpandana facilitated farmers network to evolve into district/project level informal committees in irrigation projects. Farmers participation in main system management is

felt essential. Although, the PIM policies in Andhra Pradesh, Karnataka and Tamil Nadu have envisaged project level committees, only Karnataka is formally making progress in formation of project level committees. Thus, JalaSpandana facilitated formation of informal project level committees to set model and lobby for formation of project level committees in irrigation projects.

5.7. NATIONAL WATER POLICY

As the National Water Policy is published in English and many farmers in the States, particularly in South India are unable to read and digest the same. Thus, JalaSpandana translated the National Water Policy in Kannada, Tamil and Telugu and circulated free of cost to farmers.

5.8. STATE ORGANISATIONS

One of the significant development under FNWSR is the emergence of Farmers Organisation to work exclusively on water related issues with special emphasis on PIM. These State organisations are registered under the State societies Act and have offices in respective States. Pragathi – Farmers Society for Rural Studies and Development, an NGO formed by the farmers/ representatives of water users/farmers already existed in Karnataka. Similar organisation in Andhra Pradesh and Tamil Nadu was successfully formed as follows.

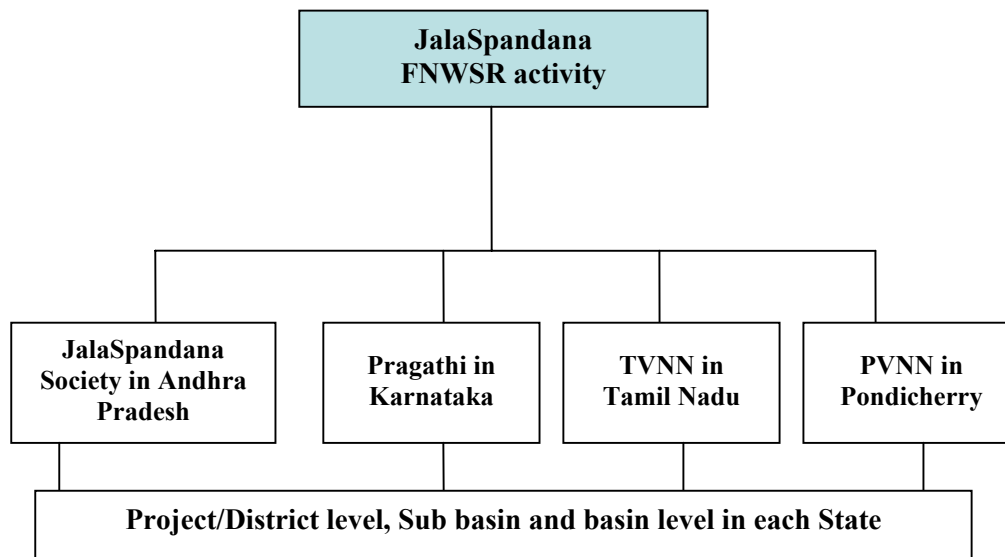


Diagram 1. State Organizations of Farmers Network

5.9. SOUTH INDIA FARMERS' WORKSHOPS

Under FNWSR three workshops were organised at South India Level were organised in January 2004 at Indian Social Institute, Bangalore, December 23rd 2004 at United Theological College campus, Bangalore and 25th May 2005 at BMP, Urban Health

Centre, Bangalore. Dr. Peter Mollinga, participated in first two workshops and Mr Raymond Peter participated in third workshop. The agenda of the workshop were to share the project experiences, best practices, intervention methodology, success of PIM and lessons learnt from each of these State and strategies for future action.

5.10. PUBLICATION

JalaSpandana has purchased the domain www.jalaspandana.org and the site is a multilingual website that caters to farmers and other stakeholders with the information on the water sector reforms including capacity building and other on farm activities. JalaSpandana is publishing quarterly newsletter in English and regional languages like Kannada, Tamil and Telugu. In Andhra Pradesh, the title of the newsletter is JALAVANI, in Karnataka it is called RAITHA PRAGATHI and in Tamil Nadu it is called NEERVALAM

6. OUTPUTS

6.1. ANDHRA PRADESH

In Andhra Pradesh, as mentioned earlier that the government was not keen on continuing WUAs after the completion of first term either through holding fresh elections or continuing the existing body. In 2003, farmers network took initiative and met the then Chief Minister of Andhra Pradesh, Mr. N. Chandra Babu Naidu and demanded to continue WUAs in Andhra Pradesh. There was a direct interaction between the farmers (former representatives of WUAs) and Chief Minister of the State. Further, the farmers network developed itself into pressure groups and continuously build pressure on the government through interacting with bureaucracy and other Ministers. The Chief Minister of Andhra Pradesh took a decision to conduct elections to WUAs in thirteen districts that had water in the reservoir during the year. The elections to remaining nine districts was not conducted.

The district/project level workshops organised by FNWSR facilitated formation of district level and project level informal committee of WUAs. This committees interacted among WUAs and with department officials to boost the success of PIM. Ground level lobbying for the elections for WUAs in remaining nine districts in Andhra Pradesh.

In 2005, state level workshop was organised in which the Minister for Major and Medium Irrigation participated. Farmers presented the policy recommendations and demanded Minister to conduct elections in remaining nine districts. The resolution copy of the workshop was prepared and circulated to Minister for Major and Medium Irrigation, Minor Irrigation, Lift Irrigation, Revenue and Finance Departments. The Government of Andhra Pradesh took a decision just in three days after submission of resolution copy of the workshop to conduct elections in nine districts.

The **capacity building** in irrigation projects was the most neglected part in the irrigation development. Farmers network further conceptualised Participatory Training Programme (PTP) to build capacity of WUAs and farmers on various facet of water management. The concept PTP was shared with Irrigation and CAD, Government of

Andhra Pradesh, which was further developed by the participation of officers. Mr. S.P. Tucker, Principal Secretary, I&CAD conducted several rounds of workshops to develop the concept PTP and identify NGOs to carry out capacity building in irrigation projects. An attempt is also made to revitalize Water and Land Management and Training and Research Institute (WALAMTARI).

The **operation and maintenance** is yet another issue that needed attention for the successful functioning of WUAs. As per the PIM policy, revenue department is to make apportionment to WUAs, DC and PC out of the water tax amount collected from the water users. This apportionment was not happening for past few years and WUAs were unable to carry out operation and maintenance of canal system and also to function as WUAs. Farmers network had regular meetings with department officials and demanded for apportionment to carry out regularly.

Farmers network pursued the issue of water tax collection and apportionment. To a large extent representatives of WUAs were divided over the issue of WUAs taking over the responsibility of water tax collection. Farmers network highlighted the positive elements of WUAs taking over water tax collection responsibility. As a result, many WUAs express willingness to collect water tax collection. The department is considering to hand over water tax collection on pilot basis in irrigation projects where WUAs are expressing interest.

6.2. KARNATAKA

In Karnataka, farmers network made significant landmark in the field of PIM. Operation and maintenance work by the WUAs, appropriate representation of WUAs in Apex body, Cooperative Act versus Societies registration Act were some of the issues raised by farmers network.

Informal project level WUAs federation established by FNWSR speed up the process of formation of WUAs, increase membership and project level federation. The members of FNWSR was instrumental in forming federations in Ghataprabha irrigation project and Harangi Irrigation Project. The secretary of JalaSpandana who was spear heading FNWSR became the president of project WUAs federation in Harangi irrigation project in Cauvery Basin. She is the first woman to become the president in a federation that has 86 WUAs with the command area of 54591 hectares. This is an historical achievement in Gender and PIM.

Karnataka adopted volumetric supply of water distribution. WUAs and Irrigation Department enter into Memorandum of Understanding to carry out the water management. The MOU with present model is one sided and do not give any leverage for the WUAs to make claims due to breach of contract by the government. One of the significant pre requisite for volumetric supply is fixing the quota and entitlements. This element is overlooked by the department. Thus, volumetric supply is not being carried out in true spirit. FNWSR is working out mechanism with the government to move towards actual volumetric supply. In addition, the issue of water rights and entitlements is also being taken up by FNWSR.

FNWSR is helping department officials in implementation of PIM policy. The process adopted elsewhere in forming WUAs, federations, MOU, operation and Maintenance,

etc. are documented and circulated to officers in other parts of the State. In other words, FNWSR produce documentary evidence to show the progress of PIM in different irrigation projects in the State, this is one of the strategies for speedy implementation of PIM. This approach is very helpful in irrigation projects that has some resistance from the department officials to empower WUAs.

6.3. TAMIL NADU AND PONDICHERRY

Similarly, in Tamil Nadu FNWSR empowered farmers with the contents of State water policy and PIM programme in the State and elsewhere in the country. The networks developed at district/project level started interacting with the irrigation and CAD officials constructively and started demanding the implementation of project level committees.

The PIM programme with the fixed area for WUA ran into serious problems in tank systems. FNWSR identified these problems encountered during the elections in terms of the Structure, functions and other logistics and brought to the notice of PIM experts and policy makers. This was realized by the policy makers and considered for changing the area of each WUA under tank systems.

At present FNWSR is constructively involved in the policy discussions on PIM in Tamil Nadu. It intends to make PIM one of the major component in the forth coming project taken up by Tamil Nadu under the financial loan from World Bank to the tune of Rs. 3050 crores to take up the project titled Irrigated Agriculture Management of Water Resources Management.

The members of FNWSR both in Tamil Nadu and Pondicherry became pro active in terms of operation and maintenance of water bodies. WUAs demanded the details of the works tendered to carry out in the area of WUAs and regularly monitored the works. FNWSR also promoted establishment of offices for WUAs and records maintenance.

6.4. Women in Networks

A special focus was laid on promoting women in networks, which is found essential to develop awareness among fellow women and build pressure on the government to promote women's role in WUAs through the necessary amendments to PIM policy in the State. The intensified meetings promoting women participation in WUAs resulted very positively in Harangi Irrigation Project, one of the major irrigation project in Cauvery Basin in which the General Secretary of JalaSpandana (member of farmers network) became president of project level WUCs federation.

Trainings were provided to members of farmers network on leadership qualities and motivating the elected representatives. One of the main issues is to avoid confrontation with the other elected representatives in the constituency by way of interacting with them and briefing the activities undertaken by WUAs and achievements like water use efficiency, water tax collection, quality and quantity of work, sense of ownership over canal system by water users and reduction in burden on the State exchequer.

7. FUTURE APPLICABILITY

The FNWSR has immense scope in promoting PIM in South India. It is quite evident from the field experience that the success of PIM lies with intensive struggle between the water users, bureaucracy and elected representatives of other bodies. There is consistent resistance from most of the department officials to empower WUAs. On the other hand, the culture of change in the government or Minister also creates gap in the frequency level of interest extended towards PIM. Most of the state governments express large part of interest in construction of projects and less importance to software component of irrigation projects like empowerment of WUAs.

In all these states, the implementation of PIM even to the extent envisaged in the state policy is lagging behind. Under such circumstances, further amendments or modifications in existing policies become mirage when left to the bureaucracy to carry PIM forward. There is need for constant pressure or the lobbying group to ensure successful implementation of PIM and further changes in PIM policy.

8. CONCLUSION

Farmers network is the pre requisite for the success of participatory irrigation management that warrants devolution of power from department to water users. FNWSR not only enables negotiate and contest with the government agency but also facilitate building consensus and cooperation from fellow farmers. The implementation process becomes smoother through FNWSR. It is evident from the above text that the FNWSR has created considerable impact on PIM through creating awareness among farmers, direct interaction with the policy makers, facilitating implementation process, etc, with limited financial resources. PIM in these states are majority concern, particularly farmers.

REFERENCE

1. Alders Carine, Haverkort Bertus and Veldhuizen Van Lawrens, (1993): Linking with Farmers Networking for Low External Input and Sustainable Agriculture, Intermediate Technology Publishers, U.K.
2. Aw Djibril and Diemer Geert (2005): Making a Large Irrigation Scheme Work, A case study from Mali, The World Bank, Washington D.C.
3. Bauman Parri (1999): Democratizing Development? *Panchayat Raj Institutions in Water Shed Development in India* in Participatory Watershed Development – Challenges for twenty-first century, Oxford University Press.
4. Doraiswamy R and Bhavanishankar B.S (2001): Irrigation Policy Reforms – *Peoples perceptions on the amendment bill to irrigation act of 1965 of Karnataka*, Sahayoga, Bangalore
5. Doraiswamy R, et. al, (2003): Farmers Organisation and Water Policy in South India, edited by Doraiswamy R, Mollinga P and Rajagopal A, published by Wageningen University, The Netherlands and National Institute of Rural Development, Hyderabad, India,

6. Doraiswamy R and Mollinga P, (2002): Tailenders and other deprived in irrigation in India: Tamil Nadu, Karnataka and Maharashtra by A. Rajagopal, R. Doraiswamy, Peter P Mollinga, K.J. Joy and Suhas Paranjape, Irrigation and Water Engineering, Wageningen University, The Netherlands.
7. Doraiswamy R and Gujja B, (2004): Understanding Water Conflicts - *Case Studies from South India*, Pragathi – Farmers Society for Rural Studies and Development, Bangalore.
8. Doraiswamy R, (2005), Irrigation Policy Reforms in Karnataka, in book Karnataka Economy: *Issues and Concerns*, edited by Vishwanatha and Jayasheela, published by Academic Publishers, Bangalore.
9. Government of Andhra Pradesh (2004): Annual Report of Irrigation and Command Area Development, Unpublished Report, Hyderabad, India.
10. Government of Karnataka (1995): Brochure on Irrigation Statistics in Karnataka 1993-94, Directorate of Economics and Statistics, Bangalore.
11. Government of Karnataka (2002): Karnataka at a glance 2000-2001, Directorate of Economics and Statistics, Bangalore.
12. JalaSpandana, (2004, 2005): Farmers Network for Water Sector Reforms in South India, Unpublished Report, JalaSpandana, Bangalore.
13. Hooja Rakesh, (2006): Management of Water for Agriculture – *Irrigation, Watersheds and Drainage*, Rawat Publications, India.
14. Mollinga P, Doraiswamy R and Engbersen K (2004): Capture and Transformation: *Participatory Irrigation Management in Andhra Pradesh, India* in The Politics of Irrigation Reform, edited by Peter P Mollinga and Alex Bolding, Ashgate Publishers, London.
15. Naidu Chandra Babu, 2000: Plain Speaking, Viking – Penguin Books India.
16. Vaidyanathan A, (1999): Water Resources Management, *Institutions and Irrigation Development in India*, Oxford University Press.