

Vol. 7, Issue 5, February 2018

ISSN 2249-894X

REVIEW OF RESEARCH

An International Multidisciplinary Peer Reviewed & Refereed Journal

Impact Factor: 5.2331

UGC Approved Journal No. 48514

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A STUDY ON PARTICIPATORY IRRIGATION MANAGEMENT IN ANDHRA PRADESH AND TELANGANA STATE

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ABSTRACT:-

More than two centuries ago, the American continents by and large, belonged to the Red Indians. Since the European colonisation, the Indian population has become a vanishing race. They were vanquished by the whites and expelled from their home lands. As a rule the Indians believed in one all powerful Supreme Being. He was the Great Spirit or the Master of life.

KEYWORDS: PIM in India, Status of PIM Andhra Pradesh and Telangana state.

INTRODUCTION :

In fact, the farmer managed irrigation systems are recorded as far back as the 3rd century B.C. There were a wide range of systems and practices across the country, some of which are evident even today. Usually, the kings would provide the material for building the dams and canals and then the people would be responsible for managing and maintaining the systems, resolving conflicts etc. In south India, the thousands of small irrigation tanks seen today were owned, operated and maintained entirely by farmers in the command area either through formal or informal institutional mechanism, The Objectives of the Present Study are, To study the Participatory Irrigation Management; To know the status of PIM in Andhra Pradesh and Telangana State: To examine the status of PIM; To conclusion and suggestion of the study. The present paper based on empirical methodology, and secondary data particularly, related to Books, Newspapers, Articles, journals, government policies, discussion with scholars and Irrigation Experts and internet to substantiate the reports.

PARTICIPATORY IRRIGATION MANAGEMENT (PIM) IN INDIA:

The concept of PIM is not a new to India. It reference to the involvement of irrigation users in all aspects and at all levels (i.e. Major, Medium and Minor) of irrigation management. The participation of farmers in management of irrigation system has been accepted as a policy of government of India and it has been included in the national water policies also commitment to PIM and the encouragement of water management being undertaken with the help of WUAs is apparent from a perusal of it polices as well as the agenda notes pertaining to command area development and PIM. Similarly, many states have references to PIM and WUAs in their water policies and irrigation related legislation. Andhra Pradesh, Bihar, Goa in 1997, Madhya Pradesh, Karnataka, Rajasthan and Tamil Nadu in 2000, have enacted farmers management of irrigation system acts. In this manner Orissa 2002, Kerala 2003, Assam 2004, Maharashtra 2005, Chhattisgarh 2006, Sikkim irrigation Act 2008, and Uttar Pradesh 2009. (See Table-1)



Table-1 State – Wise Enactment of PIM Amendment of irrigation Act

Sl.No	Name of State	Enactment of PIM amendment of irrigation Act
1	Andhra Pradesh	Enacted “Andhra Pradesh farmers management of irrigation systems Act, March 1997”
2	Assam	The Assam Irrigation Water Users Act 2004
3	Bihar	“The Bihar Irrigation, Flood Management and Drainage Rules. 2003” under the Bihar irrigation Act.1997
4	Chhattisgarh	Enacted “Chattisgarh Sinchai Prabandhan Me Krishkon Ki Bhagidari Adhiniyam, 2006”
5	Goa	Enacted “Goa Command Area Development Act 1997 (Goa Act 27 of 1997)”
6	Gujarat	Gujarat Water Users Participation Management Act 2007
7	Karnataka	Promulgated an Ordinance on 7 th June 2000 for amendment of the existing Karnataka Irrigation Act 1957
8	Kerala	Enacted “The Kerala Irrigation and Water Conservation Act 2003”
9	Madhya Pradesh	Enacted “Madhya Pradesh Sinchai Prabandhan Me Krishkon Ki Bhagidari Adhiniyam, 1999” during September 1999.
10	Maharashtra	“The Maharashtra Management of Irrigation Systems by Farmers Act, 2005”
11	Orissa	Enacted “The Orissa Pani Panchayat Act 2002”
12	Rajasthan	Passed the “Rajasthan Sinchai Pranali Ke Prabadh Me Krishkon Ki Sahabhagita Adhiniyam 2000”
13	Sikkim	“Sikkim Irrigation Water Tax 2002” and “Sikkim Irrigation Water (Amendment) Act 2008”
14	Tamil Nadu	Enacted the “Tamil Nadu Farmers Management of Irrigation Systems Act 2000”
15	Uttar Pradesh	Enacted the “Uttar Pradesh Irrigation Management Act, 2009”

Source: Government of India, New Delhi, 2012

According to these acts to promote PIM in their state irrigation policies, the given table examine that the total number of WUAs in India. i.e. 63,167, it covered 14.62 mha of irrigation land, among these WUAs in 15 states in the country 62, 346, it covered 14.18 mha. i.e 96 per cent. The highest WUAs in Orissa 18, 989 and the lowest in Jammu & Kashmir 39 WUAs, The major states in term of this proportion in descending order Orissa 18,989, United Andhra Pradesh 10,748, West Bengal 10,000, Kerala 4163, Maharashtra 2815, Haryana 2800, Karnataka 2662, Gujarat 1834, Madhya Pradesh 1687, Tamil Nadu 1641, Chattishgur 1324, Rajasthan 1130, Punjab 957, Himachal Pradesh 876, and Assam 720 in which the covered 14.18 mha of irrigated land in India. (See Table-2)

Table-2: State wise number of Water Users Associations (WUAs) and Area covered in India

Sl.No	Name of the States	Number of WUAs	Area covered(000 ha)
1	United Andhra Pradesh	10748	4169.00
2	Arunachal Pradesh	43	9.02
3	Assam	720	47.04
4	Bihar	80	209.47
5	Chattisgarh	1324	1244.56
6	Goa	57	7.01
7	Gujarat	1834	486.64
8	Haryana	2800	200.00
9	Himachal Pradesh	876	35.00
10	Jamu and Kashmir	39	2.758
11	Jharkand	0	0.00
12	Karnataka	2662	1363.07
13	Kerala	4163	174.89
14	Madhya Pradesh	1687	1692.26
15	Maharashtra	2815	1102.42
16	Manipur	73	49.27
17	Megahalaya	151	18.75
18	Mizoram	110	14.00
19	Nagaland	23	3.15
20	Orissa	18989	1692.60
21	Punjab	957	116.95
22	Rajasthan	1130	983.07
23	Sikkim	0	0.00
24	Tamil Nadu	1641	840.94
25	Telangana	0	0
26	Tripura	0	0.00
27	Uttar Pradesh	245	121.21
28	Uttaranchal	0	0.00
29	West Bengal	10000	37.00
	Total	63167	14.62 (Million ha)

Source: National Convention of Presidents of WU As organized by MoWR RD & GR. - IndiaNPIM at Delhi (7-8 Nov. 2014)

Status of PIM in Andhra Pradesh and Telangana State:

Andhra Pradesh primarily an agricultural state. About 70 per cent of the population depends on agriculture. Hence irrigation assumes significant importance in the economic development of the state. Irrigation has been the key force behind the agricultural revolution in the state. The state AP is divided in 2 regions, i.e. Costal Andhra and Rayalaseema They are Costal andhra Region consists of nine north-eastern districts of Guntur, Krishna, West Godavari, Nellore, Prakasham, Visakhapatnam, Vizayanagaram and Srikakulam. Which are along the coast line. This extends over 9.25million ha. The Rayalaseema Region covers the southern districts of Kurnool, Kadapa, Ananthapur and Chittoor, covering 6.77 million ha. Present the united Andhra Pradesh as divided in two states, i.e. Andhra Pradesh and Telangana State.

In Telangana the Agriculture plays important role of the economy of the state and the better performance of this sector growth. About 55.49 per cent of the population depends on agriculture and ailed sectors. Hence the irrigation is the significant importance in the economic development of the state. The geographical area is 112.08 Lakh ha of which the area under forest covers is 25. 40 Lakh ha, consists 22. 66 per cent land about 37.25 per cent area is under cultivation, i.e. 41.75. Let us light on gross and net irrigated area, 20.27 lakh ha under gross irrigated land 14.86 under net irrigated land in different irrigation source. In this manner the government as decided as main agenda of the sustainable agricultural development in the state and initiated some programmes for agriculture and irrigation as well as water resource development, i.e. Mission Kakatiya, farmers Participation in Irrigation Management i.e. PIM.

The main objective of PIM are follows, To create a sense of ownership of water resource and the irrigation system among the users; to improve deliveries through timely and proper maintenance; to achieve optimum utilization of available water resources by better operation of the system; to achieve equity in water distribution; to facilitate the users to decide on timing of water supply, period and frequency of supply; to provide choice of crop to farmers based on soils, climate and other related facts; to improve water use efficiency; to increase production per unit of water, where water is scarce and increase production per unit of land where water is adequate; to develop community responsibility to collect water charges and raise required internal resources; to make best use of natural precipitation and ground water in conjunction with flow irrigation for increasing irrigation facility and cropping intensity.

Participation of farmers in operation, management and maintenance of the irrigation system along with irrigation authorities, through PIM, aims to improve irrigation utilization and enables all the farmers under the system share the available water. In this manner the two states are followed by the United Act, i.e. Andhra Pradesh Farmer's Management of Irrigation Systems Act, 1997. In Andhra Pradesh formed 6,051 WUAs in the state, were as Telangana state has been continued the joint act of APFMIS Act, 1997, and formed Project committees, Distributory committees and WUAs. (See Table- 4 &5)

Table: 4 District wise Water Users Associations in Andhra Pradesh.

Sl.No	Name of District	Major	Medium	Minor	Total
I	Rayala Seema Region				
1	Chittoor	00	12	572	584
2	Ananthapur	48	22	305	375
3	Kadapa	78	16	217	311
4	Kumool	119	12	158	289
Sub-Total		245	62	1252	1559
II	Andhra Region				
1	Nellor	92	43	630	765
2	Krishna	308	12	274	594
3	Srikakulam	100	06	417	520
4	Vijayanagarm	04	49	444	497
5	Prakasham	165	24	300	489
6	Guntur	389	00	64	463
7	East Godavari	182	17	218	417
8	West Godavari	149	13	226	388
9	Visakapatnam	16	18	332	366
Sub-Total		1405	182	2905	4492
	Grand Total	1,650	244	4,157	6,051

Source: I&CAD, Government of Andhra Pradesh, 2008-09

Table-5 District wise Project Committees, DCs & WUAs in Telangana State

Sl.No	Districts	Project Committees (PC)		Distributory Committees (DC)	Water Users Associations (WUAs)			Total
		Major	Medium		Major	Medium	Minor	
1	Adilabad	1	5	6	33	38	258	329
2	Karimnagar	1	3	20	167	18	495	680
3	Khammam	0	5	9	79	38	381	498
4	Mahabubnagar	2	1	14	81	5	518	604
5	Medak	0	2	0	0	14	544	558
6	Nalgonda	2	2	27	212	16	575	803
7	Nizamabad	1	3	11	85	16	285	386
8	Rangareddy	0	1	0	0	5	175	180
9	Warangal	1	4	10	87	23	645	755
	Total	8	26	97	744	173	3876	4793

Source: I&CAD, Government of Telangana, PIM Report 2014

The above table confined that the two states are continued WUAs, in Andhra Pradesh the total number of WUAs 6,051 working, i.e. under Major Irrigation, 1,650, under Medium Irrigation 244, and Minor Irrigation 4,157. Were as Telangana 34 project committees, under Major and Medium irrigation system are working. 97 Distributory committees and 4,793 WUAs are working.

CONCLUSION:

Participatory irrigation management is recognized as an important process and a measure for improving irrigation utilization, ensure better maintenance of the system, minimize tail end problems and improve the overall economy of the area. There is a need to build the skills and capacities of the WUAs to enable them to function effectively and to cope up with many of the day-to-day problems. The irrigation department at the field level is working closely with WUAs and helping them in their activities. The other government agencies like agriculture, revenue, marketing, etc are closely associated in working with WUAs. Obviously both the managing committees, member of WUAs and farmers are suitably informed and trained regarding their functions, responsibilities and rights. Equally important is to train the various functionaries of government departments to enable them to discharge their responsibilities and work closely with WUAs.

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