

PUNJAB IRRIGATION & DRAINAGE AUTHORITY

FARMERS ORGANIZATIONS PERFORMANCE MONITORING, AWB/LCC (EAST) CANAL CIRCLE

By

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Farmers Organizations Performance Monitoring, in AWB/LCC (East) Canal Circle

1. Priority Actions for Development of Farmers Organizations

The immediate needs are to restore and improve the productivity of irrigation systems, to assure their sustainable management by transferring management to farmers through the establishment of Farmers Organizations (FOs). This needs a massive drive to provide follow-up support to make the FOs fully functional and to get quick benefits. Urgent attention to maintenance and rehabilitation, continued improvement in cost recovery, a realignment of expenditures, and rapid capacity building of institutions are required to meet the challenges.

The process of Institutional Reforms commenced with community development at village level so as to well aware the farming community about Participatory Irrigation Management initiatives and to organize them for establishment of Farmers Organization. The following concerted actions support the development of Farmers Organizations, and, more generally, consolidate the implementation of reform process.

- Information dissemination among farming community for Participatory Irrigation Management.
- Social Mobilization of farming community at each watercourse level and in the area.
- Formation of Khal Panchayats and Farmers Organizations through election process.
- Capacity Building and Training of members of Farmers Organization and Provincial Irrigation Department staff.
- Dissemination through Workshops, Seminars and Media etc. to create awareness among farmers, public and other stakeholders.
- Operationalization and strengthening of Farmers Organizations
- Coordination and Institutional Support to Farmers Organizations for their efficient functioning.
- Monitoring and evaluation of Farmers Organizations and back up support in weak areas.

The capacity building and training to Farmers Organizations are imparted through a comprehensive plan. This activity is carried out prior to Irrigation Management Transfer to Farmers Organizations, while continuous capacity development and support to Farmers Organizations in their functioning is provided by PIDA through its experts and conducting a series of events at Farmers Organizations level through class room lectures, on job trainings and inter FO dialogue.

The following are a number of management and administrative aspects covered in capacity building and skill development of FOs:

- Need for institutional changes and its legal aspects (Canal and Drainage Act, PIDA Act, Farmers Organizations Rules and Regulations.)
- Organizational development and management skills, Conduct of Business of FO.
- Social aspects, Dispute Resolutions and communications skills.
- Capacity development for system management and record keeping.
- Technical issues of irrigation service delivery, operation & regulation of water, maintenance of channels/works and contract management
- Equitable distribution of water and control over water theft.
- Financial management i.e. maintaining accounts and audit.
- Water rate (Abiana) assessment and collection, procedures and other issues of water management.

The first Area Water Board (AWB) was established in Lower Chenab Canal (East) Canal Command Faisalabad on Pilot basis in February 2000 under PIDA Act 1997. Accordingly, establishment of eighty four Farmers Organizations (FOs) and Irrigation Management Transfer (IMT) of distributaries to them was completed by the end of year 2005. The Irrigation Management was transferred to 84 FOs in three phases. 1st group of 20 FOs signed IMT agreement on 8th March 2005, the 2nd Group of 49 FOs on 28th June, 2005 and for 3rd group of 15 FOs, it was completed on 8th December 2005. The FOs start their functioning as soon as transfer agreement is signed between PIDA and management committee of FO. The sustainability of FOs has been ensured by providing *Coordination and Institutional Support* in technical, revenue, operation and maintenance of infrastructure and organizational setup by PIDA. Further *Monitoring and Evaluation* of the performance of the FOs is being regularly carried out so as to assess the performance of FOs, to provide back up support in weak areas, and to keep progress on track. Continuous skill development and training in deficient areas is being provided through extra trainings, workshops and FO to FO dialogues.

2. Performance Monitoring of Farmers Organizations

Monitoring and Evaluation Cell, PIDA is carrying out internal/on-going monitoring of performance of FOs and revised the M&E inspection sheets/forms in accordance with the outlined benchmarking system and performance parameters/indicators of FOs functions in order to assess and formulate ranking the FOs performance and sub-sequent monitoring and evaluations. The following specific key indicators have been considered under the monitoring and evaluation of FOs performance:

1. Organizational Development
2. Management of Physical Condition of Distributary
3. Irrigation Service Delivery - Operation and Regulation of Channels, Monitoring and Recording of Water Delivery of Channels and Outlets to Maintain Equity
4. Disputes Resolution and Disposal of Revenue Cases
5. Water Rate (Abiana) Assessment and Collection

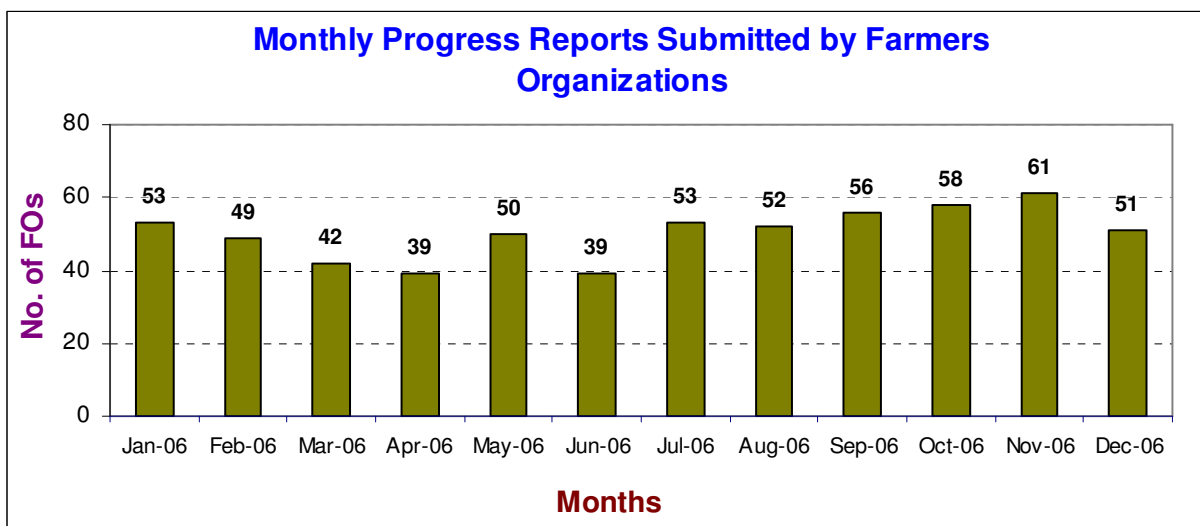
Performance of FOs

The performance of FOs regarding to their functioning have been analyzed through FOs monthly progress reports and carrying out physical inspection by M&E cell team. Some of the important qualitative and quantitative observations and performance of FOs regarding to organizational development aspects, irrigation service delivery aspects (including operation & regulation of channels and monitoring of water delivery position of channel & outlets to maintain equity), repair & maintenance of works, disputes resolution & disposal of unauthorized irrigation/water theft cases, and water rate assessment & collection are enumerated in below sections.

(A) Organizational Development Characteristics

- i. **FOs Monthly Progress reporting:** FOs are submitting their monthly progress of activities on monthly progress report proforma/forms regarding to conduct of business meetings, disposal of cases, repair and maintenance of works, operation of canals, water rate assessment & collection. FO Coordinators are ensured the submission of monthly progress reports by the FOs. FOs monthly progress were reviewed and lacking/deficiencies were identified and communicated to management of FO and PIDA's concerned cells for follow up actions and back up support for improvement. The scrutiny of progress reports submitted by FOs reveals that an average 54 %age of FOs (Av. 45 Nos. of FOs) was submitted their monthly progress for the months January 2006 to June 2006, and an average 64 %age of FOs (Av. 54 Nos. of FOs) was submitted their progress for the months July 2006 to December 2006. Among them, 11 numbers of FOs submitted regularly their monthly progress for the months of Jan.06 to June06 and 30 numbers of FOs was observed regular in progress reporting during July06 to Dec.06. It is much likely the number of FOs will go increase to submit their progress report for December2006 so as receiving is continued in current month

January 2007. Further hopeful, the all FOs would submit their progress regularly and provide all quantitative and qualitative information on the prescribed format as the FOs and their recruited staff has obtained necessary support, guidance and on job capacity building and training in management aspects especially in record management and maintenance.



- ii. All the 84 FOs and their staff have obtained on job trainings in financial discipline and preparation and management of accounts, revenue record, technical record and general record. They also attended various class room lectures & training courses for their capacity and skill development, and well aware of functional procedures detail about irrigation management system aspects and issues. It is observed the FOs and their staff are taking interests for their capacity development, learning attitude is improving, exercise and implementation on delivered training & information is carrying out accordingly by FOs. It is also felt the FOs would be soon come up in a position to efficiently manage the system, up keep to record and report their progress of activities timely and provide quantitative and qualitative outputs as per standard procedure.
- iii. Farmers Organizations General Body meetings and Management Committee meetings are being carried out regularly but sequence of these meetings differs from FO to FO. The participation of members in these meetings remained at an average of about 70%. The frequency of meetings remained more than one during a month for almost all the FOs. The members of the Management Committee are generally taking interest in the affairs of FO but in some cases the office bearers of Management Committee do not attend the meetings regularly

and some lacking in harmony among the members of Management Committee is observed due to the dominant role of FO President.

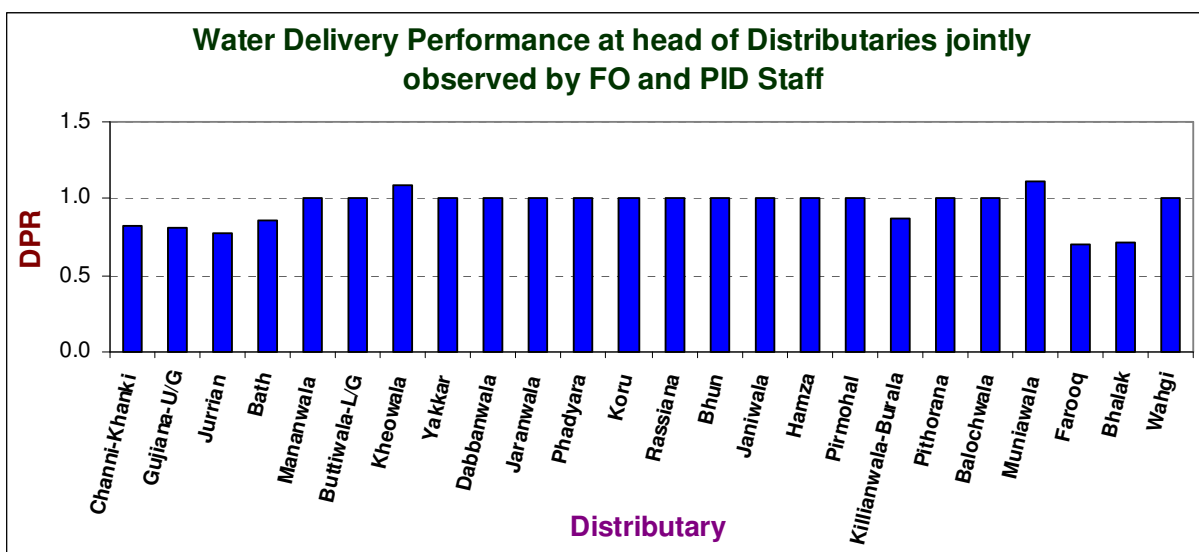
- iv. Although the Management Committees of the FOs are expected to work collectively for operational issues of FOs but it is observed that the Presidents of almost 50% of FOs themselves or with one or two active members of management committees are generally carrying out the tasks of the FO.
- v. Interaction and cooperative approach amongst FO management in functioning of FO and respect of mutual responsibilities is going to be realized by FOs day by day and FOs are taking up the matters in their meetings agenda discussion and enhancing their managerial and operational functioning.
- vi. FOs have initiated to assign functions to their established Standing Committees but notification in this regard is awaited.
- vii. FOs have prepared their annual business plan/budget for the year 2006-2007, and General Body of each FO has approved these Business plans. This activity was carried out after guidance provided by the PIDA. FOs are carrying out activities as per approved business plans.

(B) Operation and Regulation of Channels

- i. All 84 FOs are functional in operation and regulation of distributaries and they have managed to observe the gauges and discharges at head regulator of the distributary and distribute the supply in off-taking minors and observing tail gauges. The monitoring of water supply position has been properly watched and any short coming or access is duly addressed, reported, and communicated with concerned Executive Engineer, SDO and guage readers etc.
- ii. FOs have established and improved a system of watch & ward of channels and safe delivery of water, inspection and checking of outlets and hydraulic structures. The cut and breaches in channels were addressed and protective measures adopted properly and timely.
- iii. Inspection of channels and works are carrying out by FOs in routine and are preparing and planning for repair and maintenance works on their channels for coming annual closure starting on 13 January 2007. During this canal closure the strengthening of banks, berm cuttings, de-silting, repairing of outlets, repairing of head and tail clusters, uprooting sarkanda etc. are expected to be carried out by FOs.

(C) Monitoring of Water Delivery Position of Channels and Outlets to Maintain Equity

- i. All FOs are observing the discharges and water delivery position in their channels regularly, and measuring outlets parameters and delivery performance ratios (DPRs) and maintaining outlet check registers. Most of FOs with their Technical Manager jointly with PID field staff are also observing the discharges of their distributaries every month. Jointly observation of discharge is being reported by FOs in their progress report. Water delivery performance of some distributaries based on last jointly observed discharge, are graphically presented below.



- ii. FOs are making efforts to improve the water delivery from head of distributaries to tail outlets. The repairing of weak banks, desilting of channels, berm cutting and clearing water way of tail reaches and repairing of defective outlets are the main activities performed. Although the outlets parameters have been mostly restored but their fixation to design levels is yet to be carried out and expected in current annual closure January, February 2007 on most of the distributaries so as to deliver water to outlets as per their authorized discharge.
- iii. Monitoring field team, PIDA jointly with FO is also carrying out physical inspection of channels, outlets checking and identifying delivery performance of channels outlets from head to tails. Field inspection reports reveals that the delivery performance of channels outlets varied among head and tail reaches of the distributaries. A copy of physical inspection sheets were also delivered to concern FO and identified weak areas were conveyed to FO for follow up of improvement and necessary action to improve water delivery and ensure equity.

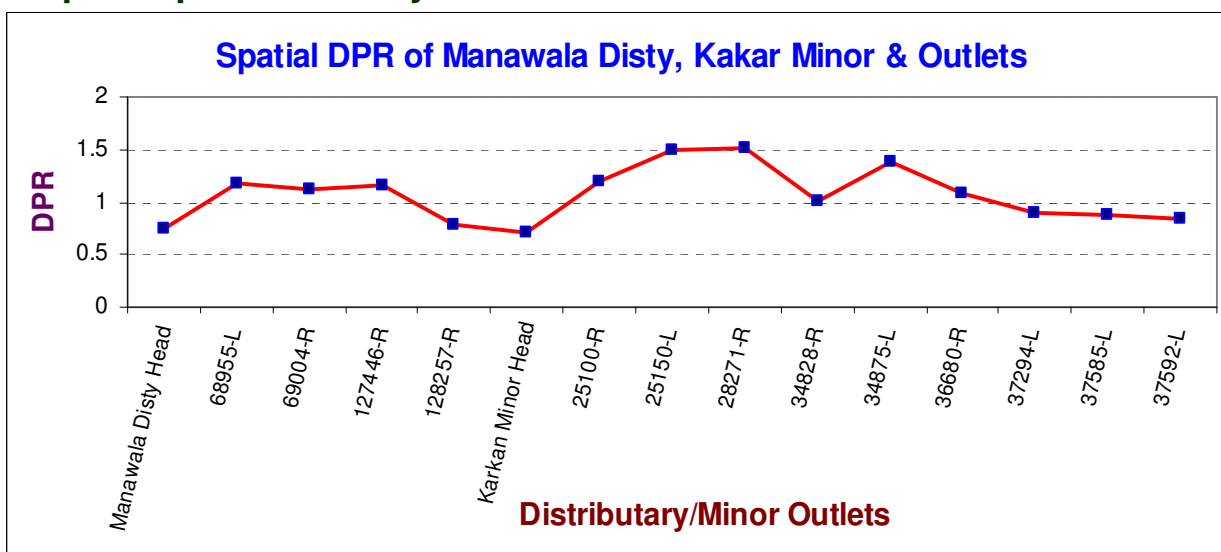
Some of important observations and results regarding to water delivery performance of Channels outlets from head to tails and physical condition of outlets, which were identified during inspection from October - December 2006, are placed at following;

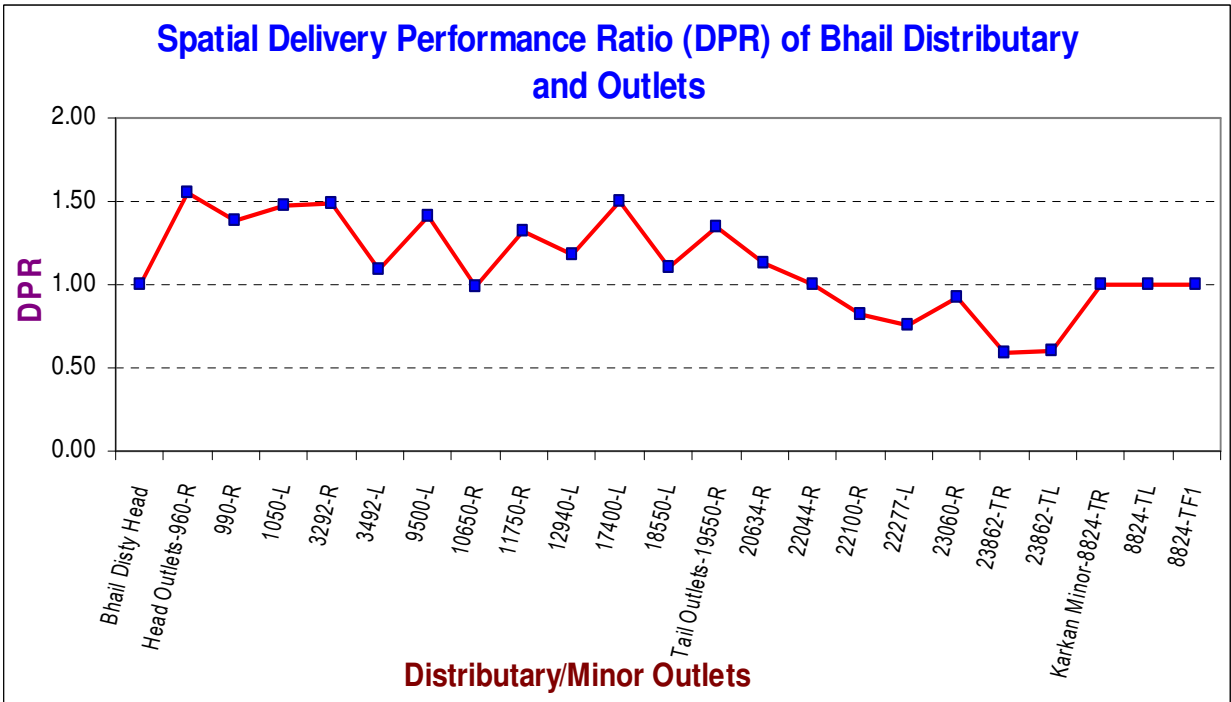
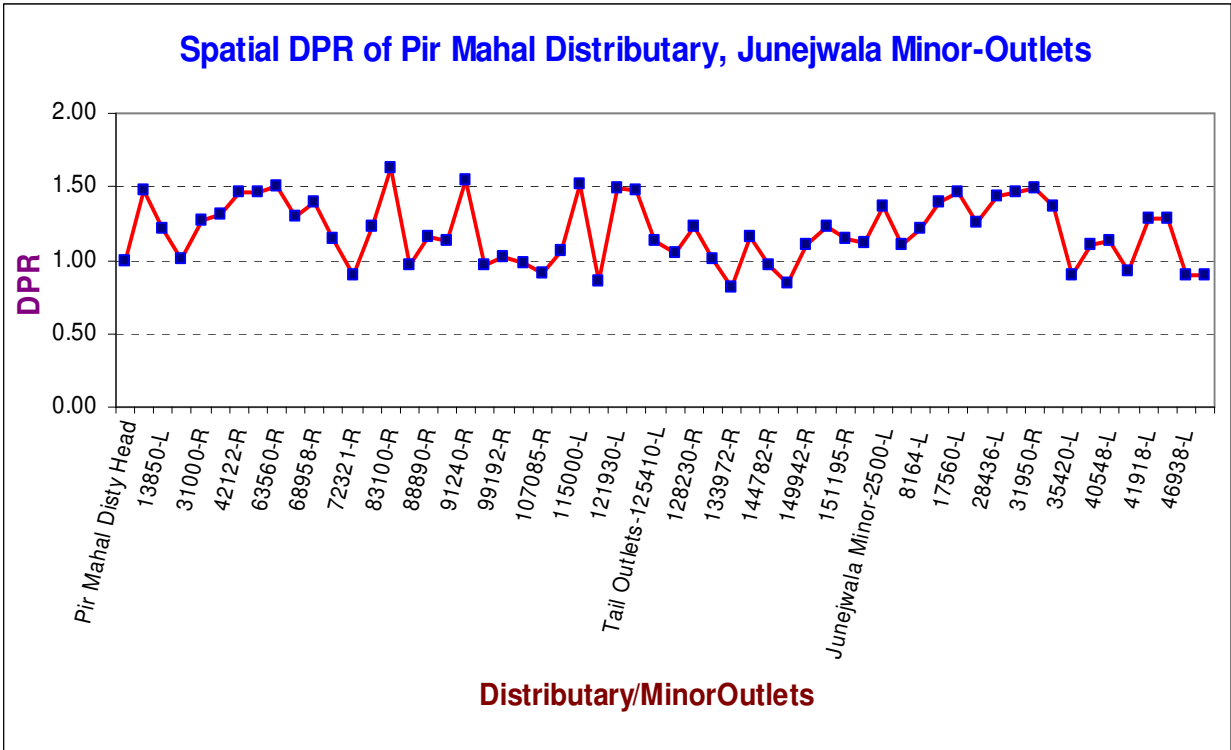
Farmers Organization-Distributary (IMT Group, Canal Div. & inspection date)	Nos. of outlets checked	DPR of Channels Outlets at Head and Tail Reaches			Physical Condition of Outlets-tampering & defective outlets identified during inspection of channels	
		Av. DPR of outlets at Disty head reach	Av. DPR of outlets at Disty Tail reach	DPR: (Av. Tail/Av. Head)	Tampering of outlets	Defective Outlets
1. Manawala Disty & Karkan Minor (3 rd Group)/UpperGugera 4/10/06	24	1.15	0.98	0.85	8	3
2. Pir Mehal Disty & its 4 Minors (3 rd Group)/LowerGugera 15-18/11/06	89	1.27	1.04	0.82	1	10
3. Bhail Disty & Kakar Minor (2 nd Group)/LowerGugera 15/12/06	22	1.32	0.93	0.71	1	3
4. Nasri Disty, Khushpur Disty & Gill Disty (2 nd Group)/LowerGugera 18/12/06	12	1.30 1.11 1.50	0.98 0.89 1.31	0.75 0.80 0.87	1	2
5. Nupewala-I Disty, Nupewala-II Disty & Nupewala Minor (2 nd Group) Burala 20/12/06	32	1.36 1.15 0.97	1.34 1.32 0.64	0.99 1.15 0.66	12	4
6. Ranjiana-I&II Distys (2 nd Group)/Burala 21/12/06	14	1.21	0.85	0.70	9 (Ranjiana-II all 5outlets)	2
7. Munianwala, GillGhazi & Dhudian Distys (2 nd group)/Burala 23/12/06	18 (including 9 direct outlets)	1.40 1.42	1.16 0.73	0.83 0.52	8 (includes 6 direct outlets)	2
8. Balochwala Disty (2 nd Group)/Burala 28/12/06	16	1.00	0.74	0.74	0	2
9. Pervaiz Disty (2 nd Group)/Burala 30/12/06	17	1.28	0.99	0.77	1	3

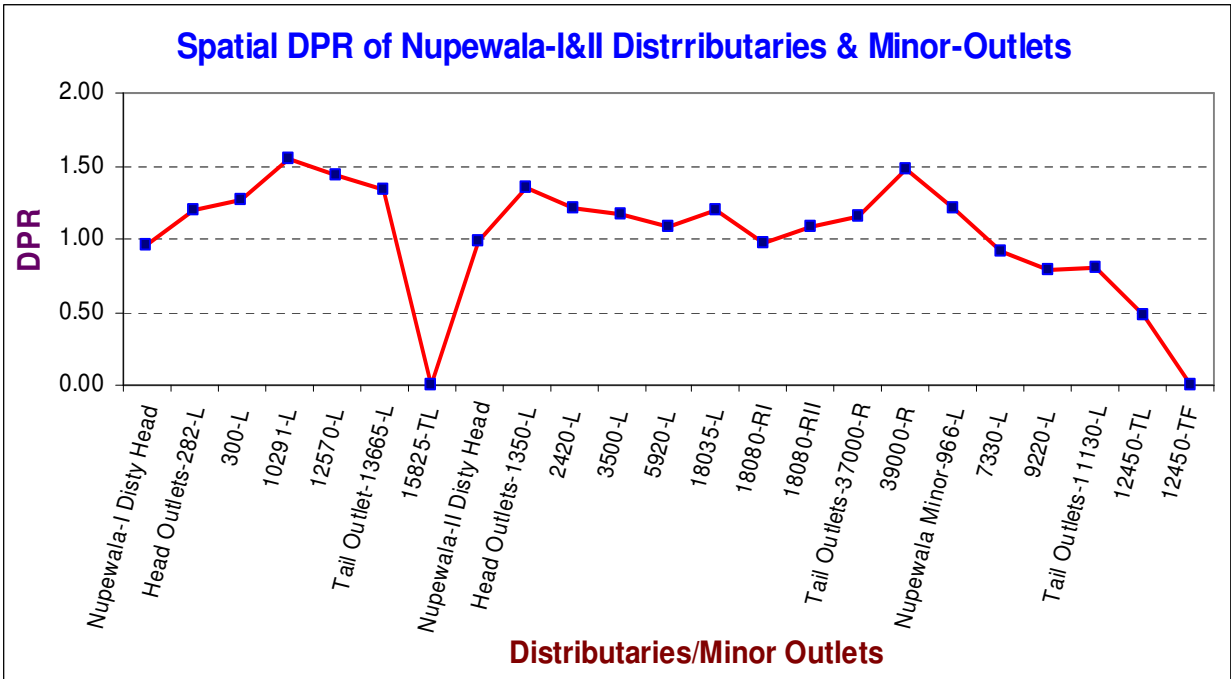
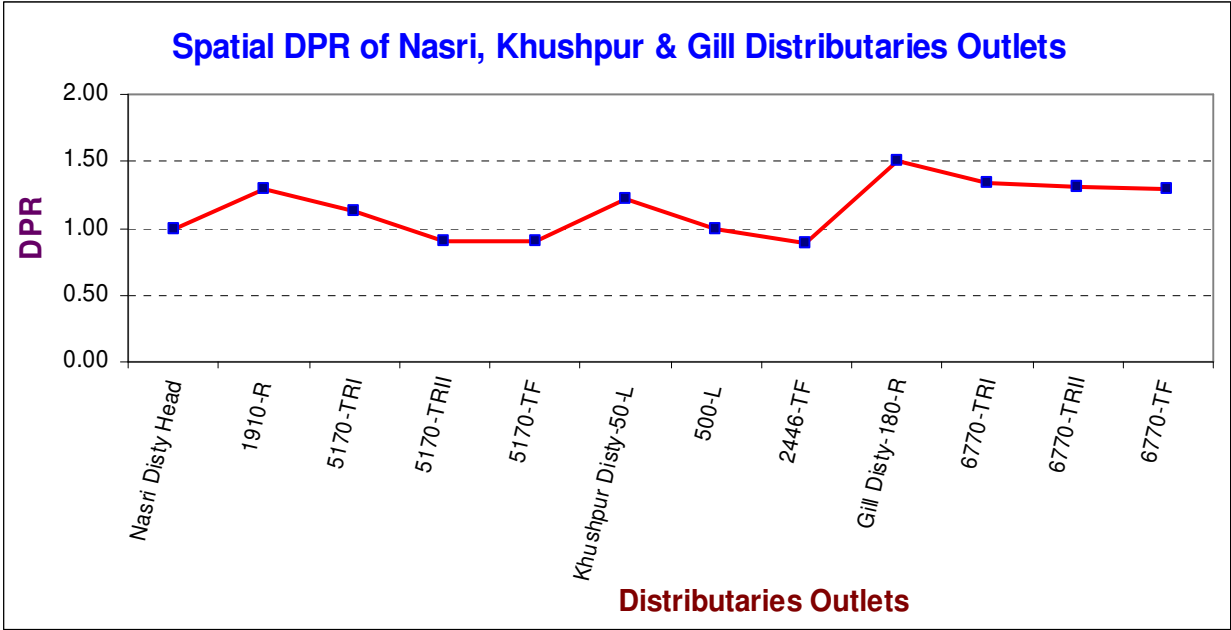
The existence of head and tail gauges and water supply reached to at point/location (RD#) of distributaries and minors have also been observed, which are specified in following table;

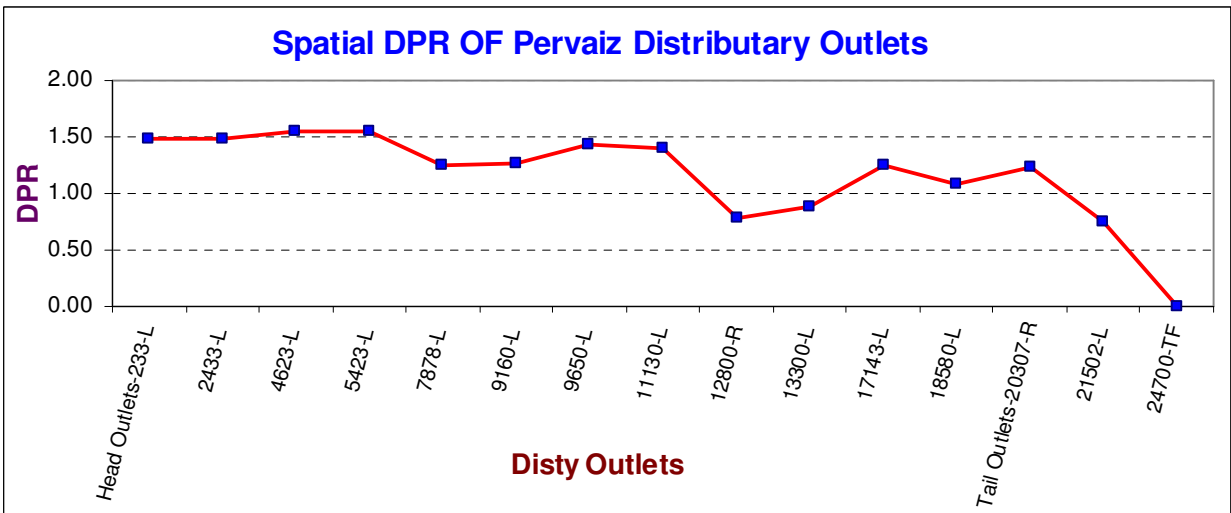
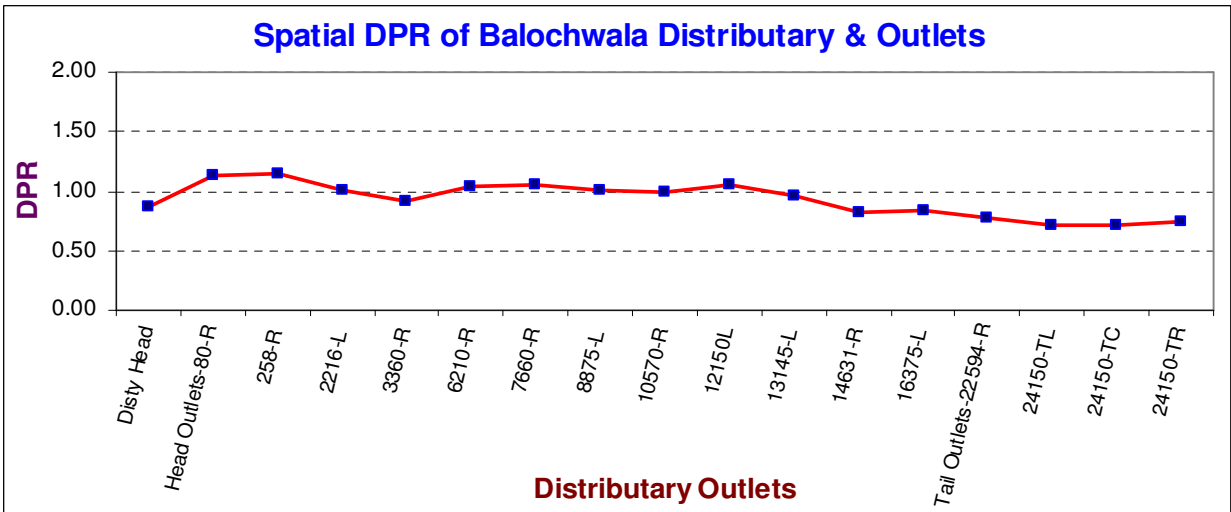
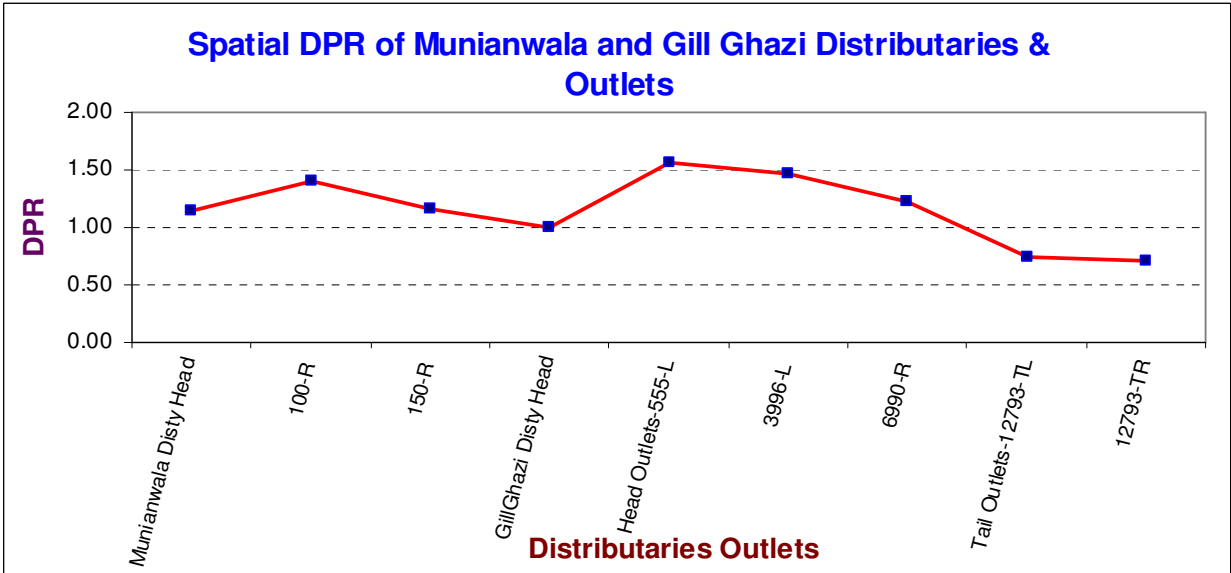
Farmers Organization	Distributary & Minors	Existence of Gauges (installed Yes/No)		Water reached to at point RD# of Disty/Minor	Disty/Minor Tail RD#
		At Head	At Tail		
Manawala Distributary	Manawala Disty Karkan Minor Mitu Minor	Yes Yes Yes	No-as lining of Disty & Minor in progress. No	RD-131650 RD-45389 RD-9310	RD-148600 RD-84300 RD-9310
Pir Mehal Distributary	Pir Mehal Disty Thera Minor Jundwala Minor Magneja Minor Junejwala Minor	Yes No Yes No Yes	No No No Yes Yes	RD-156082 RD-15915 RD-12276 RD-32430 RD-52470	RD-156082 RD-15915 RD-12276 RD-32430 RD-52470
Bhail Distributary	Bhail Disty Kakar Minor	Yes No	Yes No	RD-23862 RD-8824	RD-23862 RD-8824
Nasri Distributary	Nasri Disty Khushpur Disty Gill Disty	Yes No No	Yes No No	RD-5170 RD-2446 RD-6770	RD-5170 RD-2446 RD-6770
Nupewala Distributary	Nupewala Disty-I Nupewala Disty-II Nupewala Minor	Yes Yes No	No No No	RD-14000 RD-41823 RD-12450	RD-15825 RD-41823 RD-12450
Ranjiana Distributary	Ranjiana Disty-I Ranjiana Disty-II	No No	No No	RD-15587 RD-11500	RD-17795 RD-11500
Munianwala Distributary	Munianwala Disty Dhudian Disty Gill Ghazi Disty	Yes Yes Yes	No No Yes	RD-150 RD-3970 RD-12793	RD-150 RD-3970 RD-12793
Balochwala Distributary	Balochwala	Yes	Yes	RD-24150	RD-24150
Pervaiz Distributary	Pervaiz	No	No	RD-22000	RD-24700

Graphs: Spatial Delivery Performance Ratio of Channels-Outlets









(D) Management of Physical Condition of Distributary / Repair and Maintenance of Channels/Works

- i. After IMT, the most of FOs identified the problems in delivery of water from head to tails of the channels. The weak banks, chocking of inner prisms of the channels especially in tail areas, desilting, jungle clearance, sarkanda/weed/vegetation growth removing etc. were carried out on self help basis through deploying tractors and volunteer labour. In some cases, the FOs collected funds from each water course for major repairs of banks and desilting of channels by hiring machinery from the market. In this way, the most of FOs have succeeded in clearing the water way of channels and feeding the tails through checking the authorized discharges of distributaries and by repairing the defective outlets. Among all 84 FOs, seventy FOs (83%age of FOs) have carried out O&M activities on self help basis in worth about 3.8 Million rupee.
- ii. Almost all the FOs mobilize their community resources of labour and farm machinery for maintenance activities on cooperative basis. The farming community fully participated in desilting activities and repairing of weak banks of the channels.
- iii. All FOs are found active and involved in maintenance and repair activities. Among 84 FOs, sixty five FOs (77%age of FOs) carried out de-silting activity in their channels, fifty one FOs (61%age of FOs) carried out berm cutting/trimming, fifty eight FOs (69%age of FOs) were done banks strengthening, and seventy eight FOs (93%age of FOs) repaired two thousand numbers of defective and tampered outlets. Up to now, FOs so far have spent an amount total Rs.12.5/- Million rupee on such O&M works. The major quantum of works was carried out during the annual canal closure January, February, 2006. In the usual course of events all FOs are preparing and planning for repair and maintenance works on their channels for current annual closure January, February, 2007.

(E) Disputes Resolution and Disposal of Unauthorized Irrigation/ Water Theft Cases

- i. During inspection of FOs it is observed, generally, the FOs are resolving disputes/conflicts relating to water distribution, Warabandi and Nakka etc. collectively and timely. It is also a good sign the FOs are keeping transparency/fairness in resolving the disputes, and farming community seems satisfied with FO decisions. It is also observed that no any single case or challenge against

decision and appeal lodged in the court of law against the FO decision. All FOs progress since January 2006 to December 2006 were analyzed and found that FOs during said period have been resolved total 967 numbers of disputes and 1758 numbers of unauthorized irrigation / water theft cases decided. Quantitative results in periodic form are illustrated at following table.

Table: Dispute Resolution and Disposal of Cases

Canal Div.	Nos. of FOs	Cases	Jan06-Apr06	May06-Aug06	Sep06-Dec06	Total: Jan06-Dec06
Khanki	12	Disposal of Unauthorized Irrigation/ Water Theft Cases	276	60	29	365
		Disposal of Chakbandi Cases	3	2	3	8
		Disputes Resolution	4	10	7	21
Upper Gugera	22	Disposal of Unauthorized Irrigation/ Water Theft Cases	89	211	349	649
		Disposal of Chakbandi Cases	1	21	12	34
		Disputes Resolution	60	106	71	237
Lower Gugera	26	Disposal of Unauthorized Irrigation/ Water Theft Cases	49	116	48	213
		Disposal of Chakbandi Cases	4	2	9	15
		Disputes Resolution	81	99	235	415
Burala	24	Disposal of Unauthorized Irrigation/ Water Theft Cases	90	149	292	531
		Disposal of Chakbandi Cases	6	25	13	44
		Disputes Resolution	82	97	115	294
Grand Total	84	Disposal of Unauthorized Irrigation/ Water Theft Cases				1758
		Disposal of Chakbandi Cases				101
		Disputes Resolution				967

- ii. During Kharif season when high delta crop i.e rice is sown, the incidence of unauthorized irrigation / water theft increases through cuts in channels, tampering of outlets, fixing unauthorized pipes, etc which results shortage of supply at tails. It is observed that in lower part of the AWB (Lower Gugera & Burala Canal Divisions) the number of incidence of water theft relatively less, while in upper part (Khanki & Upper Gugera Canal Divisions) where rice commonly implanted the water theft incidence are higher and could not be effectively controlled. However the FOs are reported such identified incidence to police timely.
- iii. FOs in most cases faced problems in lodging of FIRs against offenders of water theft and also pointed out the poor response and cooperation of police which ultimately spared bad effects not only on FOs efficient functioning and efforts for control over water theft but also encouraged more the wrongdoers to continue this illegal practice. However in some cases, FOs have vigorously pursued these cases with police and have succeeded to lodge FIRs.
- iv. It is observed that tampering and repairing of outlets is a continuous process, and for water thefting control practice it entails punitive action to discourage this illegal practice. However efforts of the FOs are very encouraging, at some places the local police have started to support the FOs initiatives due to socio political pressure generated by the FOs.

(F) Water Rate (Abiana) Assessment and Collection

- i. The task of assessment and collection of water rate (Abiana) was entrusted to FOs so as to enable them to generate their funds for management of their channels and smooth functioning of FOs.
- ii. FOs have adopted the services of their Khal Punchayats (KPs) for distribution of bills to farmers and collection of abiana. The improvement in water rate (Abiana) collection by the FOs is very encouraging during first crop **Rabi 2004-2005** as collection of water rate is observed 80.1%. The 22 numbers of FOs have collected 100% Abiana, 11 FOs collected more than 90% Abiana, and 10 FOs remained below 60% collection. For the second crop **Kharif 2005** the all 84 FOs (1ST, 2nd & 3rd group of IMT-FOs) have collected 72.6% water rate (Abiana). Among them, 13 FOs collected 100% Abiana, 15 FOs collected more than 90% Abiana, and 21 FOs remained below 60% collection. For the third crop **Rabi 2005-2006** the FOs have collected 40.9% Abiana. Among them 4 FOs collected 100% Abiana, 3 FOs

collected more than 90% Abiana, and 62 FOs remained below 60% collection. For the fourth crop **Kharif 2006**, all FOs so far prepared and distributed Abiana bills to farmers and collection process is started.

FOs Group wise detail of water rate assessment and collection for the crop season are tabulated below:

Crop Season	Group of FOs	Assessed Amount (Rs/-)	Collected Amount (Rs/)	Av. % age Collection	Nos. of FOs Collected 100% Abiana
Rabi 2004-2005	1 st Group-20 FOs 2 nd Group-49 FOs	1,98,82,778 3,07,56,088	1,71,53,424 2,39,03,223	86.27 77.72	* 4 FOs collected 100% * 18 FOs collected 100%
Total	69 FOs	5,06,38,866	4,10,56,647	81.08	22 FOs collected 100% Abiana
Kharif 2005	1 st Group-20 FOs 2 nd Group-49 FOs 3 rd Group-15 FOs	4,33,32,825 5,19,07,197 2,72,13,417	3,03,28,843 3,75,90,336 2,09,29,096	69.99 72.42 76.91	* 1 FO collected 100% * 10 FOs collected 100% * 2 FOs collected 100%
Total	84 FOs	12,24,53,439	8,88,48,275	72.56	13 FOs collected 100% Abiana
Rabi 2005-2006	1 st Group-20 FOs 2 nd Group-49 FOs 3 rd Group-15 FOs	2,00,60,343 3,13,77,223 1,62,23,294	77,60,564 1,26,16,828 73,08,263	38.69 40.21 45.05	* 1 FO collected 100% * 2 FOs collected 100% * 1 FO collected 100%
Total	84 FOs	6,76,60,860	2,76,85,655	40.92	4 FOs collected 100% Abiana

Water Rate (Abiana) Collection Performance Ranking

Ranking	Nos. of FOs	%age of FOs out of 84 FOs
Good - greater than 90%	10	11.9
Satisfactory – 80-90%	15	17.9
Adequate – 60-80%	30	35.7
Poor – less than 60%	29	34.5

(G) Overall Performance Rating of FOs

Rating	Nos. of FOs	%age of FOs out of 84 FOs
Good – greater than 85%	13	15.5
Satisfactory – 65-85%	34	40.5
Adequate – 50-65%	26	30.9
Poor – less than 50%	11	13.1