

**PUNJAB IRRIGATION & DRAINAGE AUTHORITY**

**AWB/LCC (EAST) CANAL CIRCLE**

**FARMERS ORGANIZATIONS PERFORMANCE MONITORING,**

**Annual Report (F.Y. 2006-07)**



**Monitoring & Evaluation Cell, PIDA**

**(July 2007)**

---

**Punjab Irrigation and Drainage Authority**  
PIDA H/Qs, Irrigation Secretariat Premises Old Anarkali, Lahore.  
Email: [pidahq@yahoo.com](mailto:pidahq@yahoo.com) Ph: 042-9212771-3 Fax: 9212774

# Table of Contents

	<b>Section Headings</b>	<b>Page No.</b>
<b>1.</b>	<b>Background</b>	1
	1.1 Legal Framework and New Entities	2
	1.2 Implementation Process	3
<b>2.</b>	<b>Monitoring and Benchmarking System of Farmers Organizations Performance (Introduction &amp; Implementation)</b>	6
	<b>2.1 Performance of Farmers Organizations</b>	11
	(A) Organizational Development (Conduct of Functions)	11
	(B) Irrigation Service Delivery:	
	I) Operation and Regulation of Channels	15
	II) Monitoring of Water Delivery Performance of Channels and Outlets	
	(C) Management of Physical Condition of Distributaries – O&M of Channels/Works	21
	(D) Disputes Resolution and Disposal of Unauthorized Irrigation/ Water Theft and Canal Revenue Cases	24
	(E) Assessment and Collection of Water Charges (Abiana)	26
<b>3</b>	<b>Performance Evaluation / Ranking of FOs</b>	28

***Annexure- A: Delivery Performance of Channels and Outlets Checked during July-Dec. 2006 ( Detail Data)***

***Annexure- B: Delivery Performance of Channels and outlets Checking Detail (January-June 2007)***

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

## **1. Background**

The deficiencies in effective water resources management and declining irrigation performance poses adverse effects on productivity of water and sustainable agriculture that had been a matter of great concern for the Government, which led the Government to adopt new improved practices to manage the water resources in the country and implement comprehensive Institutional Reforms in the water sector. Accordingly, during 1995, the Government of Pakistan decided to introduce Institutional Reforms in the Irrigation Sector, so as to improve the quality, equity in distribution of supplies, improve cost recovery, efficiency and accountability in delivery of irrigation services and encourage participatory management in the irrigation system for more responsiveness.

By realizing the problems in irrigation water management and service delivery in the province, the Govt. of Punjab decided to implement the institutional reforms in irrigation sector. Hence, during June 1997, the Punjab Provincial Assembly passed the “Punjab Irrigation & Drainage Authority Act”. This was an important step in the process of implementing the necessary institutional reforms in the irrigation sector. The reforms in irrigation management focus on decentralization, participatory management, improved services and sustainability.

The Institutional Reforms envisage the reforms to transfer the management of irrigation and drainage system from the Government controlled (Punjab Irrigation Department, PID) to a multi-tiers (PIDA-AWB-FOs) system of autonomous institutions having clearly defined roles and responsibilities. The Punjab Irrigation & Drainage Authority (PIDA) established at provincial level with representation of farmers and the government representatives, on July 2, 1997 under PIDA Act 1997. The Act provides set up of Area Water Boards at Canal Command Levels, including farmers and Government Representatives and establishment of Farmers Organizations at distributary levels, an entirely farmer based entity. Hence this Act focuses on decentralization of a centrally controlled irrigation system (Provincial Irrigation Department-PID) into a three tier public private partnership based management system. The

Government of the Punjab is committed to implement its vision and strategy on Institutional Reforms with the following goals;

- Equity in distribution of water and sharing shortages.
- Agricultural growth and povert alleviation.
- Efficiency: Improved client services with service delivery cost efficiency.
- Sustainability with legal back-up, reduction of costs and increase in revenue.
- Transparency: Transparent utilization of funds, assessment and dispute resolutions.

### 1.1 Legal Framework for Implementation Process

The reforms in the province started with promulgation of the “Punjab Irrigation and Drainage Authority” PIDA Act 1997, by the Provincial Assembly of Punjab.

For implementation the reforms initiatives, a legal framework has been evolved by the PIDA which is based on the participation of farmers at all levels of irrigation management that is at provincial level, canal command level and at distributary level. This framework legitimizes the reforms process and set up for the establishment of Farmers Organizations and Area Water Boards through Rules and Regulations under PIDA Act. The legal framework for Institutional Reforms in Punjab has been established as per following;

- The Punjab Irrigation and Drainage Authority, Act 1997.
- Pilot Area Water Board (Rules) 2005.
- Farmers Organizations (Rules) 1999, replaced with new Rules, 2005.
- FOs (Elections) Regulations 1999.
- FOs (Registration) Regulation, 1999.
- FOs (Financial) Regulations 2000
- FOs (Conduct of Business) Regulations 2000, Amendment Regulations 2007.
- Irrigation Management Transfer Agreement between FO and AWB /PIDA.
- Pilot Area Water Board LCC (East) (Conduct of Functions) Regulations 2007

Under this legal framework the existing management of irrigation system has been converted into multi-tier system for management of irrigation infrastructure.

<p><b>Punjab Irrigation and Drainage Authority-PIDA</b> at provincial level (representation of farmers and the Govt.)</p>	<ul style="list-style-type: none"> <li>• Chairman (Minister for Irrigation, Punjab)</li> <li>• 6 Farmer Members (Nominated by the Government)</li> <li>• 5 Non-Farmer Members (Chairman P&amp;D Board, Punjab, Secretary, Irrigation &amp; Power Department Punjab, Secretary, Agriculture Department Punjab, Secretary , Finance Department Punjab, Managing Director PIDA)</li> </ul>
---	---

<b>Area Water Board (AWB)</b> at Canal Command level	<ul style="list-style-type: none"> <li>• Chairman (Elected out of Farmer Members)</li> <li>• 10 Farmer members (elected out of Farmers Organizations)</li> <li>• 9 Non Farmer Members. (Representative of allied Government Departments and technical expert)</li> </ul>
<b>Farmers Organizations (FOs)</b> at distributary level  <b>Khal Panchayat (KP)</b> at watercourse level	(a) General Body consist of Chairmen of Khal Panchayat (b) Management Committee (elected by General Body) i) President ii) Vice President iii) Secretary iv) Treasurer v) 5 Executive Members (three from tail reaches)  <ul style="list-style-type: none"> <li>• Chairman</li> <li>• 4 Members (elected out of farmers of watercourse)</li> </ul>

Under the implementation of Reforms process the current functions of the Irrigation Department are being shared by establishing the new institutions viz. Punjab Irrigation and Drainage Authority (PIDA) at provincial level (representation of farmers and the Govt.), Area Water Board (AWB) at Canal Command level, Farmers Organizations (FOs) at Distributary level and Khal Panchayats at Watercourse level. In this scenario, the PIDA as an autonomous body is responsible to carry out all the functions of the Irrigation Wing of the PID, with independent revenue collection and purchasing authority, policy formulation, legal enactment and supervision of the overall management of the irrigation and drainage system in the province with emphasis on improving irrigation service delivery, optimizing water use efficiency, introducing the concept of participatory management, undertaking measures to improve assessment and collection of water charges, and making a Authority self sustaining organization. The Area Water Board (AWB) has to perform most of the aforementioned irrigation management functions at the canal command level, including bulk water supplies to the head of distributaries, and has to adopt such implementation plans which are aimed at promoting the formation and growth of Farmers Organization. Farmers Organization (FO) is basic farmer-managed unit responsible to operate and manage the distributaries and subsystem, obtain irrigation water from the Main Canal and distribute water equitably between watercourses and water users/farmers along the distributaries, repair and maintain the channel/works, resolve the water disputes, and assess, collect & deposit the amount of water charges etc.

## 1.2 Implementation Process

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, improvement in cost recovery, a realignment of expenditures, and capacity building of institutions are required to meet the challenges.

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. 1<sup>st</sup> group of 20 FOs signed IMT agreement on 8<sup>th</sup> March 2005, the 2<sup>nd</sup> Group of 49 FOs on 28<sup>th</sup> June, 2005 and for 3<sup>rd</sup> group of 15 FOs, it was completed on 8<sup>th</sup> December 2005. The FOs start their functioning as soon as transfer agreement is signed between PIDA and management committee of FO. The organizational development and operationalization 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 identified 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.

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 promotion of 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 and staff of Farmers Organizations 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 and their staff 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 out source experts, and conducting a series of events at Farmers Organizations level through class room lectures, on job trainings and inter FOs 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.

Monitoring and evaluation is an important tool for policy makers, planners and management for assessing the performance of Farmers Organizations against the entrusted functions, impacts and outcome etc. Monitoring and Evaluation Cell, PIDA has developed and instituted a system of monitoring and benchmarking of performance of Farmers Organizations. For the implementation of such system the M&E team has been devised to carry out internal/on going monitoring of performance of FOs against the entrusted functions regarding to organizational development, equitable distribution of water, operation, maintenance & execution of works, disputes resolution and disposal of revenue cases, water rate (Abiana)

assessment and collection. For the purpose, FOs monthly and periodic progress reports on preset delivered format/forms are being received from FOs. Further physical inspections of FOs and checking of physical condition of distributaries is being carried out periodically by M&E cell team. The progress reports submitted by FOs and M&E field inspection reports have been analyzed thoroughly and prepared the monitoring and evaluation report on performance of Farmers Organizations, AWB/LCC (East) Canal Circle.

## **2. Monitoring and Benchmarking System of FOs Performance (Introduction and Implementation)**

PIDA monitoring and evaluation teams are devised to carrying out internal on-going monitoring of FOs activities. Monitoring and benchmarking system has been set down for FOs performance evaluation through developing performance indicators and criteria for evaluation, and introduced the developing mechanism to all FOs and concerns staff through organizing workshops, courses and delivering lectures in various training sessions.

An indicator is a variable, which measures the change. The selection of the indicators is an important to quantify the output in desired format. An appropriate type of indicator can help the following:

- Revealing the nature and rate of change that has been occurred or appeared to be occurring;
- Enabling progress to be compared with the planned targets
- Assisting in establishing an input-output relationship and economic viability of the project.

Based on the mentioned roles and responsibilities of various entities at different tiers, i.e. PIDA, AWB and FOs, the following are the broader areas to be considered under the monitoring and evaluation of FOs performance:

- I. Organizational Development - Constitution of Standing Committees, conduct of meetings (General Body & Management Committee), training & capacity building, inter-community visits, preparation of annual business plan/budget, water scheduling, record keeping, understanding & commitment regarding roles and responsibilities, cohesion amongst the FOs members, AWB & PIDA as well as other stakeholders.
- II. Management of Physical Conditions – walk thru the channel, identification and execution of physical/ O&M works, maintaining of hydraulic structures (bridges, falls, head regulators etc.) and inner sections of the channel to design parameters.



- III. Efficient Service Delivery - responsiveness to emergency calls relating to breaches, cuts, water theft, water related disputes etc.; maintenance of outlet structures to design parameters, watch and ward of the channel, reduction in canal breaches/ cuts as well as water theft cases; methods of irrigation, efficient use of water, water measurements, increase in delivery efficiency/conveyance losses etc. at watercourse level.
- IV. Regulation and water accounting - delivery performance of outlets at different reaches, observation of gauges of the channels including water delivery, accounting etc.
- V. Equity in Water Delivery - water measurements at various reaches of the channel, actual discharge against the sanction, checking of gauges, checking of outlets, control over water theft.
- VI. Revenue Management – assessment and collection of water rates (abiana), utilization of funds on the operation & management of the distributary sub-system.
- VII. Dispute Resolution & Disposal of Revenue Cases – resolution of conflicts related to water allocation, distribution, and revenue & unauthorized irrigation/water theft cases (initiation, action & finalization)
- VIII. Farmers/ Community Participation – works carried out on self-help basis regarding repair of breaches/ cuts, desilting of channel, repair & maintenance works as well as several others.
- IX. Accounts Management – management of accounts (procurement of goods & services, execution of works, assessment, collection & utilization of funds) as per the procedures laid out in the financial management guidelines of PIDA.
- X. Coordination amongst the Stakeholders – interaction/ cohesiveness between PIDA, AWB, FOs, IPD, Agriculture Department, NGOs as well as other stakeholders. Works carried out in collaboration/ or with the assistance of stakeholders relating to the irrigation/ water management, agriculture, marketing and other activities.
- XI. Self Monitoring & Progress Reporting to PIDA/AWB – FO system of monitoring to improve performance w.r.t agreed parameters and monthly & periodically progress reports submission on prescribed formats/forms.

Keeping in view of the above, the following specific indicators are being derived;

- **Organizational Development**
- **Management of Physical Condition of Distributary** -O&M of channels/works)
- **Irrigation Service Delivery** - operation and regulation of channels, monitoring of water delivery of channels and outlets to maintain equitable distribution of water
- **Disputes Resolution and Disposal of Revenue Cases**
- **Assessment and Collection of Water Charges (Abiana)**

The indicators used in the ranking of performance of FOs and the weightage marks to each indicator is segregated as follows;

<b><u>Indicators &amp; Sub-indicators</u></b>	<b><u>Weighted (Marks)</u></b>
<b>1. Organizational Development:</b>	<b>15</b>
a) Responsiveness to trainings, workshops, visits and coordination meetings etc.	2
b) FOs meetings (MC & GB) conducted and Minutes recording & decision notified	2
c) Prepared annual business plan/budget & approval	1
d) Prepared annual work plan and approval	1
e) Special works committee functioning	2
f) Standing committees formation & their functioning	1
g) Financial discipline, accounting and auditing	2
h) Record maintenance	2
i) Progress reporting and follow-up	1
j) Interaction and co-operation amongst FO members, with farming community & stakeholders (coordination & co-operative approach in functioning of FO)	1
<b>2. Management of Physical Condition of Disty sub-system:</b>	<b>20</b>
a) Maintaining condition of channels & structures	8
b) Estimation and execution of repair & maintenance works of channels	8
c) Resources mobilization and farming community participation in O&M activities on self help basis	4
<b>3. Irrigation Service Delivery:</b>	<b>45</b>
<b>a) Operation and regulation of channels</b>	<b>15</b>
(i) Daily observation of head gauges of Disty, Minors & Tails recording, reporting and actions	4
(ii) Water budgeting, scheduling & publishing of warabandi/ water accounts	3
(iii) Inspections and daily watch & ward of channels & works	4
(iv) Responsiveness to emergencies (controlling of breach/cuts & protective measures adopted)	4
<b>b) Monitoring and recording of water delivery of channels and outlets to maintain equity</b>	<b>30</b>
(i) Measuring of discharge at head of disty & minors, recording & updating/maintaining discharge table/rating curves, and carrying out condition survey of channels	7
(ii) Observation and improvement of water supply/delivery position in channels	8
(iii) Monitoring/checking of outlets and observing delivery performance of outlets from head to tails	7
(iv) Maintaining outlets structures to design parameters and ensuring equity	8

- 4. Disputes Resolution and Disposal of Revenue Cases: 5**
- a) Disputes/Conflicts resolution 2
  - b) Disposal of chakbandi cases under Section 20 C&D Act 1
  - c) Disposal of unauthorized irrigation/water theft cases (initiation, legal actions & finalization) 2
- 5. Water Charges (Abiana) Assessment and Collection: 15**
- a) Assessment of water charges (Abiana) as per schedule 5
  - b) Delivery of bills and Collection of water charges as per schedule 10

### FOs Performance Evaluation Criteria and Ranking

The evaluation of performance of FOs is standardized into four broader legends:

Ranking/Standard	Score %age	FO Performance
<b>Poor</b>	<b>Less than 55%</b>	FO is not performing adequately in this aspect and requires support and guidance. the PIDA/AWB should intervene, investigate and boost performance
<b>Adequate</b>	<b>55-70 %</b>	FO has reached the minimum acceptable standard in this aspect, but remains vulnerable, and their progress should be monitored
<b>Satisfactory</b>	<b>70-85%</b>	FO is performing well. FO in this category is considered to be sustainable. Continue monitoring and support
<b>Good</b>	<b>Greater than 85%</b>	FO performance is very good, mature, fully sustainable and model for other FOs. FO is able to develop further or accept additional responsibilities

The ranking criteria and their assigned value/score (in percentage) for each major indicator is as follows;

Indicators	Standard	Assigned Value/Score
<b>1. Organizational Development</b>	Poor Adequate Satisfactory Good	Less than 50% out of wt. score 15 50-70 % out of wt. score 15 70-90% out of wt. score 15 Greater than 90% out of wt. score 15
<b>2. Management of Physical Condition of Distributary sub-system - O&amp;M of Channels &amp; Works</b>	Poor Adequate Satisfactory Good	Less than 60% out of wt. score 20 60-70 % out of wt. score 20 70-80% out of wt. score 20 Greater than 80% out of wt. score 20

<b>3. Irrigation Service Delivery</b> : a) Operation & Regulation of Channels; b) Monitoring & Recording of Water Delivery of Channels and Outlets to Maintain Equity	Poor Adequate Satisfactory Good	Less than 70% out of wt. score 45 70-80 % out of wt. score 45 80-90% out of wt. score 45 Greater than 90% out of wt. score 45
<b>4. Disputes Resolution and Disposal of Revenue Cases</b>	Poor Adequate Satisfactory Good	Less than 40% out of wt. score 5 40-60 % out of wt. score 5 60-80% out of wt. score 5 Greater than 80% out of wt. score 5
<b>5. Water Charges Assessment and Collection</b>	Poor Adequate Satisfactory Good	Less than 60% out of wt. score 15 60-80 % out of wt. score 15 80-90% out of wt. score 15 Greater than 90% out of wt. score 15

Thus five above major indicators have been developed and the weightage has been assigned in accordance their relative significance. It is proposed that if an FO secure greater than **85 points/score** overall, its performance would be considered as very good. The benchmark data analysis will be accomplished based on the pre-project situation which will be compared with respect to the latest situation. So the data for first year will provide the basis for the performance monitoring for the second year and so on.

In order to record and assess the performance of FOs, the monthly FOs progress report proformas/formats have been developed and delivered to all FOs. FOs are submitting their progress on these preset designed forms every month covering each financial year period. Further M&E teams visit the FOs and carryout physical inspection of channels and check water delivery performance of channels and outlets from head to tails and report the performance of FOs as per performance indicators. The copies of physical inspection sheets are delivered to concern FOs, and performance of FOs and identified weak areas conveyed to FOs for follow-up improvement and back-up support and further capacity building & training provided by PIDA to improve FOs functioning.

The progress reports submitted by FOs and field inspection reports by M&E teams are analyzed and prepared and submitted monitoring report in October 2006, annual report (January 2007) for the period January 2006 to December 2006, and also compiled this comprehensive monitoring report up to June 2007, reflecting the status of performance of all FOs in AWB/LCC (East) Canal Circle.

An independent external third party consultancy services has been hired to verify implementation of the program interventions and evaluate outputs and outcomes through random surveys as well as case studies, including the following monitorable indicators;

- (A) Random checking of DPR values of FO managed Channels and control channels managed by PID.
- (B) Case studies of FOs and the IMT program using the indicators for benchmarking of FOs and the IMT Program.
- (C) M&R Performance Evaluation; Engineering Audit

The impact assessment is also recommended after every three years on the assigned parameters of performance.

## **2.1 Performance of Farmers Organizations**

The performance of FOs has been analyzed based on monthly progress reports and field inspection reports submitted by M&E cell teams. The FOs functioning have also brought under discussion with field staff of Social Mobilization, Coordination & Support and Capacity Building & Training Cells. The personal interaction and meetings with office bearers of FOs and management committees by the M&E teams and PIDA officers were ensured. The view points of office bearers and farming community regarding functioning of FOs during visits, workshops, seminars and trainings also included in evaluation of the performance of FOs. Some of the important qualitative and quantitative performance of FOs regarding Organizational Development aspects, Irrigation Service Delivery (including operation & regulation of channels, monitoring of water delivery in channel & outlets and ensuring equity) Repair & Maintenance of Works, Disputes Resolutions & Disposal of Unauthorized irrigation/Water theft & other Revenue Cases, and Water Charges Assessment & Collection are enumerated in following sections.

### **(A) Organizational Development (Conduct of Functions)**

#### **Meetings:**

- General Body and Management Committee meetings of the FOs are being carried out regularly but frequency of these meetings differs from FO to FO. The extent of participation level of members in these meetings remained at an average of about 70%. 72 Nos. FOs (86% FOs) have maintained the record of minutes of meetings and attendance very well and the participation of members in the meetings is more than

70%. The 12 Nos. FOs reported low participation of their members which is less than 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 are lacking in harmony among the members of Management Committee due to the dominant role of FO President.
- 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% FOs themselves or with one or two active members of management committees are generally carrying out the tasks of the FOs and for the remaining 50% all MC members participating in meetings and activities of FOs. The performance of these FOs is better in rating where the Management Committee is functional.

**Cooperative Approach:**

- Interaction and cooperative approach amongst management committees in functioning of FO and mutual trust in paying responsibilities is enhancing day by day. The FOs are taking up the matters in their meetings/agenda discussions and developing their management and operational skill through their collective decision-making.
- For better performance of the functions, in general, the FOs have established their standing committees and assigned them the responsibilities regarding operation & regulation (watch & ward of channels), repair & maintenance of works, water charges, collection finance and water theft control etc.
- Although majority of FOs members are well aware about their roles and responsibilities, but they still need to improve the understanding about the standard procedures and responsibilities.
- 73 Nos. FOs (87% of FOs) have good or satisfactory understanding about the administrative aspects, while 11 FOs (13% of FOs) are poor in this regard. 68 Nos. of FOs (81% of FOs) has good or satisfactory in accounts management, 74 Nos. FOs (88% FOs) have good or satisfactory concepts about the procedure of procurement of goods& services, O&M of system, funds utilization and flow/discharge measurement and discharge table reading.

### **Staffing:**

- All the FOs (32 IMT) have their staff i.e. Manager Technical, Gauge readers, Beldars, Patwaries, FO assistants, Office Clerk/computer operators etc. As regards, Technical Manager and FO Assistant, most of FOs are utilizing the services by sharing more than one FO. Generally one Manager Technical serving to the one IMT Unit constituting 1 to 6 FOs. All FOs have strength of 460 Nos. of total staff; including 31 Managers (Technical), 34 Nos. FO Assistants cum Computer Operators, 23 Nos. Revenue Assistants (appointed by PID), 105 Nos. Patwaries as per yardstick/staffing plan (each for 15000-20000 CCA), 204 Nos. Beldars, 27 Nos. gauge readers. The mostly FOs are observing their channels head and tail gauges through utilizing their technical managers, Beldars and regulation committees. Other staff includes 36 Nos. Naib Qasid/ Dak Runners and Security Gaurds.
- It observed that 70 Nos. FOs (83% FOs) are satisfied with staff as recruited and their working. While remaining 14 Nos. FOs realized that they don't have adequate Nos. of Technical and Revenue staff. The status of current staffing level (460 Nos.) indicates the less staff as per IMT Agreement (Staffing Plan) which is 608 Nos. Therefore, for better performance of FOs functioning the requisite staff should be recruited immediately by the FOs as per staffing plan agreed in IMT agreement.

### **Business Plans:**

All the FOs prepared and approved their annual business plan/budget for the year 2006-07 and carried out their day to day functions accordingly. Similarly for the year 2007-08, the all FOs have prepared their business plans and approved by General Bodies. The FOs are carrying out their functioning in accordance with approved Budget & plans.

### **Record Maintenance:**

The FOs are not properly maintaining their record. This aspect is weak which need special attention. The 34 Nos. FOs (40% FOs) are good in maintaining their records regarding disputes/complaints entry, maintaining gauges/discharges register and outlets check register. 57 Nos. FOs (68% FOs) reported that they have maintained their accounts record, 10 Nos. of FOs are in progress to maintain such records and 17 Nos. FOs did not maintain their accounts record. The financial discipline/management procedures also followed only by 34 Nos. FOs. Therefore the record maintenance and management of FOs is still needs to be improved by majority of FOs.

### **Capacity Building:**

All the 84 FOs have obtained an average number of 8 trainings in various aspects of irrigation management i.e i) Organizational Development and management skills; ii) Operation and Maintenance of channels and structures; iii) Equitable distribution of water; iv) Water Charges assessment and collection; v) Disputes resolution and disposal of revenue cases; vi) Financial Management; and vii) Record maintenance. FOs also attended various class room lectures & training courses and workshops for their capacity and skill development. The institutional support and coordination in all fields of functioning of FOs is regularly provided by PIDA. It is observed that the FOs and their staff are visualizing their further training for efficient performance of their duties which indicates their growing interests and learning attitude towards their capacity development. Further Capacity building and training cell of PIDA is assessing the need of continuing training of FOs and facilitate the FOs to enhance their capabilities for managing the system properly and effectively.

### **Progress Reporting:**

FOs are submitting their monthly progress of activities on defined proformas/forms regarding conduct of business, dispute/conflict resolution and disposal of revenue cases, repair and maintenance of works, operation & regulation of channels, water delivery of channels and outlets, water charges assessment & collection and expenditures detail. FOs monthly progress are reviewed and lacking/deficiencies are identified and communicated to management of FO and PIDA's concerned cells for improvement, further capacity building trainings and back up support. The scrutiny of progress reports submitted by FOs covering the financial year 2006-2007 reveals that an average 76%age of FOs (64 Nos. of FOs) submitted their monthly progress, while 24% FOs (20 Nos. FOs) have not submitted their monthly progress regularly and timely.

### **General:**

Some common areas of FOs are enumerated below which requires refresher training as well as On-job Training in post IMT scenario with Practical Module to FO management and specially FO-staff for more reflective organizational development.

- FOs capacity building & training for advocacy, interaction and cooperative approach for promotion of participatory irrigation management system and FOs Conduct of Business (Regulations) 2007.
- Progress Reporting on the desired standard format and Communication.
- Agenda setting, proceedings of meetings, recording and notification of the decisions/resolutions.



- Good governance- office administration, timings, attendance, responsiveness etc.
- Presentable record keeping through preparing *Standard Formats* of each record/register (other than those format/registers which already provided by PIDA i.e. for Abiana, outlet check register) so that all FOs would maintain their records in same pattern.
- Proceeding of cases- initiation, finalization and recording
- Role and Responsibility / Conduct of Functions of AWB
- Watch and ward system of Distributary & sub system, system of monitoring and discharge measurement, and daily recording of water delivery of channels, outlets checking and control over water theft to maintain equitable distribution of water from head to tails.
- Detail procedure for execution of repair and maintenance works and conformity to Rules/Regulation etc. thereof.
- FO set up and responsibilities for financial functions as per specified in financial regulations 2000.
  - Treasurer-functions.
  - FO Technical Manager-functions
  - Special Works Committees-functions
  - FO Assistant and Revenue Assistant-functions
  - Billing and Payment Procedure, Accounts & Revenue Record management in view of Audit requirement.
- Delivery of Abiana bills assurance, collection system and Procedure of Abiana remission

Before going to start further trainings of FOs, it needs to synchronize and validate whether the FOs have practically implemented and followed the previous training instructions and informations delivered by the Capacity Building Training Cell.

## **(B) Irrigation Service Delivery:**

### **I) Operation and Regulation of Channels**

- All 84 FOs have found functional in operation and regulation of distributaries. These have assigned and utilized the services of Regulation Committees, Manager Technical, Beldars and gauge readers to control water theft and check and observe the gauges and discharges at head regulator of the distributary and distribute the supply in off-taking minors and observe tail gauges. It observed that 61 Nos. FOs (73% FOs) effectively improved water supply position in their channels up to the tails as they succeeded to manage water delivery more than 85% in their channels through out the

year, and 23 Nos. of FOs faced problems in delivery of authorized supply at head due to non regular and low supply of water, in parent channel, rehabilitation works in progress and some reservations on the constructed head, bed/crest level of the channels and construction of outlets during the rehabilitation/lining works which effect the supply at tails. The records maintenance/ management status of FOs regarding daily gauges, discharges and the checking of outlets including the DPR entries still require improvement and need to be maintained regularly by majority of FOs (60% FOs). 39 Nos. FOs maintained proper record (100%) of daily gauges/discharges of their channels, 31 FOs maintained such record averaged 75%-satisfactory level. While 14 FOs were poor in record maintenance of daily gauges/discharge of their channels.

- The warabandies of each watercourse are being implemented as per approved schedule by FOs and have been disseminated at outlets / village level while each Khal Punchayat has its copy with it.
- FOs are establishing and improving a system of watch & ward of channels and safe delivery of water, checking and maintaining of outlets and structures.
- The cut and breaches in channels were addressed and protective measures adopted properly and timely.
- FOs have carried out inspection of channels and works in routine as well as during the annual closure periods and accordingly planned repair and maintenance works on their channels.

## **II) Monitoring of Water Delivery Performance of Channels and Outlets**

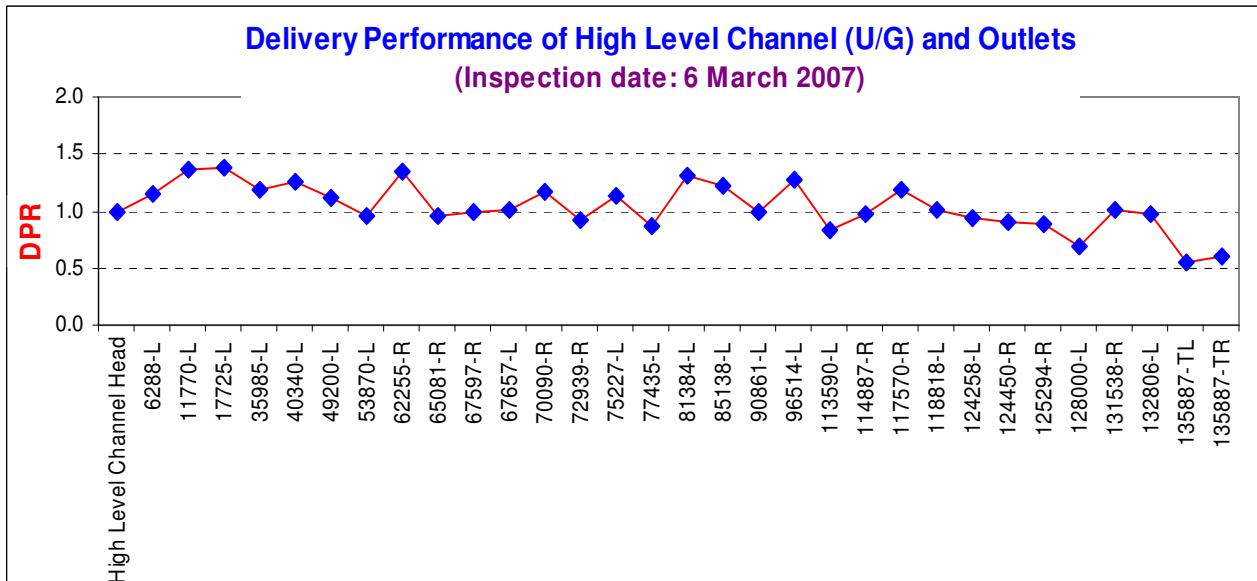
- All FOs are regularly checking the outlets of their channels, monitoring “H” (Head over Crest) and observing the discharges and water delivery position in their channels. The Technical Managers, Beldars and Regulation Committees of the FOs are observing the discharges and checking of outlets regularly. FOs are making efforts to improve the water delivery from head of distributaries to tail outlets.
- It observed that 61 Nos. FOs (73% FOs) have effectively improved water supply delivery position in their channels up to the tails as they succeeded to manage water delivery more than 85% in their channels, while 23 Nos. FOs faced problem in supply at head of the Distributary due to supply problems in parent channels.
- It observed that about 50% of FOs are quite satisfied with the cooperation and response of PID field staff. As whenever FOs approached the PID Officers either for improvement and demanded water supply at head of their channels as per design or in

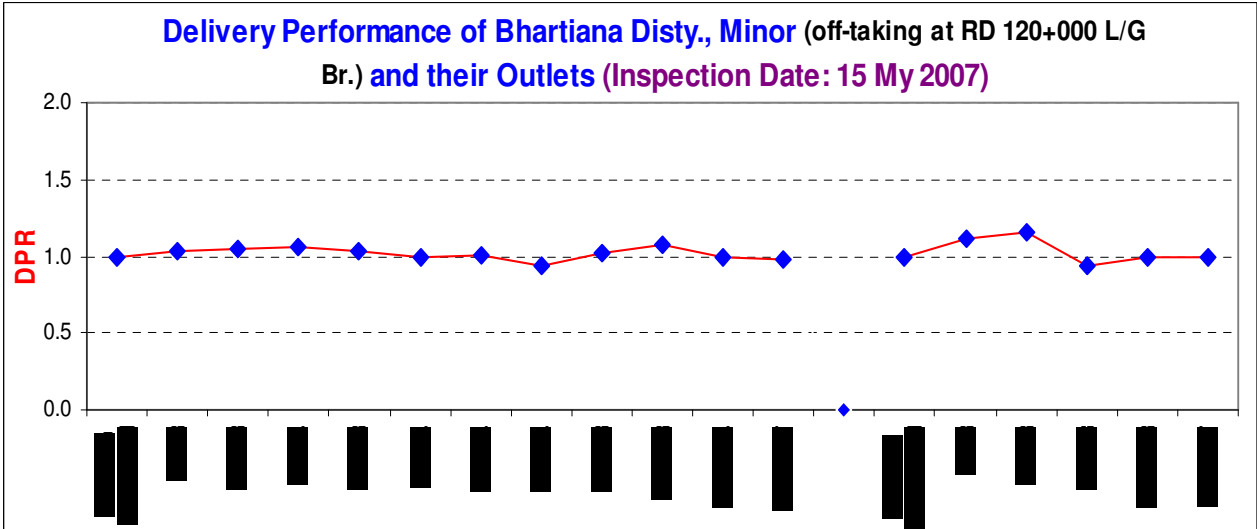
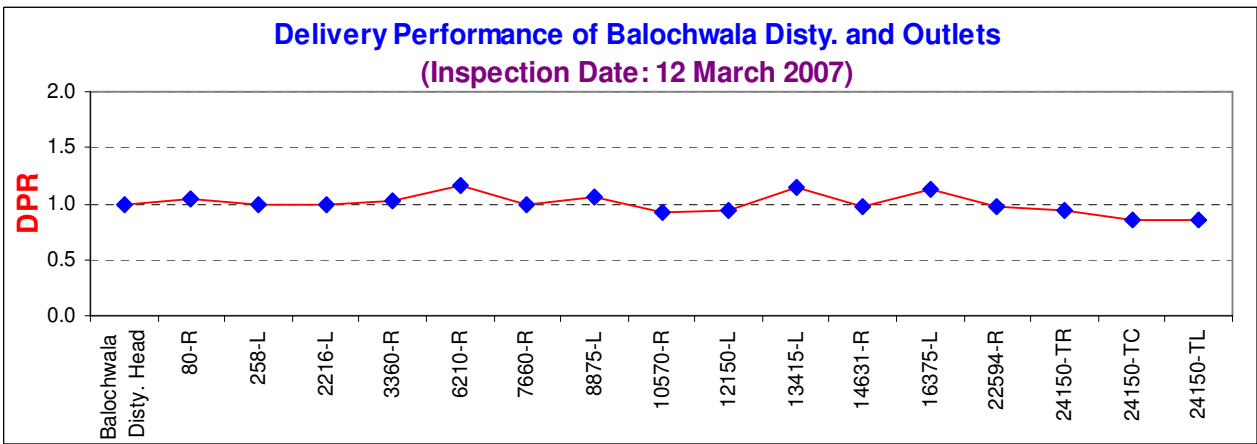
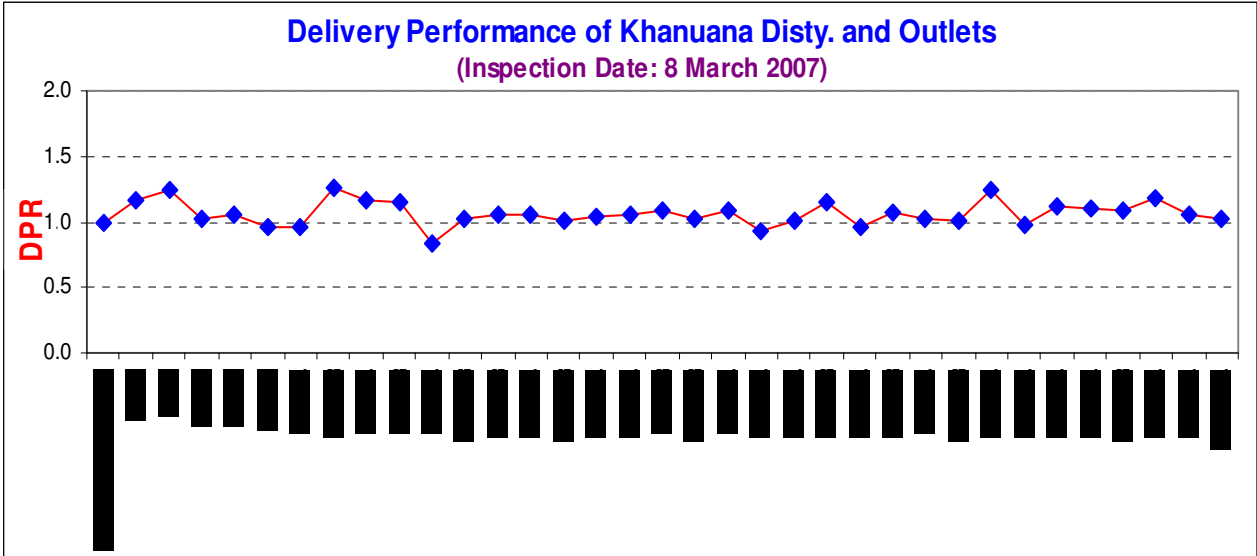
case cut/breach in channels and on intimation to PID officers to close the supply of channel etc.

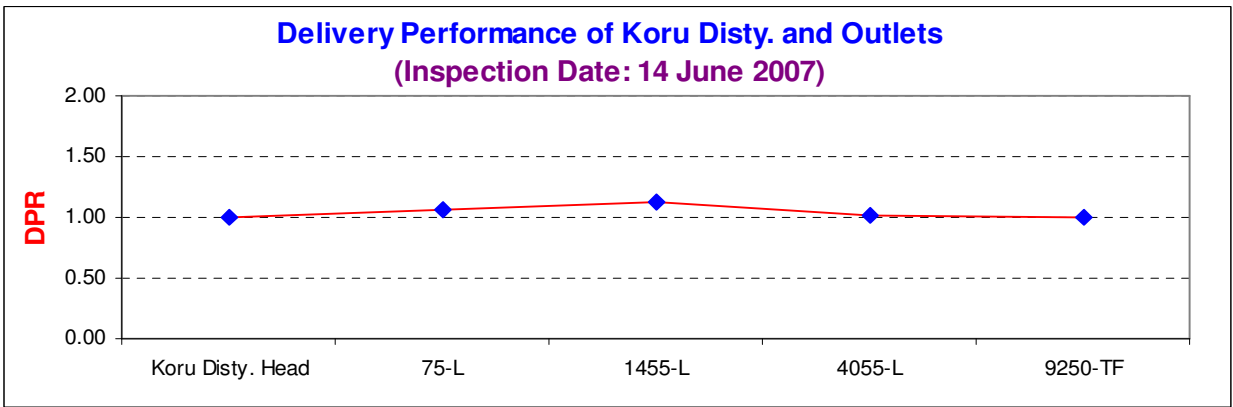
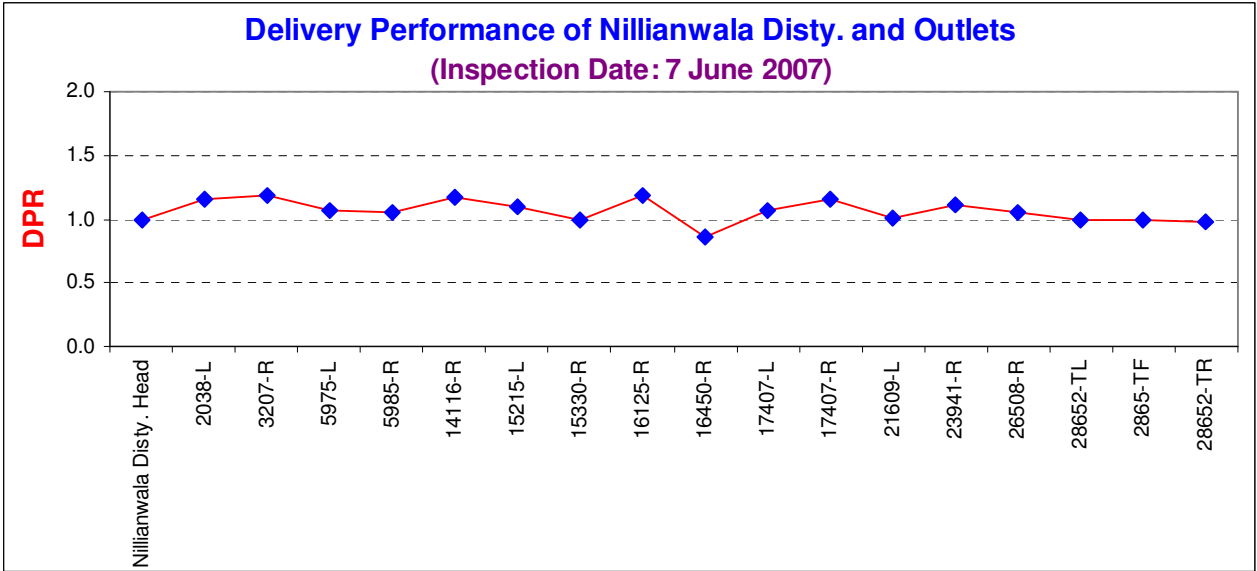
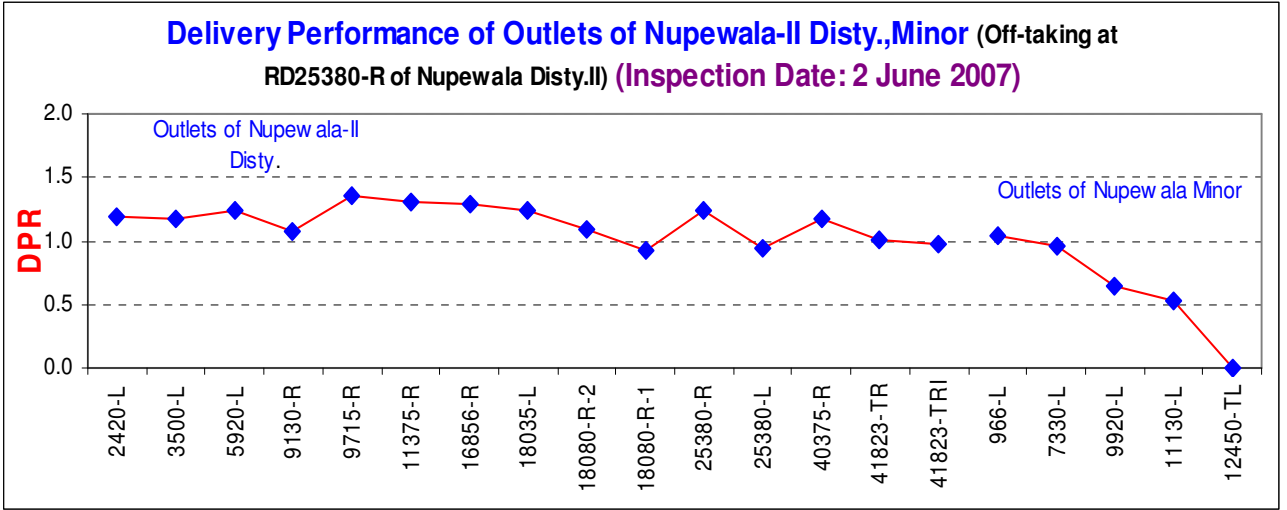
- The FOs have reported that they have checked their all outlets and identified and repaired 925 Nos. defective/tampered outlets. Although the outlets parameters have been mostly restored by the FOs but their fixation to design levels is still needed to be carried out so that the equitable distribution of water at each outlet level as per their authorized discharge can be ensured.
- Entries in outlets check register regarding checking of outlets parameters (B, Y & H), delivery performance ratios (DPRs) and observations after repairing of outlets are being done which have also been checked during visits of FOs by M&E teams.
- The 28 Nos. FOs (33% FOs) have maintained the outlets check record in proper manner and 39 FOs (46% FOs) maintained at satisfactory level as an average of 75% record, while 17 FOs (20% FOs) found poor in maintaining the outlets check register. Although, all the 84 FOs are regularly observing the gauges and checking out their outlets but they do not in writing transferred the data into the registers.
- PIDA monitoring field teams jointly with FOs are also carrying out physical inspections of channels and checked outlets parameters and water delivery performance of channels and outlets from head to tails. The physical inspections of various distributaries and observations reflecting the status of FOs functioning up to September 2006 have been presented in PIDA monitoring 1<sup>st</sup> report submitted in October 2006 and annual monitoring report covering the period (January 2006 to December 2006) submitted in January 2007 by the M&E Cell. The PIDA M&E teams inspected the 80 channels during the year 2006-07. Out of these, 36 distributaries have been checked completely in all aspects of its functioning. The copies of physical inspection sheets were delivered to concern FOs and identified weak areas were conveyed to FO for follow up improvement and necessary action to improve water delivery and ensure equity, and further verification of improvement made by the FOs are again monitored by the M&E teams.
- The water delivery performance of channels and outlets, which have been checked during the period July to December 2006, are **Annexed at "A"**.
- The onward from January 2007 up to June 2007, the inspection of channels and outlets delivery performance, parameters observations are placed here under and detail **Annexed at "B"**.

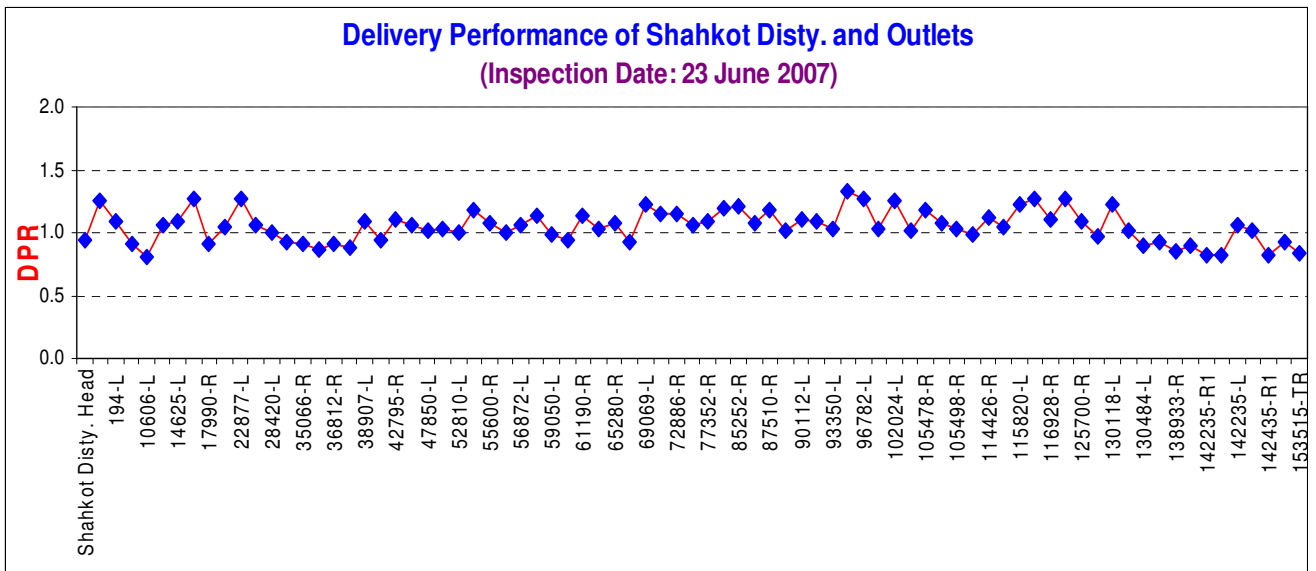
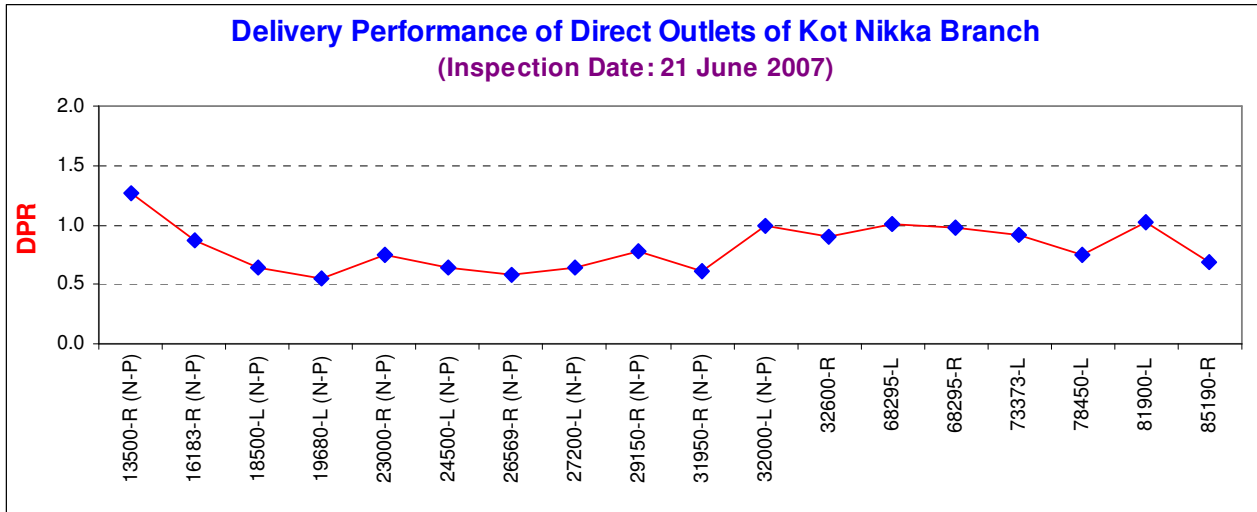
Farmers Organization- Distributary Canal Div. & inspection date	DPR of Channels at Head and Tail		
	DPR of Disty. At head	DPR of Disty. at Tail	Channels DPR: Tail DPR / Head DPR
<b>1. Highlevel Channel Disty.</b> UpperGugera 6/3/07	1.00	0.60	0.60
<b>2. Khanuana Disty.</b> LowerGugera 8/3/07	1.00	1.03	1.03
<b>3. Balochwala Disty.</b> Burala Div. 12/3/07	1.00	0.87	0.87
<b>4. Bhartiana Disty. &amp; Minor</b> LowerGugera 15/5/07	1.00 1.00 (Minor)	1.00 1.00 (Minor)	1.00 1.00 (Minor)
<b>5. Nillianwala Disty.</b> Upper Gugera 7/6/07	1.00	1.00	1.00
<b>6. Koru Disty.</b> Lower Gugera 14/6/07	1.00	1.00	1.00
<b>7. Shahkot Disty.</b> Upper Gugera 23/6/07	0.95	0.83	0.87

**Graphs: Water Delivery Performance of Channels and Outlets from Head to Tails:**









**(C) Management of Physical Condition of Distributaries - O&M of Channels/Works**

In general, the FOs maintained the irrigation channels and infrastructure with a sense of participation on the self help basis using their resources as well as from the 40% share of Abiana of the FO. The desilting, jungle clearance, sarkanda/weed/vegetation growth removing berm cutting and strengthening of banks etc. were carried out on self help basis by FOs through deploying tractors and volunteer labour. In this way, the most of FOs (about 75% FOs) have succeeded in clearing the water way of channels and feeding the tails through regulating the authorized discharges of distributaries and by repairing the defective outlets. Among all 84 FOs, 70 FOs (83% FOs) have carried out O&M activities on self help

basis besides from its share of abiana. Almost all the FOs have mobilized 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 and jungle clearance, Total 75 Nos. of FOs executed repair and maintenance works of channels out of their 40% share. The remaining 9 FOs reported that they could not plan and execute the repair and maintenance works at their channels due to the rehabilitation and lining works in progress.

All 84 FOs have prepared their annual business plan/budget for the year 2006-07 and accordingly carried out functions as per approved plans and expenses incurred out of their 40% share of water charges. All FOs reported that they have spent total Rs. 28.3 Million in the year 2006-07 on the administration (staff salary & allowances, utilities, stationary, equipments etc.) and repair & maintenance works of channels. The major quantum of repair and maintenance works was carried out during the annual canal closure January-February, 2007. The identification of works, execution of works and quality assurance have been made and ensured by FOs through utilizing the services of Managers (Technical) and their special works committees. The observation of physical condition of channels through progress reports of FOs and inspection reports, reveals that 67 Nos. FOs (80% FOs) have maintained their channels in good or satisfactory condition, and remaining 17 Nos. FOs (20%% FOs) maintained their channels adequate to poor level. It also observed that 50 Nos. FOs (60% FOs) controlled damages by cattle trespassing in their channel and remaining 34 Nos. of FOs could not effectively control the cattle trespassing.

- For better performance of the functions, in general, the FOs have established their various standing committees and assigned them the responsibilities regarding operation & regulation (watch & ward of channels), repair & maintenance of works, water charges collection, Accounts and water theft control etc.
- Although majority of FOs members and their staff are well aware about their roles and responsibilities, but they still need to have proper understanding about the standard procedures and how to perform their responsibilities as per rules / regulations.
- 73 Nos. FOs (87% of FOs) have good or satisfactory level about administrative aspects, while 11 FOs (13% of FOs) have poor understanding in this regard. 68 Nos. FOs (81% of FOs) has good or satisfactory level in Accounts maintaining, 74 Nos. FOs (88% of FOs) have good or satisfactory understanding about the procedure of



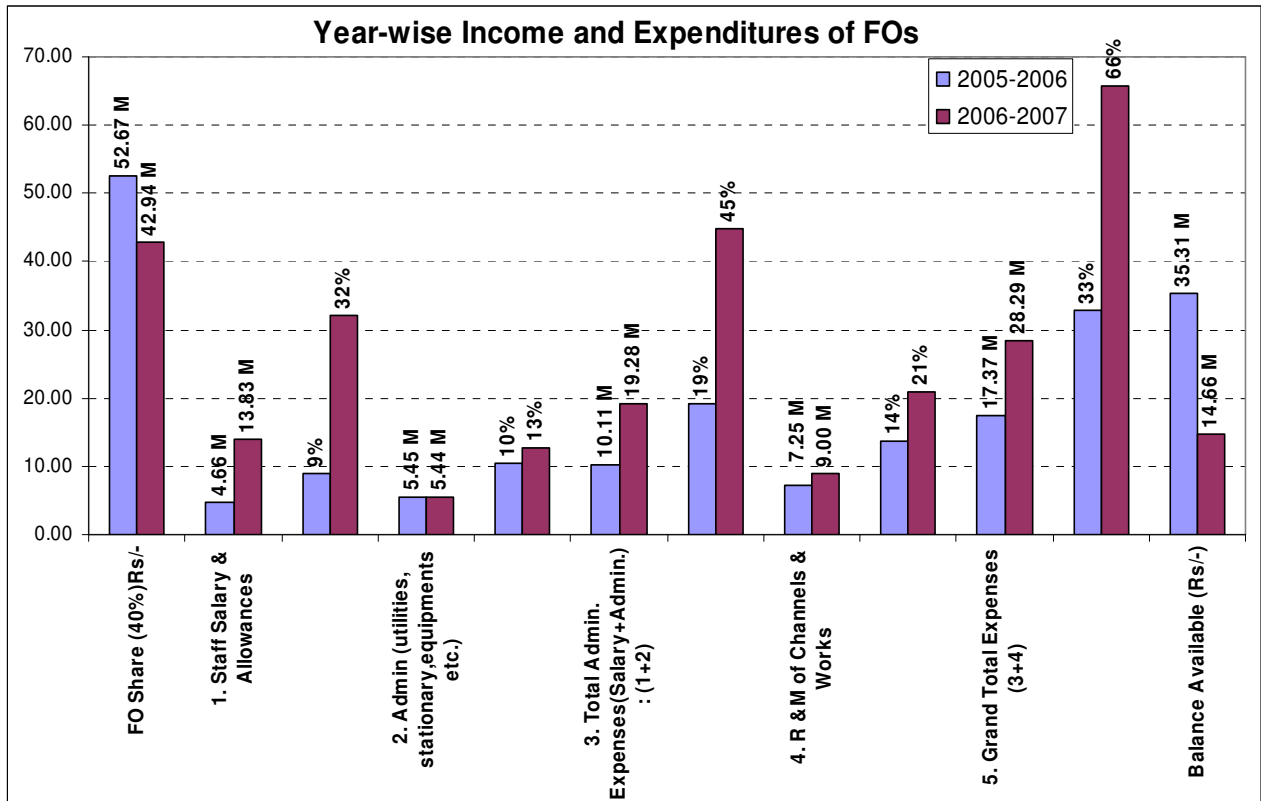
procurement of goods& services, O&M of system and limits of FOs expenses & funds utilization.

- The expenses on M&R of channels by the FOs are about 21% during the year against 33% required as per IMT agreement. While over all expenses are 66% of the income by the all FOs during the year 2006-07 which are mentioned in **Table-I** yearly basis. An hand sum amount of Rs. 49.97 Million is available with FOs. It is observed that the lacking in capacity by some FOs, the expenses on M&R could not be made by some FOs as per need.
- According to the progress reports of FOs, 57 FOs have maintained their all account record and the remaining 27 FOs at the moment are in process to maintain their accounts record under the guidance and support of PIDA Staff.

**Table I: The year-wise detail of total expenses**

For the Year	FO Share (40%) Million	Expenditures Detail (Rs. In Million)										Balance Available (Rs. M)*
		1. Staff Salary & Allowances (Rs. M)		2. Admin (utilities, stationary, equipments etc.) (Rs. M)		3. Total Admin. Expenses (Salary+Admin.) : (1+2) (Rs. M)		4. R &M of Channels & Works (Rs. M)		5. Grand Total Expenses (3+4) (Rs. M)		
2005-2006	52.67	4.66	9 %	5.45	10 %	10.11	19 %	7.25	14 %	17.37	33 %	35.31
2006-2007	42.94	13.83	32 %	5.44	13 %	19.28	45 %	9.00	21 %	28.29	66 %	14.66
<b>Grand Total</b>	<b>95.62</b>	<b>18.50</b>	<b>19 %</b>	<b>10.89</b>	<b>11 %</b>	<b>29.40</b>	<b>31%</b>	<b>16.25</b>	<b>17 %</b>	<b>45.65</b>	<b>48 %</b>	<b>49.97</b>

\*. M= Million

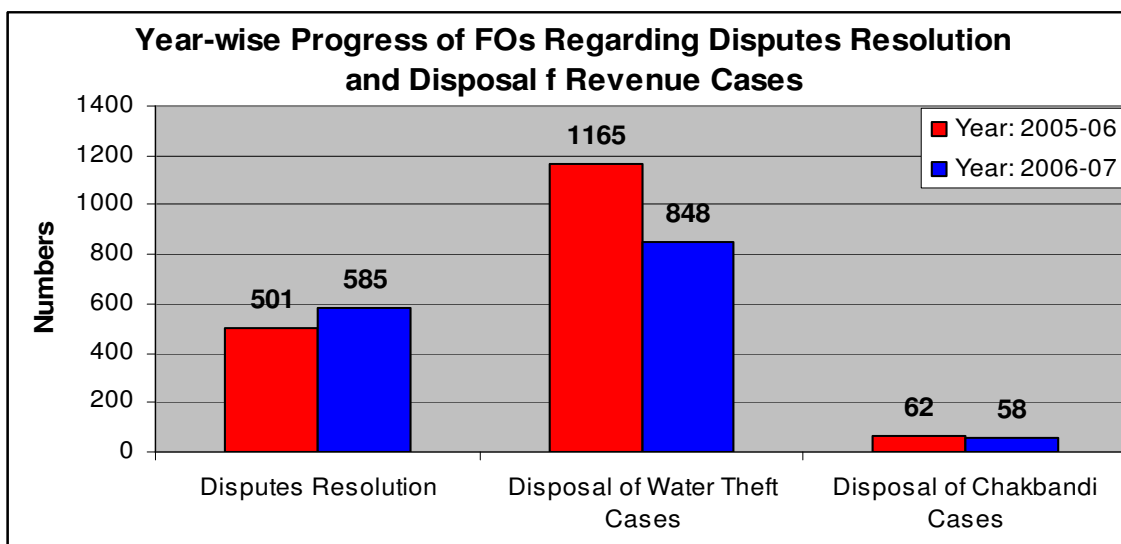


- Further the prioritization action plan for the FOs internal Audit by PIDA is being implemented and 14 nos. FOs have been completed. The lacking areas in record maintenance and account maintenance have been identified and PIDA support staff is assisting the FO to rectify the identified deficiencies.

**(D) Disputes Resolution and Disposal of Unauthorized Irrigation/ Water Theft and Canal Revenue Cases**

FOs are resolving disputes/conflicts relating to water distribution, Warabandi and Nakka etc. collectively and timely. It is also a good sign that the FOs are keeping transparency/ fairness in resolving the disputes, and farming community almost satisfied with FO decisions. The progress reports of FOs have been reviewed and accounted that the FOs have resolved total 585 numbers of disputes and decided 906 numbers of unauthorized irrigation / water theft cases and chakbandi (revenue cases). It also observed that FOs have initiated and taken action on 728 Nos. of cases of water theft and imposed special charges/tawan Rs. 59 Millions and 571 such cases were also reported to police for legal actions against culprits. As

of June 2007, the year-wise progress of FOs regarding disputes resolution and disposal of revenue cases are graphically presented as under:



The progress of FOs regarding to disputes resolution are reviewed and analyzed that 71 Nos. FOs (85% FOs) have resolved efficiently and timely all water relevant disputes, while remaining 13 Nos. FOs (15% FOs) found weak and lacking in resolution of disputes. The record management and maintenance of FOs regarding disputes/complaints entry and resolution status observed, which reveals that on the whole 34 Nos. FOs (40% FOs) maintained their records properly, while remaining FOs did not maintain their record in proper format and the resolved cases status. The such lacking/shortcomings were communicated to concerned units/cells of PIDA for further guidance, support and capacity building of FOs which is being provided by the field teams PIDA.

It observed, in general, during Kharif season when high delta crop i.e rice is sown, the incidence/frequency of unauthorized irrigation / water theft increases through cuts in channels, tampering of outlets, fixing unauthorized pipes, etc which results shortage of supply at tails. In lower part of the LCC canal system i.e 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 are not being effectively controlled. However the FOs have reported such identified incidences to police timely.

The 67 Nos. FOs faced problems in lodging of FIRs against offenders of water theft and also pointed out the poor response and cooperation of police. This has discourage the control over offences of water theft which may lead ultimately bad effects on FOs efficient functioning and efforts for control over water theft. However, some 22 Nos. of FOs have reported that they vigorously pursued these cases with police and have succeeded to lodge FIRs (213 Nos.). PIDA staff also provided support to FOs in lodging FIRs through meeting with police officers and even at PIDA H/Q level, while in some cases, MD PIDA have talked to support of police to help the FOs in control over water theft.

### (E) Assessment and Collection of Water Charges (Abiana)

The task of assessment and collection of water charges (Abiana) was entrusted to FOs so as to enable them to generate their funds for management of their channels and smooth functioning of FOs.

FOs have adopted the services of their Khal Punchayats (KPs) for distribution of bills to farmers and collection of abiana. The response in water charges (Abiana) collection by the 65 FOs was very encouraging during first crop **Rabi 2004-2005** as collection of water rate is observed 88%, among them 28 numbers of FOs have collected 100% Abiana. For the second crop **Kharif 2005** the all 84 FOs have collected 80% water charges (Abiana), among them 27 FOs collected 100% Abiana. For the third crop **Rabi 2005-2006** the total 80 FOs have collected 79% Abiana, among them 24 FOs collected 100% Abiana. For the fourth crop **Kharif 2006**, all 84 FOs, so far, have collected 53 % of Abiana, among them 11 FOs collected 100% Abiana.

The crop wise progress of FOs of LCC(East) Command regarding assessment and collection of water charges is as under:

Crop Season	Nos. of FOs	Assessed Amount (Million)	Collected Amount (Million)	Av. % age Collection	Remarks
<b>Rabi 2004-2005</b>	65 FOs	47.60	41.72	88	28 FOs collected 100% Abiana
<b>Kharif 2005</b>	84 FOs	112.48	89.98	80	27 FOs collected 100% Abiana
<b>Rabi 2005-2006</b>	80 FOs	61.32	48.44	79	24 FOs collected 100% Abiana
<b>Kharif 2006</b>	84 FOs	112.16	58.92	53	11 FOs collected 100% Abiana

It is observed that the trend of the collection of water charges (Abiana) by the FOs is declining. PIDA coordination and social mobilization cell has stressed the FOs to improve the collection of water charges (Abiana) and provide of necessary support. The regular meetings are held by the field staff with Management Committees and General body members of FOs in this regard. The revenue coordinators of capacity building & training cell are providing on job training and assistance to each FO regarding maintenance of assessment and abiana record and guidance for recovery of abiana etc. The services of tehsildar for recovery of abiana from defaulters has been obtained who is assisting FOs in collection of abiana.

The following main problems are identified which effected the performance of water charges collection.

- a)** Inexperienced revenue staff of FOs for assessment and preparing water charges bills.
- b)** Poor mechanism adopted by the FOs for collection, which mainly depends on chairmen Khal Panchayats who have collected the water charges from farmers but did not deposit back to the FOs.
- c)** Non-provision of incentives to collectors of water charges, while all FOs demanded to allow them to pay collection charges in line with existing practices in Government. (During June 2007, the PIDA Authority has approved the incentive of 6% of water charges collection by each Khal Panchayat when (100%) collection made)
- d)** The weak internal interaction and cohesion among Management Committees and Khal Panchayats chairmen.
- e)** Socio-political and cultural factors has started effecting the performance of FOs and mistrust gap developed.
- f)** Fluctuation in delivery of water supplies due to ongoing rehabilitation works in channels.
- g)** Problem in effective control over water theft resulting non feeding of water supply to tail reaches.

### 3. Performance Evaluation/ Ranking of FOs

The crop-wise abiana collection performance of FOs is evaluated as under;

Ranking-Standard	Rabi 2004-05 (65 Nos. of FOs)	Kharif 2005 (84Nos. of FOs)	Rabi 2005-06 (80Nos. of FOs)	Kharif 2006 (84Nos. of FOs)
<b>Good - greater than 90% Collection</b>	43 (66%)	44 (52%)	35 (44%)	15 (18%)
<b>Satisfactory – 80-90% Collection</b>	8 (12%)	8 (10%)	16 (20%)	9 (11%)
<b>Adequate – 60-80% Collection</b>	8 (12%)	14 (17%)	12 (15%)	18 (21%)
<b>Poor – less than 60% Collection</b>	6 (9%)	18 (21%)	17 (21%)	42 (50%)

#### Cumulative Water Charges (Abiana) Collection Performance Ranking

Ranking-Standard	Nos. of FOs	%age of FOs out of 84 FOs
<b>Good - greater than 90% Collection</b>	29	35%
<b>Satisfactory – 80-90% Collection</b>	11	13%
<b>Adequate – 60-80% Collection</b>	25	30%
<b>Poor – less than 60% Collection</b>	19	23%

#### Overall Performance Evaluation/ Ranking of FOs

The overall performance of all 84 FOs in AWB/LCC (East) Circle is evaluated against performance benchmark indicators/parameters and standards. The performance ranking of FOs is tabulated as under:

Ranking-Standard	Nos. of FOs	%age of FOs out of 84 FOs
<b>Good – greater than 85%</b>	25	30 %
<b>Satisfactory – 70-85%</b>	19	23 %
<b>Adequate – 55-70%</b>	25	30 %
<b>Poor – less than 55%</b>	15	17 %

The evaluation of performance of FOs has shown that on the whole, out of 84 FOs, there are only 25 FOs ranked as “Good”, while remaining 59 FOs fall under different levels of performance i.e. poor, adequate and satisfactory. There is need to evolve mechanism for improving the performance level of FOs i.e. poor (15 FOs) to adequate, adequate (25 FOs) to satisfactory, satisfactory (19 FOs) to good, and good (25 FOs) towards the sustainable.