

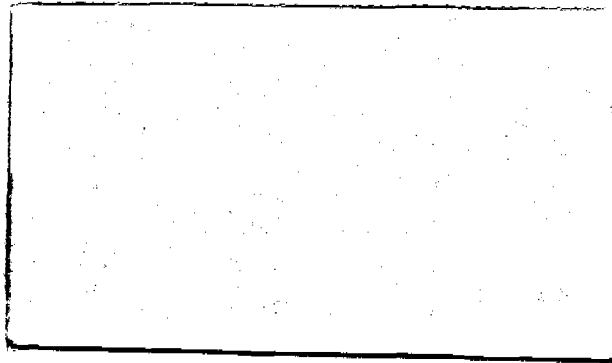
822 INAN97

ETC

CONSULTANTS INDIA PVT. LTD.

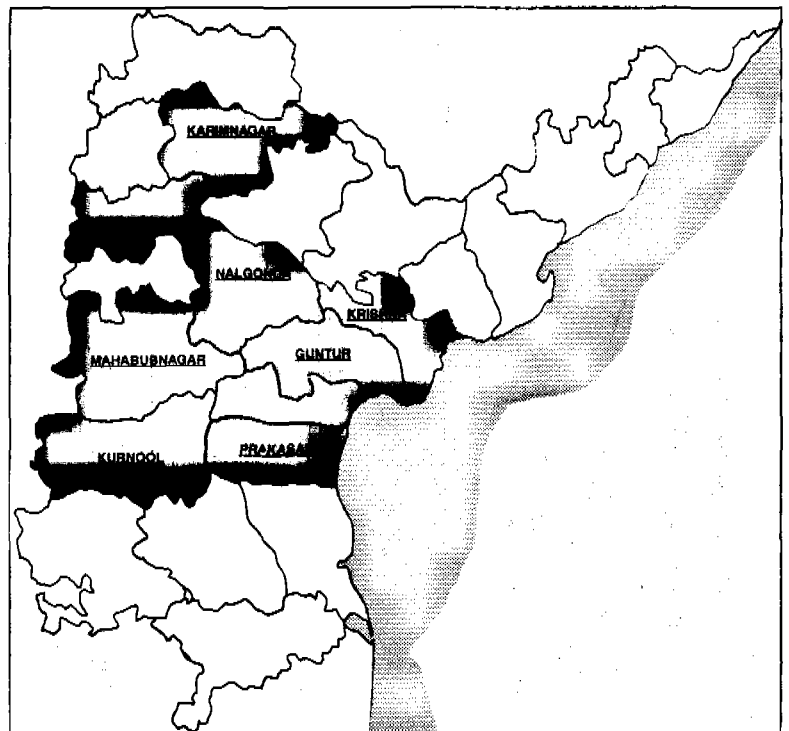


**NETHERLANDS
ASSISTED
PROJECTS OFFICE**



Library

IRC International Water
and Sanitation Centre
Tel.: +31 70 30 689 80
Fax: +31 70 35 699 84



NETHERLANDS ASSISTED PROJECTS OFFICE

HALF-YEARLY PROGRESS REPORT

APRIL TO SEPTEMBER 1996

LIBRARY IRC
PO Box 93190, 2509 AD THE HAGUE
Tel.: +31 70 30 689 80
Fax: +31 70 35 899 64
BARCODE: 13734
LO: 822 INANG7

**42/4 RT, BARKATPURA, HYDERABAD-500 027, Phone: 665358, 7610652
Fax: 0091-040-7610667**

LIST OF ABBREVIATIONS

AEV	Additional Enroute Villages
AIRDS	Local NGO
AP	Andhra Pradesh
APDDCFL	Andhra Pradesh Dairy Development Cooperative Federation Limited
AP I	First generation of Netherlands Assisted projects in AP
AP II	Second generation of Netherlands Assisted Projects in AP
AP III	Third generation of Netherlands Assisted Projects in AP
APSEB	Andhra Pradesh State Electricity Board
ASSIST	Local NGO
BR	Balancing Reservoir
CE	Chief Engineer
CPWS	Comprehensive Piped Water Supply
CPWSS	Comprehensive Piped Water Supply Scheme
C/W	Clear Water
CWA	Clear Water Augmentation
CWST	Clear Water Sump Tank
DC	District Collector
E-n-C	Engineer-in-Chief
EV	Enroute Villages
ES	Effective Size
FRE	Final Revised Estimate
ft	feet
GLSR	Ground Level Service Reservoir
GO	Government Order
GoAP	Government of Andhra Pradesh
GOI	Government of India
GoN	Government of Netherlands
GP	Gram Panchayat
HC	House Connection
HERSELF	Local NGO
H/W	Head Works
IPM	Institute of Preventive Medicine
IPWSS	Individual Piped Water Supply Scheme
lakh	100,000
LIS	Lift Irrigation Scheme
lpcd	Litres Per Capita per Day
MARI	Local NGO
MEP	Minimum Evaluation Procedure
MI	Minor Irrigation
MIS	Management Information System
MODE	Mode Research Private Limited
MPR	Monthly Progress Report
+ MSL	+ Mean Sea Level
NAP	Netherlands Assisted Projects
NAPO	Netherlands Assisted Projects Office
NEERI	National Environmental Engineering Research Institute
NGO	Non-Government Organization
NS	Nagarjuna Sagar
O&M	Operation and Maintenance

LIST OF ABBREVIATIONS

OHSR	Overhead Service Reservoir
PRA	Participatory Rural Appraisal
PRED	Panchayat Raj Engineering Department
PRFS	Project Reformulation/Feasibility Study on AP-III
PSP	Public Stand Post
PWS	Piped Water Supply
QPR	Quarterly Progress Report
R&B	Roads and Buildings
RGNDWM	Rajiv Gandhi National Drinking Water Mission
RSF	Rapid Sand Filtration
RSM	Review and Support Mission
R/W	Raw Water
RWS	Rural Water Supply
SHGs	Self Help Groups
SM	Support Mission
SNIRD	Local NGO
SSF	Slow Sand Filtration
SST	Summer Storage Tank
TBLLC	Tunga Bhadra Lower Level Canal
TMC	Thousands Million Cubic feet
TP	Treatment Plant
TRM	Technical Review Mission
WHO	World Health Organization
WMF	Water Monitoring Format
WTP	Water Treatment Plant
UC	Uniformity Coefficient
VAC	Village Action Committee
VBO	Village Based Organization
VDS	Village Development Society

CONTENTS	PAGE NO.
A INTRODUCTION	1
EXECUTIVE SUMMARY	3
B BASIC INFORMATION	26
C NAP OFFICE	27
1 Missions, Meetings & Visits	27
2 NAP Office & Staffing	28
D NAPO MONITORING & SUPPORT SERVICES	31
1 RURAL WATER SUPPLY	31
1.1 Inventory AP II	32
1.2 As laid/built information AP II	37
2 COMPLETION OF AP II PROJECTS	39
2.1 Overall completion status AP II	42
2.2 Completion status per district	46
2.2.1 Mahbubnagar	46
2.2.2 Kurnool	53
2.2.3 Medak	60
2.2.4 Prakasam	67
2.3 Completion planning per district	74
2.3.1 Mahbubnagar	75
2.3.2 Kurnool	79
2.3.3 Medak	84
2.3.4 Prakasam	88

CONTENTS	PAGE NO.
3 OPERATION & MAINTENANCE	93
3.1 Functioning of schemes as per NAPO monitoring format	
3.1.1 Mahbubnagar	94
3.1.2 Kurnool	97
3.1.3 Medak	105
3.1.4 Prakasam	113
3.2 Summary of water monitoring	126
4 SANITATION	128
4.1 Project Clean Village	130
5. COMMUNITY PARTICIPATION AND INVOLVEMENT	131
OF NGOs IN AP II	
6. LIFT IRRIGATION SCHEME (MAHBUBNAGAR)	145
7. AP III NALGONDA	148
7.1 PRED's preparations AP III	149
and technical support NAPO	
7.1.1 Developing the methodology and planning for	149
a ground water based village approach in	
Nalgonda, AP III	
7.1.2 Hydrogeological activities for the provisions	151
in 25 habitations in Zone D, A and B	
7.1.3 Scheduled activities for the preparation of the	152
proposal for the phase out AP II / Phase in AP III year	
8. AP II	152
E. ANNEXURES	153

LIST OF ANNEXURES

PAGE NO

- | | |
|---|-----|
| 1. Abstract Statements on QPRs | 154 |
| 2. Cumulative Statements on Physical Progress - AP II | 163 |
| 3. LPCD details and capacity utilisation for CPWSS of AP II | 165 |
| 4. Report on Workshop on Communication methods | 237 |

MAILING LIST

	Address	No. of copies
1.	The Royal Netherlands Embassy 6/50 F Shantipath Chanakyapuri New Delhi 110 021	7
2.	The Panchayati Raj Engineering Department (PRED) Swamy Ramananda Teertha Grameena Nirmana Bhavan Errum Manzil Colony Hyderabad 500 482	7
3.	The Principal Secretary Panchayati Raj & Rural Development Government of Andhra Pradesh Secretariat Hyderabad 500 022	1
4.	ETC Consultants India Pvt. Ltd. E-110 Saket New Delhi 110 017	1
5.	ETC Foundation Kastanjelaan 5 P.O. Box 64 3830 AB Leusden The Netherlands	1
6.	IWACO Bv. Hoofdweg 490 P.O. Box 8520 3009 AM Rotterdam The Netherlands	1
7.	ASSIST G.T. Road Chilakaluripet 522 616 Guntur District, A.P.	1

	Address	No. of copies
8.	HERSELF Society Shyam Nagar (Near Bethel Church) Nandyal 518 502 Kurnool District, A.P.	1
9.	SNIRD (Society for National Integration through Rural Development) Railpet Ongole 523 001 Prakasam District, A.P.	1
10.	Project Support Unit C/o Gujarat Water Supply & Sewerage Board Sector 16, G.H. 5 Gandhinagar 382 016 Gujarat	1
11.	Project Support Unit Integrated Rural Water Supply/ Sanitation Project No. 27, First Floor 5th Main, 4th Cross Jayamahal Extension Bangalore 560 046 Karnataka	1
12.	Socio Economic Foundation Vellayambalam Vikas Bhawan P.O. Trivandrum - 695 033 Kerala	1
13.	PSU Foundation 2 Sarojini Naidu Marg Lucknow 226 001	1

	Address	No. of copies
14.	International Reference Centre (IRC) P.O. Box 93190 2509 AD The Hague The Netherlands	1
15.	MARI Modern Architects for Rural India 13-76, C/o P. Shivchander Court Road, Jogipet Medak District	1
16.	The Chief Engineer Minor Irrigation Errum Manzil Hyderabad 500 082	1

A. INTRODUCTION

This report covers the reporting period April 1996 till September 1996, as far as the physical and financial monitoring of the AP II projects are concerned.

In consultation with RNE we have decided to cover the subjects of completion of the AP II projects and the preparations for an alternative AP III programme in NALGONDA until December, so that the recent developments, including the activities of PRED with NAPO and the support Missions can be included in this report.

Several of the recent progress reports from NAPO have been rather voluminous, also creating a substantial workload for NAPO and staff. This is rooted in the fact that much of the data not documented in the past are now recorded retroactively, and the fact that we are presenting the first efforts in detailed documentation and analyses of data regarding the monitoring of water delivery.

As these tasks should be taken on by the PRED in the near future, we hope that the volume of our reports can be somewhat reduced in the future.

The observations in the report clearly indicate the nearing of completion of the AP II Projects, while specific planning per district for the final completion is presented herewith.

The completion, however, seems to concentrate on completion of physical works and an assessment of the level of operation at that point in time.

Physical completion in our view merely implies "**operationable**", and does not indicate the score on how much water is provided to the users, based on the design parameters, which is considered the basic objective of the entire programme.

After completion of the infrastructure, the Operation and maintenance of the schemes will hence be left as a serious concern.

PRED and NAP Office have discussed initiatives to introduce a monitoring system for the level of operation throughout the AP II schemes.

As that would only be a start to observe and document the level of operation, measures and a system to improve operation on the basis of monitoring observations still has to be worked out.

Additional issues, such as O&M manuals, O&M budgets, and the institutional responsibility and day to day responsibility, are likewise considered crucial to the improvement of operation and maintenance of the schemes.

The issue of "ownership / responsibility" of the schemes, is still unresolved. GP seems reluctant to take over, after the new Sarpanches were elected, while NAPO has been insisting that handing over of responsibility for distribution systems from PRED to GP could only be done if schemes are fully completed, based on a formal procedure, including provisions for O&M manual from PRED, trained operators and provisions of budget facility, either granted from GOAP or within a system of GP cost recovery.

While the balance is presently beginning to shift from a concentration of AP II to the preparation of the start Year called "phase out AP II phase in AP III", it should be discussed and decided to what level NAP Office will still be involved in the monitoring and advisory services to the operation of AP II schemes, after their physical completion.

The latter part of this report describes the present efforts made in conceptualizing and planning of the phasing in of a ground water approach in the AP III Nalgonda project.

The concentrations in these efforts clearly reflect the intentions to depart from existing facilities in the village, to base the design, construction and O&M on the participation of the users, and to introduce proper planning and documentation.

NAPO JANUARY 1997.

EXECUTIVE SUMMARY

C NAP OFFICE

- 1. Missions, Meetings and Visits**
- 2. Nap Office and Staffing**

Social Project Officer Mr. Govardhan Das replaced SPO Shashi Johnson, while Technical Programme Coordinator A. Zutshi joined the RNE as Senior Programme Officer. NAPO is still searching for a replacement.

The synchronization of programme activities with the administrative procedures proved to create some constraints for NAPO, where a number of activities could not be taken up prior to approval of the workplan submitted for the period July '96 -March '97.

The recruitment of a new TPO also proved difficult in view of the limited period that the present administrative approval can cover.

Financial coverage of NGOs extension, has been found through re-appropriation in the NAPO budget.

D NAPO MONITORING AND SUPPORT SERVICES

1. Rural Water Supply

1.1 Inventory Information AP II

Completed Inventory Formats have now been received from PRED.

Although NAPO received upgraded inventory formats for all Districts but Prakasam, the quality of the data does not match the system as it was agreed upon.

PRED local field staff has not been able to provide village wise information for reservoirs and distribution systems.

The lack of this information makes it impossible to make specific analyses at village level.

PRED local field staff have filed in identical data for design - execution - and the level of functioning of the schemes.

This runs counter to the observations in the field and is inconsistent with PRED's own reporting, as in reimbursement claims, deletions and the level of pumping data.

There are also plenty of gaps in the information provided.

After the initiatives from NAPO and assistance to PRED to set up a documentation format, it is now considered up to the PRED to have the data filled in properly.

1.2 As Laid/ Built Information

By October 1996 NAPO received as built drawing and maps.

This time an elaborate and good effort was made to improve previous versions.

2. COMPLETION OF AP II PROJECTS

The completion procedure as discussed with RNE, PRED and NAPO consists of the following components :

- Physical completion of works and the completion dates thereof
- PRED internal completion reports
- Possible completion assessment by external local consultant
- PRED Technical Audit, reviewing the level of functioning
- Completion report per scheme per District in accordance with the RNE format to be submitted to Rajiv Gandhi Mission
- Bilateral Mission
- Administrative and Financial completion

2.1 Overall Completion Status AP-II (till end of Sept 1996)

The AP II projects have reached a level of 97.6% financial progress, with an expenditure of Rs.3992.61 lakhs out of a final revised estimate of Rs.4089 lakhs.

Out of a total of 283 villages, 254 (90%) have been covered with water supply.

Out of a total of 1016 physical works, 960 (94.5%) have been completed.

The Lift Irrigation project has reached 84.4% financial expenditure, with 90 % of the irrigation potential created and 86% of the major works completed. Presently 3000 acres of the infrastructure created for 9000 acres are actually being irrigated.

2.2 Completion Status Per District

This section in the report provides the specifics regarding the completion per District ;
The summarized completion levels are as follows:






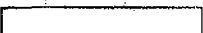
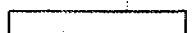







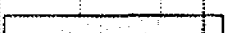

Mahbubnagar	:	physical completion	90 %
		financial completion	94 %
Kurnool	:	physical completion	95 %
		financial completion	99.5 %
Medak	:	physical completion	98 %
		financial completion	101 %
Prakasam	:	physical completion	93 %
		financial completion	95 %

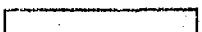



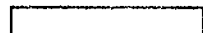


2.3 Completion Planning Per District

After detailed discussions between PRED NAPO and the Support Mission an elaborate planning for the completion of AP II was prepared for each District.

The planning has been presented in MS Project software, while the specifics can be found in section 2.3 in the report.

SCHEDULE OF COMPLETION APII PROJECTS

ID	Task Name	7/96	8/96	9/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
1																						
2	PROJECT APII MAHBUBNAGAR																					
3	Completion of works																					
4	Preparation O&M manuals																					
5	Subm. completion report																					
6																						
7	PROJECT APII KURNOOL																					
8	Completion of works																					
9	Preparation O&M manuals																					
10	Subm. completion report																					
11																						
12	PROJECT APII MEDAK																					
13	Completion of works																					
14	Preparation O&M manuals																					
15	Subm. completion report																					
16																						
17	PROJECT APII PRAKASAM																					
18	Completion of works																					
19	Preparation O&M manuals																					
20	Subm. completion report																					

Project: Date: 2/17/97	Task 	Summary 	Rolled Up Progress 	
	Progress 	Rolled Up Task 		
	Milestone 	Rolled Up Milestone 		

COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
1	GENERAL ACTIVITIES	257d	11/19/96	11/12/97	[Summary bar from Nov 1996 to Nov 1997]																
2	Basic information	115d	11/19/96	4/28/97	[Summary bar from Nov 1996 to Apr 1997]																
3	Internal inventory	2w	11/19/96	12/2/96	[Task bar from Nov 1996 to Dec 1996]																
4	Compl. reports-item	19w	11/19/96	3/31/97	[Task bar from Nov 1996 to Mar 1997]																
5	Revision compl. reports	2w	4/15/97	4/28/97	[Task bar from Apr 1997 to Apr 1997]																
6	As-built drawings	2w	11/19/96	12/2/96	[Task bar from Nov 1996 to Dec 1996]																
7	Operation & Maintenance	125d	11/19/96	5/12/97	[Summary bar from Nov 1996 to May 1997]																
8	O&M Manuals	75d	11/19/96	3/3/97	[Summary bar from Nov 1996 to Mar 1997]																
9	Draft Version	10w	11/19/96	1/27/97	[Task bar from Nov 1996 to Jan 1997]																
10	Comments NAPO	2w	1/28/97	2/10/97	[Task bar from Jan 1997 to Feb 1997]																
11	Final version	3w	2/11/97	3/3/97	[Task bar from Feb 1997 to Mar 1997]																
12	Training O&M staff	55d	1/28/97	4/14/97	[Summary bar from Jan 1997 to Apr 1997]																
13	Identification needs	1w	1/28/97	2/3/97	[Task bar from Jan 1997 to Jan 1997]																
14	Design training plan	2w	2/4/97	2/17/97	[Task bar from Jan 1997 to Feb 1997]																
15	Conduct training	8w	2/18/97	4/14/97	[Task bar from Feb 1997 to Apr 1997]																
16	O&M Budget	51d	3/3/97	5/12/97	[Summary bar from Mar 1997 to May 1997]																
17	Budget Preparation	2w	3/3/97	3/14/97	[Task bar from Mar 1997 to Mar 1997]																
18	Allocation by PRED	6w	4/1/97	5/12/97	[Task bar from Mar 1997 to May 1997]																
19	Performance Monitoring	248d	12/2/96	11/12/97	[Summary bar from Dec 1996 to Nov 1997]																
20	Aggr. pump data	242.5d	12/2/96	11/5/97	[Task bar from Dec 1996 to Nov 1997]																

Project: Completion APII Kollapur Date: 2/17/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
33	Aggr. delivery data	242.5d	12/2/96	11/5/97																	
46	Analysis by HQ/NAPO	244d	12/6/96	11/12/97																	
59	CPWSS CHINNAMAROOR	105d	11/19/96	4/14/97	—————																
60	Outstanding works	30d	11/19/96	12/30/96	—————																
61	PM KPally-BPally	6w	11/19/96	12/30/96	—————																
62	PM KPally-TPally	6w	11/19/96	12/30/96	—————																
63	PM TPally-CPally	6w	11/19/96	12/30/96	—————																
64	PM TPally-TPthanda	6w	11/19/96	12/30/96	—————																
65	VDS -Chinnamaroor	6w	11/19/96	12/30/96	—————																
66	VDS-Veltoor	6w	11/19/96	12/30/96	—————																
67	VDS-Koppunur	6w	11/19/96	12/30/96	—————																
68	VDS-Jetprole	6w	11/19/96	12/30/96	—————																
69	VDS-Kondur	6w	11/19/96	12/30/96	—————																
70	VDS-Peddamaroor	6w	11/19/96	12/30/96	—————																
71	VDS-Velgonda	6w	11/19/96	12/30/96	—————																
72	VDS-Weepanagandla	6w	11/19/96	12/30/96	—————																
73	VDS-KPally	6w	11/19/96	12/30/96	—————																
74	Scheme stabilisation	15w	11/19/96	3/3/97	—————																
75	Technical audit	2w	3/4/97	3/17/97	—————																
76	Rectifications	4w	3/18/97	4/14/97	—————																

Project: Completion APII Kollapur Date: 2/17/97	Task	Summary	Rolled Up Progress
	Progress	Rolled Up Task	
	Milestone	Rolled Up Milestone	

COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
77	PROJECT COMPLETION	130d	11/19/96	5/19/97																
78	Prep. draft final report	21w	11/19/96	4/14/97																
79	Final completion report	4w	4/15/97	5/12/97																
80	Submission to RNE	1w	5/13/97	5/19/97																

Project: Completion APII Kollapur Date: 2/17/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII KURNOOL

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
33	Aggr. delivery data	242.5d	12/2/96	11/5/97	□	□	□	□	□	□	□	□	□	□	□	□	□				
46	Analysis by HQ-NAPO	244d	12/6/96	11/12/97	□	□	□	□	□	□	□	□	□	□	□	□	□				
59	CPWSS HALVI	135d	11/19/96	5/26/97	[Thick black bar]																
60	Outstanding works	30d	11/19/96	12/30/96	[Thick black bar]																
61	GM GLBR Halvi-25 Villa	6w	11/19/96	12/30/96	[Thin white bar]																
62	VDS Urukonda	4w	11/19/96	12/16/96	[Thin white bar]																
63	Scheme stabilisation	19w	11/19/96	3/31/97	[Hatched bar]																
64	Technical audit	4w	4/1/97	4/28/97	[Thin white bar]																
65	Rectifications	4w	4/29/97	5/26/97	[Hatched bar]																
66	CPWSS HANAWAL	135d	11/19/96	5/26/97	[Thick black bar]																
67	Outstanding works	30d	11/19/96	12/30/96	[Thick black bar]																
68	OHSR Upperhal	6w	11/19/96	12/30/96	[Thin white bar]																
69	OHSR Rowdur	6w	11/19/96	12/30/96	[Thin white bar]																
70	VDS- Upperhal	6w	11/19/96	12/30/96	[Thin white bar]																
71	VDS- Rowdur	6w	11/19/96	12/30/96	[Thin white bar]																
72	Scheme stabilisation	19w	11/19/96	3/31/97	[Hatched bar]																
73	Technical audit	4w	4/1/97	4/28/97	[Thin white bar]																
74	Rectifications	4w	4/29/97	5/26/97	[Hatched bar]																
75	CPWSS SATHNUR	135d	11/19/96	5/26/97	[Thick black bar]																
76	Outstanding works	30d	11/19/96	12/30/96	[Thick black bar]																

Project: Comple2c4 APII Kurnool
Date: 2/18/97

Task [Thin white bar] Summary [Thick black bar] Rolled Up Progress [Thick black bar]

Progress [Thick black bar] Rolled Up Task [Thin white bar]

Milestone [Black diamond] Rolled Up Milestone [White diamond]

COMPLETION APII KURNOOL

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
77	Fencing at Sathnur	6w	11/19/96	12/30/96																	
78	GM Duddi to seg I	6w	11/19/96	12/30/96																	
79	GM Kaggal to seg II	6w	11/19/96	12/30/96																	
80	VDS Moogaladoddi	2w	11/19/96	12/2/96																	
81	VDS Sathnur	2w	11/19/96	12/2/96																	
82	VDS Katchapuram	2w	11/19/96	12/2/96																	
83	VDS 52 Basapuram	2w	11/19/96	12/2/96																	
84	Scheme stabilisation	19w	11/19/96	3/31/97																	
85	Technical audit	4w	4/1/97	4/28/97																	
86	Rectifications	4w	4/29/97	5/26/97																	
87	CPWSS MANCHALA	90d	11/19/96	3/24/97																	
88	Scheme stabilisation	6w	11/19/96	12/30/96																	
89	Technical audit	4w	1/28/97	2/24/97																	
90	Rectifications	4w	2/25/97	3/24/97																	
91	CPWSS CHINNAKOTHILIKI	90d	11/19/96	3/24/97																	
92	Scheme stabilisation	10w	11/19/96	1/27/97																	
93	Technical audit	4w	1/28/97	2/24/97																	
94	Rectifications	4w	2/25/97	3/24/97																	
95	PROJECT COMPLETION	160d	11/19/96	6/30/97																	
96	Prep. draft final report	27w	11/19/96	5/26/97																	

Project: Comple3c414APII Kurnool Date: 2/18/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII KURNOOL

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
97	Final completion report	4w	5/27/97	6/23/97								█									
98	Submission to RNE	1w	6/24/97	6/30/97								█									

Project: Completion APII Kurnool Date: 2/18/97	Task	Summary	Rolled Up Progress
	Progress	Rolled Up Task	
	Milestone	Rolled Up Milestone	

COMPLETION APII MEDAK

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98		
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan		
33	Aggr. delivery data	242.5d	12/2/96	11/5/97																	
46	Analysis by HQ-NAPO	244d	12/6/96	11/12/97																	
59	CPWSS IBRAHIMPUR	125d	11/19/96	5/12/97	▬																
60	Scheme stabilisation	19w	11/19/96	3/31/97	▨																
61	Technical audit	2w	4/1/97	4/14/97						▭											
62	Rectifications	4w	4/15/97	5/12/97						▭	▭										
63	CPWSS BORANCHA	125d	11/19/96	5/12/97	▬																
64	Outstanding works	30d	11/19/96	12/30/96	▬																
65	Staff quarters Borancha	4w	11/19/96	12/16/96	▭																
66	GLBR at Tumnurgutta	4w	11/19/96	12/16/96	▭																
67	Booster NPally	6w	11/19/96	12/30/96	▭																
68	Scheme stabilisation	19w	11/19/96	3/31/97	▨																
69	Technical audit	2w	4/1/97	4/14/97						▭											
70	Rectifications	4w	4/15/97	5/12/97						▭	▭										
71	CPWSS KARASGUTHY	125d	11/19/96	5/12/97	▬																
72	Outstanding works	30d	11/19/96	12/30/96	▬																
73	SO building at h/w	2w	11/19/96	12/2/96	▭																
74	Staff quarters h-w	4w	11/19/96	12/16/96	▭																
75	GM Mannur to Maikode	2w	11/19/96	12/2/96	▭																
76	GM Abenda to Hukrana	6w	11/19/96	12/30/96	▭																

Project: Completion APII Medak Date: 2/14/97	Task	▭	Summary	▬	Rolled Up Progress	▬
	Progress	▬	Rolled Up Task	▭		
	Milestone	◆	Rolled Up Milestone	◇		

COMPLETION APII MEDAK

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98					
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan					
77	GM to Yesgi & Audathpur	4w	11/19/96	12/16/96	█																			
78	Scheme stabilisation	19w	11/19/96	3/31/97	▨																			
79	Technical audit	2w	4/1/97	4/14/97						█														
80	Rectifications	4w	4/15/97	5/12/97							█													
81	PROJECT COMPLETION	165d	11/19/96	7/7/97	▬																			
82	Prep. draft final report	21w	11/19/96	4/14/97	▨																			
83	Final completion report	4w	6/3/97	6/30/97									█											
84	Submission to RNE	1w	7/1/97	7/7/97																	█			

Project: Completion APII Medak Date: 2/14/97	Task 	Summary 	Rolled Up Progress 	
	Progress 	Rolled Up Task 		
	Milestone 	Rolled Up Milestone 		

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
77	Scheme stabilisation	4w	12/31/96																	
78	Technical audit	2w	1/28/97																	
79	Rectifications	4w	2/11/97																	
80	CPWSS CHERUKURU	25d	1/28/97																	
81	Technical audit	2w	1/28/97																	
82	Rectifications	3w	2/11/97																	
83	INDIV. SCHEMES	145d	11/19/96																	
84	Outstanding works	30d	11/19/96																	
85	Augm. PWSS Daggubadu	6w	11/19/96																	
86	Augm. PWSS Subbareddyp	6w	11/19/96																	
87	Augm. PWSS Inkollu	6w	11/19/96																	
88	Augm. PWSS Ankrpalem	6w	11/19/96																	
89	RW GM to Bodawada	6w	11/19/96																	
90	VDS Budawada	6w	11/19/96																	
91	RW GM to Pavuluru	6w	11/19/96																	
92	Booster strn RNPalem	6w	11/19/96																	
93	VDS Kothapalem	6w	11/19/96																	
94	VDS ZVPalem	6w	11/19/96																	
95	VDS Nakkalapalem	6w	11/19/96																	
96	Scheme stabilisation	19w	11/19/96																	

Project: Completion APII Parchoor Date: 2/17/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
97	Technical audit	6w	4/1/97																	
98	Rectifications	4w	5/13/97																	
99	PROJECT COMPLETION	215d	11/19/96																	
100	Prep. draft final report	36w	11/19/96																	
101	Final completion report	4w	8/12/97																	
102	Submission to RNE	1w	9/9/97																	

Project: Completion APII Parchoor
Date: 2/17/97

Task

Progress

Milestone

Summary

Rolled Up Task

Rolled Up Milestone

Rolled Up Progress

In a meeting between PRED and NAPO in September, the Engineer-in-Chief instructed the AP II staff to submit bi-weekly reports on the progress per scheme, using the NAPO listing of works per scheme.

(see the NAPO workplan August 96 - March 97)

3. OPERATION AND MAINTENANCE

While the need for O&M manuals has certainly not decreased, and PRED reports to be working on these, the present report concentrates on the monitoring of the production and delivery of water, as the systematic recordings thereof will imply where the shortfalls maybe found and where improvements towards better operation can be made.

Section 3.1 provides detailed information and analyses on the production of Raw Water, Clear Water and Clear Water delivered to the villages.

The data are assembled from PRED and the NGOs, while a description of the analyses can be found in a separate note

(Please refer annexure 3)

The water monitoring exercise at this stage is a first effort to assemble and interpret information on operation of schemes systematically.

Though much more elaborate analyses could be made on the raw data, the present level concentrates on the overall water production.

Information has been put in tables as well as represented in graphics and will hopefully raise interesting questions on the variations occurring, which cannot be explained in terms of seasonal shortages.

For example, one would expect to have a reduced intake volume during the dry season, (to be covered from summer storage tanks), while the pumping is expected to increase again after the monsoon.

Mahbubnagar, Kurnool and Karasguthy scheme and Borancha scheme in Medak and MV Palem and Cherukuru schemes in Prakasam all show the volume of water picking up after the dry season, in June and July, while the production levels drop in August and rise in September, (in spite of a very good monsoon).

These variations may all have different causes, which could only be explained by the Engineers in the respective districts.

Compiling and analysing the water production over a longer period will allow, not only insights into the volumes of water delivered, and comparison to the design level, it will also allow an understanding of the seasonal changes, the effectiveness of the summer storage tanks and the reliability of the water supply systems.

NAPO has requested the PRED to review and amend the monitoring system for their internal purposes and to introduce such system throughout the AP II projects. PRED has indicated their interest to do so and consider introduction in non-NAP projects as well.

3.2 Summary of Water Monitoring

Section 3.2. provides the overall estimates of water production per scheme as follows :

Scheme	Clear Water		Clear Water at Village		Remarks
	LPCD	% Capacity	LPCD	% Capacity	
Mahabubnagar Chinnamaroor	30	35.8 %	NA	NA	-
Kurnool Chinnakothiliki	50	60 %	32.6	40 %	-
Manchala	32	69 %	20	43 %	-
Hanawal	14	17 %	NA	NA	-
Medak Ibrahimpur	48	49 %	NA	NA	- C/W > R/W
Karasguty	38	54 %	NA	NA	
Borancha	42	65 %	9.4	15% In MARI villages	
Prakasam AB Palem	11	29 %	NA	NA	C/W > R/W full filling of reservoir questionable
MV Palem	21	41 %	48.5	41 % in ASSIST villages	
Cherukuru	22	43 %	NA		C/W > R/W

A rough and average assessment indicates utilization of the capacity of the Clear water production as 50 % of the capacity, while the delivery of clear water at village level is estimated at 20 to 25 % of the capacity.

As such there is no reason why villages should be receiving less than the design parameter of 50 lpcd, while at this point in time the population is far from having reached the ultimate level.

4. SANITATION

Progress reports regarding the sanitation project "clean village" indicate progress by one latrine during the reporting period, while the expenditure recording amounts to .37 lakhs (ongoing works?).

This pilot project started early 1993, with a target of 3724 latrines in 18 villages (Prakasam - Guntur), to be completed in 12 months. Later the target was reduced by more than half, to 1581 latrines in 15 villages.

After four years of snail pace activity, the project now stands at some 80 % of the reduced target.

By the end of September 1996, 1299 latrines out of a revised target of 1581 were completed, amounting to 82 % completion.

On the advanced funds released to the level of Rs. 84.397 lakhs, cumulative expenditure stands at Rs. 32.51 lakhs (38.5 %), while PRED must be holding a balance of Rs. 51.887 lakhs for this pilot project.

Efforts were made to re-conceptualize the approach to sanitation in the AP II projects during 1996, but after good progress on an alternative approach in the beginning the efforts fizzled out. In view of the level of completion of the AP II RWS projects to date, it may not be wise to revitalize the sanitation issue any more, (with the possible exception of some hygiene promotion drives), as introduction of yet another alternative project would not fit the time frame for completion of AP II.

As described in the previous report, NAPO would like to invite PRED and RNE to review approaches to sanitation.

5. COMMUNITY PARTICIPATION

5.1 NGOs and Community Participation

5.2 Workshops

Two strategic workshops were organised by NAPO for the NGOs. One on **Review and monitoring** and the second on **Communication methods**. The workshops were a follow up of the thematic workshops planned earlier and the need to effectuate the NGO inputs.

A participatory methodology was adopted for these workshops.

The outputs aimed at qualitative assessment of the implementation strategies.

The workshops were well received by the NGOs and the lessons learnt are expected to be applied in the field activities.

5.3 Field Visits

Schedules for field visits basically ensured that each NGO would be visited for 5 days on an average in a month focusing on specific issues, either identified during the earlier visits or based on NGO specific requests.

Field visits to NGOs also included consultations with the GP representatives, village leaders and the field engineers of the PRED.

The field observations made by NAPO were shared with the NGO staff and worked out in specific action plans prepared.

5.4 Monitoring/ Impact Indicators

The need to build accountability was operationalized by identifying indicators. NGO specific indicators were finalised at the NGO level. The indicators were broken down into actions, tasks, and enlisting the person responsible. These indicators were translated into the vernacular and used in the training of the water committees.

5.5 Formats for Reporting

Reporting formats were introduced to bring about uniformity in reporting. At the NGO level due to different levels of reporting often information gets missed out. To keep a track of targets and achievements a quarterly progress monitoring framework was introduced.

5.6 Gender

Gender equity issues are addressed during visits and interactions. Efforts are on to begin with representation of women in the water committees and to shouldering responsibility in the committees. Much effort is needed to achieve results.

5.7 Strategies for Withdrawal and Sustainability

Sustainability is not built into the project document. The need to address sustainability and ability of groups to carry on by themselves after withdrawal of the NGO intervention, has been emphasised at all levels. Efforts are on to ensure that sustainability becomes part of the project implementing strategy. Translating sustainability into terms that are acceptable to the community and manageable by them has been the focus of addressing this issue.

5.8 Extension and Expansion of NGOs

In relation to the need to extend the technical programme for AP II, due to delays in completion, the need to extend community participation has been elaborately discussed with PRED, RNE and NAPO. The need for the community to monitor the actual delivery of water to step up the need to deliver sufficient quantities of water made it imperative to involve NGOs to a fuller level of coverage of the villages in the AP II projects. This has in principle been agreed upon by the PRED and the RNE.

Due to administrative changes within the Netherlands Development Assistance Programme, constraints have developed in the possibility to process such expansion at this point in time.

Hence the proposed expansions will be postponed till it can be incorporated into the PRED proposal for the phasing out of AP II and the phasing in of AP III.

Meanwhile the extension of the NGOs programme is to be covered from the existing balance on the budget or the reappropriation of the NAP budget till March 1997.

5.9 Community Contributions

Community contributions are encouraged to attend to the minor repairs around the water points. The committee/group around each water point takes responsibility for the upkeep of the particular water point. Collections also help in responsibility sharing and ownership. Assessments are made either by the lineman or by the JE.

The NGOs have also mobilised the users to contribute in terms of materials and finances, in cases where PRED has indicated a lack of funds to attend to repairs.

Efforts are on at the NGO level to systematise fund collection.

5.10 Up Keep and Maintenance

In all the NGOs, efforts are actively made to ensure that the community takes responsibility for the upkeep and maintenance of the distribution systems. Responsibility sharing is done at the village level by the different groups (e.g. women's group, youth group). The NGOs have ensured that either of the groups attend to any maintenance problem without delay.

The lineman and the works inspector hold a lot of power in the village and to ensure support and cooperation from them they are made active members of the water committees.

5.11 Health and Hygiene Promotion

Health and hygiene issues are addressed regularly in all the meetings/training and visits. Education and awareness levels being rather low, efforts are on to make it a habit formation.

School health, club formation, and using women and children as health promoters, have been some of the steps adopted. Linkages are built up with the Government PHCs to utilise the services of the multipurpose health workers and the PHC Doctors. The villagers are encouraged to participate in the different Government programmes.

5.12 Interaction with Gram Panchayat and Other Govt. Institutions

In all the villages activities are undertaken to link up the VACs and the GPs. The Sarpanch being a political leader often has an effect on the kind of cooperation extended to the NGOs.

Since the elections, GPs are in a transition period of the old Sarpanches handing over charge and the new Sarpanches taking on charge. The confusion as to who has to take responsibility for the schemes for maintenance is still often debated, while the negotiations regarding handing over of the schemes to Gram Panchayat, between the GPs and the PRED continues unabated.

While the responsibility for O&M in AP II, officially rests with the PRED, as per their agreement with the Netherlands Government, PRED expressed their interest to hand over the responsibility for O&M to the villages.

Earlier the problem was that NAPO and support missions stated that such could only be done on the basis of fully completed and operational schemes, including manual and trained operators, and accompanied by a clear procedure for handing over.

On the basis thereof, trials were to be made with handing over of the scheme.

While still awaiting fulfilment of these requirements, earlier willingness of GPs to take over the responsibility has changed to unwillingness, with the newly elected sarpanches apprehension in taking over assets and liabilities, created by their predecessors.

5.13 Impact of NGO Involvement

The impact of the NGO involvement is evident from the fact that the communities have changed their practises and behaviour.

Some of the evidences are increased consumption of piped water contrary to the earlier belief, covering the stored water and using ladles to draw water.

Revamping of the committees, replacing inactive members, recording meetings and follow up actions, increased responsibility as individuals and as committees are some of the evidences. The formation of APEX bodies for collective action has been a mile stone. Efforts to give a legal status to the APEX body has been the present thrust of the NGOs.

5.14 Progress Per NGO

5.14.1 ASSIST

ASSIST has been working in 11 villages predominantly with the latrine component. ASSIST is into its third year with the RNE. In this half year period the changed approach of ASSIST to mobilise the community support not only in the latrine construction but also in the RWS has paid rich dividends. Increased awareness programmes to enlist community support and thematic training for the staff and the masons have helped increase the momentum of construction. 720 families were mobilised and 526 of them have been provided with a completed latrine.

The VDS members started taking responsibility for the RWS and have been closely monitoring the supply. On a number of occasions the villagers have collected contributions to attend to repairs of their distribution system. However this is yet to take a more pronounced form. ASSIST realises that more work needs to be done in this area and the relationship between the sanitation programme and the RWS established.

ASSIST continues with its village level work related to health and hygiene promotion with special attention given to the pre and post natal care.

5.14.2 SNIRD

SNIRD has been working in 26 villages under the AP I. The NGO is into its third year of mobilising communities under the RWS scheme. SNIRD realised that here is a risk of stagnation in approach if activities become monotonous. A decision was taken to change the approach and make the committees more effective and functional. The first step in this direction was to form the APEX body with representations from all the VACs. The approach adopted was a democratic one and a decision was taken to call the committee as the Chandavaram Reservoir Committee.

SNIRD is now focusing on training the APEX body to take on more additional responsibility. This may be a positive step in the direction of achieving sustainability and community management.

5.14.3 MARI

MARI has been working in 10 villages under the AP II programme. MARI has a one year agreement with RNE. MARI formed the water committees as a first step in all the villages. These committees are being given the required training to facilitate them to take responsibility of the village assets. As the committees were not found to take full responsibility MARI realised the need to revamp these committees. Further the need for an APEX body to take responsibility was felt. The idea was floated and though the process has begun, MARI cannot claim to have a full fledged body as such.

MARI has experienced liquidity problems and this has affected the timely actions and thereby the quality of work. MARI proposes to take a critical look on its functioning and come out with possible lessons for the future.

5.14.4 HERSELF

HERSELF's contract with RNE expired December 1995.

January to March 1996 Herself was extended budget neutral, after which possibilities for extension were submitted by NAPO to RNE.

Pending the approval of extension/ expansion, HERSELF has been maintaining skeleton staff and has been trying to stay in touch with the water committees (VACs). HERSELF also continued to cooperate in filling in the water monitoring formars.

Meanwhile the expected extension got delayed with the processing of the NAPO Workplan proposal at the Directorate General for Development Cooperation in the Netherlands, the approval of which is still awaited to date.

B BASIC INFORMATION

Project name	-	NAP (Netherlands Assisted Project)	
Project Phase	-	NAP - AP II	
Location	-	Medak District Mahbubnagar District Prakasam District Kurnool District	
Project Components:		Implementing Institutions:	
RWS	-	PRED	
Sanitation	-	PRED: project Clean Village (preparation alternate project) NGO (ASSIST), Prakasam	
Lift Irrigation	-	Department for Minor Lift Irrigation, combined with RWS in Mahbubnagar.	
A.P. Dairy	-	APDDCFL, Hyderabad	
External Water Quality Monitoring	-	IPM (Institute of Preventive Medicine), Hyderabad. NGOs with NAPO assistance.	
Health Education/ Hygiene Promotion/ Community Participation	-	NGOs	District
		ASSIST	Prakasam
		HERSELF	Kurnool
		SNIRD	Prakasam (AP I)
		MARI	Medak
Monitoring/ Support Services/ Advisory Services	-	NAPO / ETC	
Technical Support Mission	-	IWACO	
Reporting Period	-	April to September 1996 September to December 1996	

C NAP OFFICE

1. Missions, meetings and visits

April 1996	2	Meeting E-N-C - NAPO
	3	visit Mr. H. Soree, Director ETC India
	6-14	Short Mission IWACO (overview AP III)
	6	Mission briefing with RNE in Delhi
	13-14	Mission debriefing with RNE in Bangalore.
May 1996	1	Meeting ETC/NAPO and RNE in Delhi
	15	Meeting RNE and ETC in Hyderabad
	16	Meeting RNE and NAPO in Hyderabad
	16	Meeting NAPO and E-N-C.
July	1-31	During the month of July three UK students conducted research in Prakasam District
	11	Meeting First Secretary RWS & S, RNE with E-N-C and Principle Secretary PR & RD in Delhi.
	17	Workshop NGO's.
August	5	Interviews candidates for Technical Programme Coordinator.
	12	Interview with selected candidate at ETC Delhi Office.
September	17-24	Support Mission IWACO
	21	Meeting NAPO/Support Mission and E-N-C
	22	Visit to Nalgonda, PRFS villag
	23	Meeting NAPO? Support Mission and E-N-C.
October	2-4	Meeting ETC and NAPO in Delhi
	4	Meeting NAPO RNE in Delhi
	8	Meeting NAPO and E-N-C
	19	Meeting NAPO and E-N-C
	28	PRFS study in Nalgonda
November	1	PRFS study in Nalgonda
	8-28	Support Mission 33 IWACO, B. Blankwaardt & T. Kleinendorst.
	16	Meeting NAPO/Support Mission and E-N-C
	18-20	Workshop with PRED Dy EE from all AP II projects on completion and planning AP II
	22	Debriefing meeting NAPO/Support Mission with E-N-C, PRED and RNE in Hyderabad
	22	Meeting NAPO/Support Mission with Principle Secretary PR & RD and E-N-C.
	25	Follow up research PRFS villages in Nalgonda.

2. NAP OFFICE AND STAFFING

NAP Office staffing saw some changes during this reporting period.

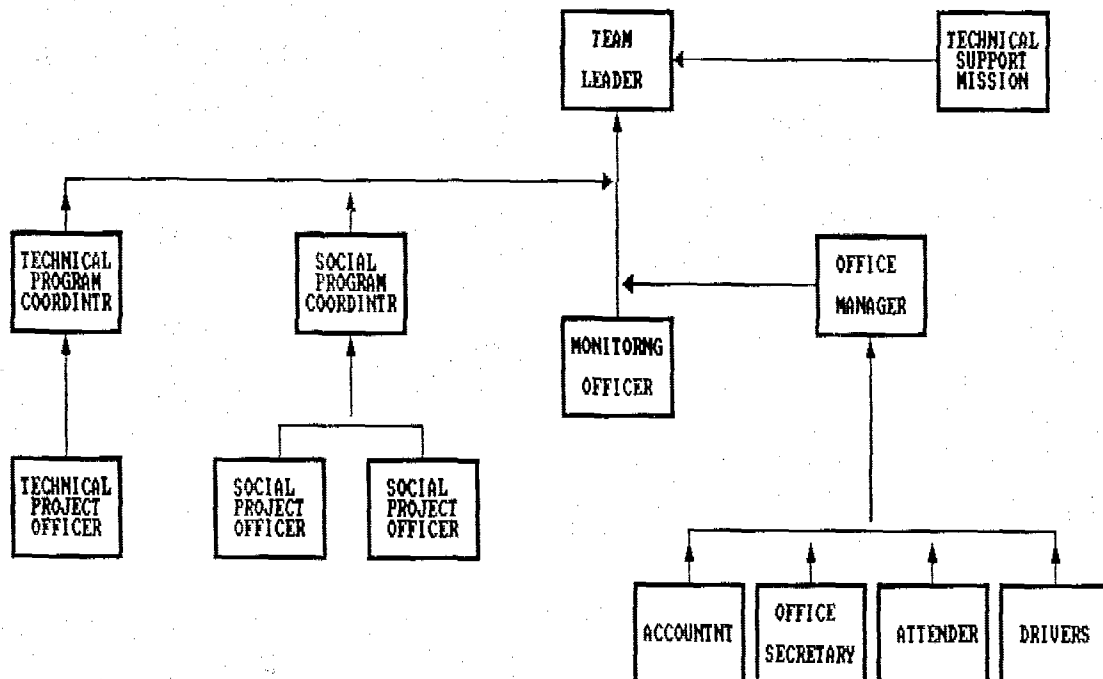
Mr. Govardhan Das joined the office by the first of May as Social Project Officer. After an introduction programme Mr. Das was quick to catch on with the community participation component in the NAP AP II programme.

At the end of June NAP Office bid fair well to Technical Programme Coordinator Avinash Zutshi, who joined the Royal Netherlands Embassy as senior Programme Officer. NAPO enjoyed working with Mr. Zutshi and is grateful for his inputs to our office. We wish him the best of luck in his new position.

NAPO has since been searching for a new Technical Programme Coordinator. Interviews with respondents to advertisements were conducted in August, and resulted in an agreement for one year, (to be adjusted when future prospects are clear), with a candidate from Orissa. The latter was provided some time to arrange his lien from Government and join NAPO by October.

NAPO was recently informed that the candidate reconsidered his earlier interest in view of NAPO/ETC's inability to offer a longer term contract at this point in time.

NAPO is making efforts to find an other candidate and is looking into intermediate solutions (by trying to hire services through a local engineering bureau).



The present NAPO staff and positions are as follows:

(TL)	Team Leader	Mr. Frank Hanrath
(SPC)	Social Programme Coordinator	Ms. A. Sharat
(TPO)	Technical Project Officer	Mr. S. Kumar
(SPO)	Social Project Officer	Mr. P. R. Kumar
(SPO)	Social Project Officer	Mr. G. Das
(MO)	Monitoring Officer	Ms. M. Nayani
(OM)	Office Manager	Ms. J. Gay
(ACC)	Accountant	Mr. S. Gupta
(OS)	Office Secretary/receptionist	Ms. T. Vinod
	Office Attender	Mr. Shankar
	Drivers	Mr. Ismail Mr. Srinivas Mr. Bakkaiah
(TSM)	Technical Support Mission	Mr. J. Spit (IWACO) Mr. B. Blankwaardt (IWACO)

As the NAPO / ETC contract with RNE was to expire by July 1996, NAPO / ETC drafted and submitted a proposal for the period August 1996 - March 1997.

The process of creating clarity on the time frame of completion of AP II, as well as on the scope and time frame for AP III and the ongoing reorganization of tasks between DGIS and the RNE, have complicated the processing of the proposal for NAPO's workplan, the approval of which is still awaited to date.

Prior to approval of the workplan and budget, NAPO has been unable to implement a number of activities scheduled in the workplan.

The plans for expansion of the community participation component were postponed, till these can be integrated in the next PRED proposal, covering the phase out of AP II as well as the phase in of AP III.

A number of the preparations for assistance towards AP III, such as hiring additional staff for the social and technical components in NAPO, the set up of a local field office in Nalgonda and preparations for an expert hydro geologist are postponed, pending the approval of the workplan and the Budget thereof.

The utilization of the "immediate relief Fund" / Rehabilitation of existing infrastructure for village water supply, Nalgonda has likewise been pending.

These activities will of course be taken up as soon as the workplan and budget are approved.

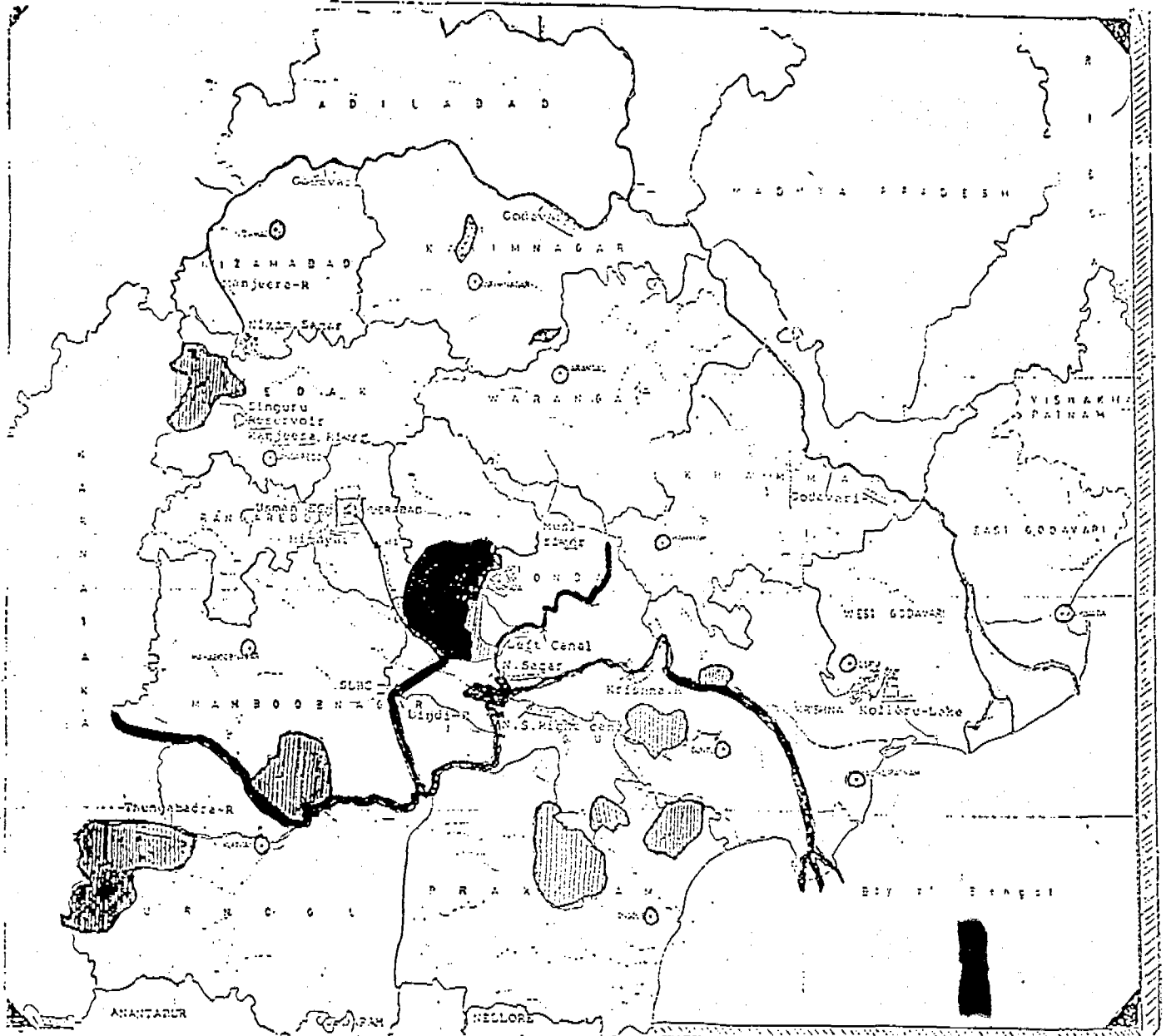
In good coordination with the RNE, NAPO has been able to push through with the Support Missions on schedule and hence has not incurred delays with assistance to PRED on the preparation of PRED's proposal for the phase out AP II/ Phase in AP III.

In consultations between RNE and NAPO it was decided to cover the on going activities for two NGO's through re-appropriations in the NAP Office budget.

D NAPO MONITORING AND SUPPORT SERVICES

1. RURAL WATER SUPPLY

Map 1 : Andhra Pradesh



PART MAP OF
 ANDHRA PRADESH SHOWING
 EXISTING SCHEMES OF
 AP-I, AP-II, PERENNIAL
 RIVERS, S.L.B.C., FUTURE
 HYDERABAD LINE DISTRICT
 BOUNDARY AND STATE
 BOUNDARY

Legend	
State boundary	—
District boundary	- - -
Major rivers	—
Minor rivers	—
State headquarters	⊙
District headquarters	⊙
Project areas	AP I
	AP II
	AP III
S.L.B.C.	—
Hydrated Pipeline	—

1.1 INVENTORY INFORMATION AP II

PRED submitted inventories in two rounds; first in January, 1996 and second in July, 1996.

During the first round; Inventories of Medak, Prakasam and Mahbubnagar were submitted, NAPO gave it's feedback to PRED and PRED filled in the gaps and upgraded the data.

Status : The information is submitted for the following three projects;

- i. Medak (Second attempt)
- ii. Mahbubnagar (Second attempt)
- iii. Kurnool (first attempt)

No information has been submitted for Prakasam District until the reporting time.

Observations project wise

Medak :

The following two deficiencies are noticed in the information:

1. GLSR/OHSR information is not given village wise.

That makes the information rather general and unfit for specific insights and monitoring. For example the information simply states that a total of 28 GLSRs have been constructed in problem villages of CPWSS Ibrahimpur with capacities varying from 5 cu.m to 40 cu.m. No further details as to what capacity tanks in which village were constructed, is provided.

The inventory format agreed upon, clearly requested this information village wise. It is obviously required to have the information available OHSR/GLSR wise and village wise so that village level calculations of storage capacity and delivered water can be made and monitoring will be possible.

2. For the itemized scheme components the inventory format distinguishes the data in "designed-executed and the level of functioning" specifics.

The information provided in all three columns appears to be the same.

This implies that there is no deviation or discrepancy between design and executed and that all components are functioning to 100% of the level designed.

This runs contrary to the facts as they are observed in the field.

- * there are some villages yet to be covered with water supply,(total 254 covered out of 283 as on Sept, 96)
- * there are works in progress (testing of pipe lines in Mahbubnagar and Medak)
- * there are many modifications and (e.g. Chinnakothiliki, Halvi)
- * NAPO has observed ample deletions in the project (Prakasam , Medak).

Examples from the data provided :

1 : Raw water pumping capacity : CPWSS Ibrahimpur

Design	:	275.28 cu.m/hr
Executed	:	275.28 cu.m/hr
Functioning	:	275.28 cu.m/hr

2 : Transmission main : Borancha CPWSS

S.No	Size	Length	Material
1	350 mm	2420 mts	RCC P3
2	300 mm	2200 mts	RCC P3

Design and executed also same figures.

3: Transmission Main : Karasguthy CPWSS

	Size	Length	Material
Designed :	300 mm	700 mts	AC CI 15
Executed :	300 mm	700 mts	AC CI 15
Functioning :	300 mm	700 mts	AC CI 15

To present the information on the particulars of design, execution and the level of functioning as if they were all the same implies the information is incorrect and less useful for the purposes the inventory was set up for.

Mahbubnagar :

i. There are some gaps in the village wise information such as:

- * village code
- * village area

ii. There are gaps regarding details such as

- * project planning date
- * construction dates and
- * commissioning date

Example : Transmission main length

Design	: 103 km
Executed	: 103 km
Functioning	: 103 km

AS it is known that at the time of submitting the inventories that not all villages were covered, it is impossible to assume that designed, executed and functioning data can be the same.

iv. Following details are missing

- * r/w pump discharge
- * C/w pump discharge
- * SST size
- * Stages of pumping

v. Village wise information is not given for the following items

- * GLSRs
- * OHSRs
- * Distribution system material, diameter and length
- * PSP

vi. Maintenance staff details are also not given.

Kurnool :

Halvi CPWSS

i. design, executed and functioning details are same.

Example : Raw water main

Designed Length : 4800 mts dia : 300 mm
Executed Length : 4800 mts dia : 300 mm
Functioning Length : 4800 mts dia : 300 mm

ii. following details are not given

- * r/w pump capacity
- * c/w pump capacity
- * transmission line

iii. village wise details are not given for

- * GLSRs/ OHSRs
- * Distribution lines material, diameter and length
- * PSPs
- * Maintenance cost and staff details are also not given may be because scheme is not yet commissioned.

Hanawal CPWSS

i. In the "Hanawal sector" there are two IPWSS Rowdur and Upperhal and there are no data at all regarding these two IPWSS. It is required to furnish the status and details of these items that have been proposed and taken up in these two IPWSS.

ii. Design, executed and functioning details are same.

Example : Filtration rate

Designed : 100 lts/ sq.m / hour
Executed : 100 lts/ sq.m / hour
Functioning : 100 lts/ sq.m / hour

iii. Village wise details are not given for

- * GLSRs
- * OHSRs and

* PSPs

iv. maintenance cost and staff details are also not given, may be because scheme is not yet commissioned.

Sathnur CPWSS

i. Design, executed and functioning details are same.

Example 1 : Raw water main

Designed	Dia : 300 mm	Length : 290 mt	Class : AC CL 15
Executed	Dia : 300 mm	Length : 290 mt	Class : AC CL 15
Functioning	Dia : 300 mm	Length : 290 mt	Class : AC CL 15

Example 2 : Raw water pump

Designed	HP : 35	Discharge : 247.08 cum/hr
Executed	HP : 35	Discharge : 247.08 cum/hr
Functioning	HP : 35	Discharge : 247.08 cum/hr

Example 3 : Clear water pump

Designed	HP : 15	Discharge : 222.37 cum/hr
Executed	HP : 15	Discharge : 222.37 cum/hr
Functioning	HP : 15	Discharge : 222.37 cum/hr

ii. Village wise details are not given for

- * GLSRs
- * OHSRs
- * distribution lines and
- * PSPs

In fact Sathnur GLSR details are mixed up with the details of Halvi.

iii Maintenance cost and staff details are also not given may be because scheme is not yet commissioned.

Manchala CPWSS

i. Design, executed and functioning details are same.

Example 1 : Raw water main

Designed	Dia : 200 mm	Length : 270 mt	Class : AC CL 10
Executed	Dia : 200 mm	Length : 270 mt	Class : AC CL 10
Functioning	Dia : 200 mm	Length : 270 mt	Class : AC CL 10

Example 2 : Clear Water Transmission mains

Design details :

S.No	Size	Length	Material
1	80 mm	9870 mts	AC CI 15
2	100 mm	6200 mts	AC CI 10
3	125 mm	3558 mts	AC CI 15
4	150 mm	8551 mts	AC CI 15

According to the inventory executed and functioning figures are also same.

ii. Clear water pump capacity details are not given

iii. Village wise details are not given for

- * GLSRs
- * OHSRs
- * distribution lines and
- * PSPs.

iv. Maintenance cost and staff details are also not given even though the scheme is already commissioned.

Chinnakothiliki CPWSS

i. Design, executed and functioning details are same.

Example 1 : R/w motor capacity

Designed	:	900 lpm
Functioning	:	900 lpm
Executed	:	900 lpm

Example 2 : Clear Water Transmission mains

Design details :

S.No	Size	Length	Material
1	80 mm	4380 mts	AC CI 10
2	100 mm	1950 mts	AC CI 10
3	125 mm	630 mts	AC CI 15
4	150 mm	5600 mts	AC CI 15
5	125 mm	14000 mts	AC CI 10

According to the inventory executed and functioning figures are also same.

- ii. Village wise details are not given for
 - * GLSRs
 - * OHSRs
 - * distribution lines and
 - * PSPs.
- iii. Maintenance cost and staff details are also not given even though scheme is already commissioned.

Prakasam :

For the Prakasam project, information was not submitted until the reporting time. Hence review of data could not take place during this period.

However, these provisions are considered investments made under the AP II projects, that have to be described in detail and have to be accounted for.

Conclusions : (For all the schemes)

- * Village wise information is needed regarding GLSR/OHSR and distribution system
- * the variations regarding the design, executed and functioning information, should be reflected in the inventories.
- * Where ever there are gaps in the information Example, Halvi CPWSS, Chinnamaroor CPWSS etc should be filled in.

NAPO had elaborately discussed these comments with the field engineers of PRED and it was agreed that NAPO has provided ample assistance in explaining the usefulness and setting up of the system towards documentation.

It is now considered up to the PRED to make use of the system and to submit the worked out details of the inventories per District.

1.2 As laid/built maps AP II

It was agreed that PRED will provide as laid maps in manageable but complete functional form for the purpose of monitoring and reviewing. In NAPO QPR January - March, 1995 the description of as laid maps is given as

- 1 **Scheme layout :** An overview map showing trunk, transmission mains, headworks and service structures etc. along with longitudinal sections of rising main and transmission main and hydraulic data of water intake structures.
- 2 **Service zone :** As laid outline map for each hydraulic service zone showing transmission lines, main distribution lines and service structures including production units with key nodal and control valve locations.

- 3 **Distribution maps** : Should depict total area covered by distribution system along with zone of influence of each service reservoir in each village and locating all PSP locations, control valves etc.

Further it was discussed that these maps along with tabulated details of pipe systems, its class, length etc. leads to a permanent project record in most practical form which shall be helpful for long term operational and maintenance as wells as monitoring.

Between Dec 95 and February 96 as built maps were submitted and NAPO had given it's comments. (pls. refer NAPO Half Yearly Report Oct 95-Mar, 1996).

By Oct, 1996 PRED has submitted refined as built drawings and this time elaborate & good attempt was made in preparing these drawings, how ever there is scope for further improvement as given below

Kurnool :

- * Village drawings with position of OHSR/GLSR
- * Valves location on Transmission Lines, Village Distribution Systems
- * Flow direction
- * L-sections

Mahbubnagar :

- * Total scheme layout
- * Village wise drawings of GLSR/OHSR
- * L- sections

Prakasam :

- * Augmentation details
- * Village wise drawings of GLSR/OHSR

Medak :

- * Village wise drawings of GLSR/OHSR
- * L- sections

Summary and Conclusions :

The data on inventory of the designed, executed and level of functioning of the components of the AP II projects certainly took a long time coming.

Lengthy deliberations with management and District/field-staff taking most of 1995, finally resulted in agreed formats, which were disseminated to the Districts.

By the end of 1996, NAPO received data on most of the Districts.

The quality of the data leaves much to be desired, making them insufficient to be used for the type of internal and external monitoring and the expected utility in Operations and Maintenance.

With PRED's District/field staff little interested or unable to appreciate the need for documentation of design, execution and level of functioning and the need to build up a data base with retrievable information, that will be used for accountability as well as operation and maintenance and internal and external monitoring of the projects and their delivery of produced drinking water, it may be difficult to expect serious efforts towards improvement in the performance of the schemes.

It seems doubtful if the expected data base and the needed activities on monitoring of the output of the schemes will become available within the PRED before the completion of the projects, unless the management makes a dramatic effort to force this upon the districts and makes it a routine monthly exercise.

All of the above seems to indicate an engineering culture or methodology based on rough estimates and improvised execution, without much attention for documentation or systematic recording of specifics for the stages of design execution and operation.

It must be added though, that the projects taken up under NAP, actually constitute the first efforts to make improvements to this improvised methodology and should to some extent be expected to be painstaking.

The problems described above are clearly related to the rationale to place much more emphasis on planning and documentation and internal monitoring in the next project phase for AP III.

2. COMPLETION AP II PROJECTS

The completion procedure which has been discussed with PRED and RNE consists of the following elements:

- physical completion and Completion dates;

During a workshop with PRED field staff from all AP II districts, NAPO and the Support Mission AP 33, the completion levels of all schemes were inventoried, while the works yet to be completed were reviewed in terms of volume and time needed to complete these.

These activities and were then listed in MS project and agreed upon with the PRED management. (for details pls refer to sections below)

- PRED internal completion reports ;

PRED's internal procedures includes itemized completion reports, per works. Wherever the information has been made available to NAPO such information is listed in the sections below, as number of completion reports on works per scheme.

Target dates for total completion per scheme have been included in the sections below and are presented in the MS Project presentation of the time frames.

o Possible completion assessment by local consultant;

When a scheme is internally declared completed RNE/NAPO have offered the possibility to PRED Management to have an assessment made by a local consultant.

PRED is of the opinion that such may not be necessary, but the offer is kept open.

o PRED Technical Audit / functioning of the schemes;

While the term completion within PRED jargon implies physical completion only, elaborate discussions have taken place to have the level of functioning of the schemes included in the completion exercise.

NAPO and the support Mission were informed that the PRED will address the issue of the level of functioning under the title "Technical Audit".

Preceding the technical audit measures to facilitate and improve the level of functioning have been planned, such as finalizing and application of O&M manuals and budgets and training for the operators, as well as introduction of monitoring of the level of operation with the NAPO developed model as a guideline.

The introduction of monitoring is intended to assess and improve the level of operation.

o Completion report per scheme per District

PRED was provided a copy of a completion format by RNE/NAPO and has been invited to fine tune the format for its application in the AP II projects.

For all schemes, District-wise such completion reports are to be submitted to the Rajiv Gandhi Water commission, who will forward copies to RNE.

o Bilateral Mission ;

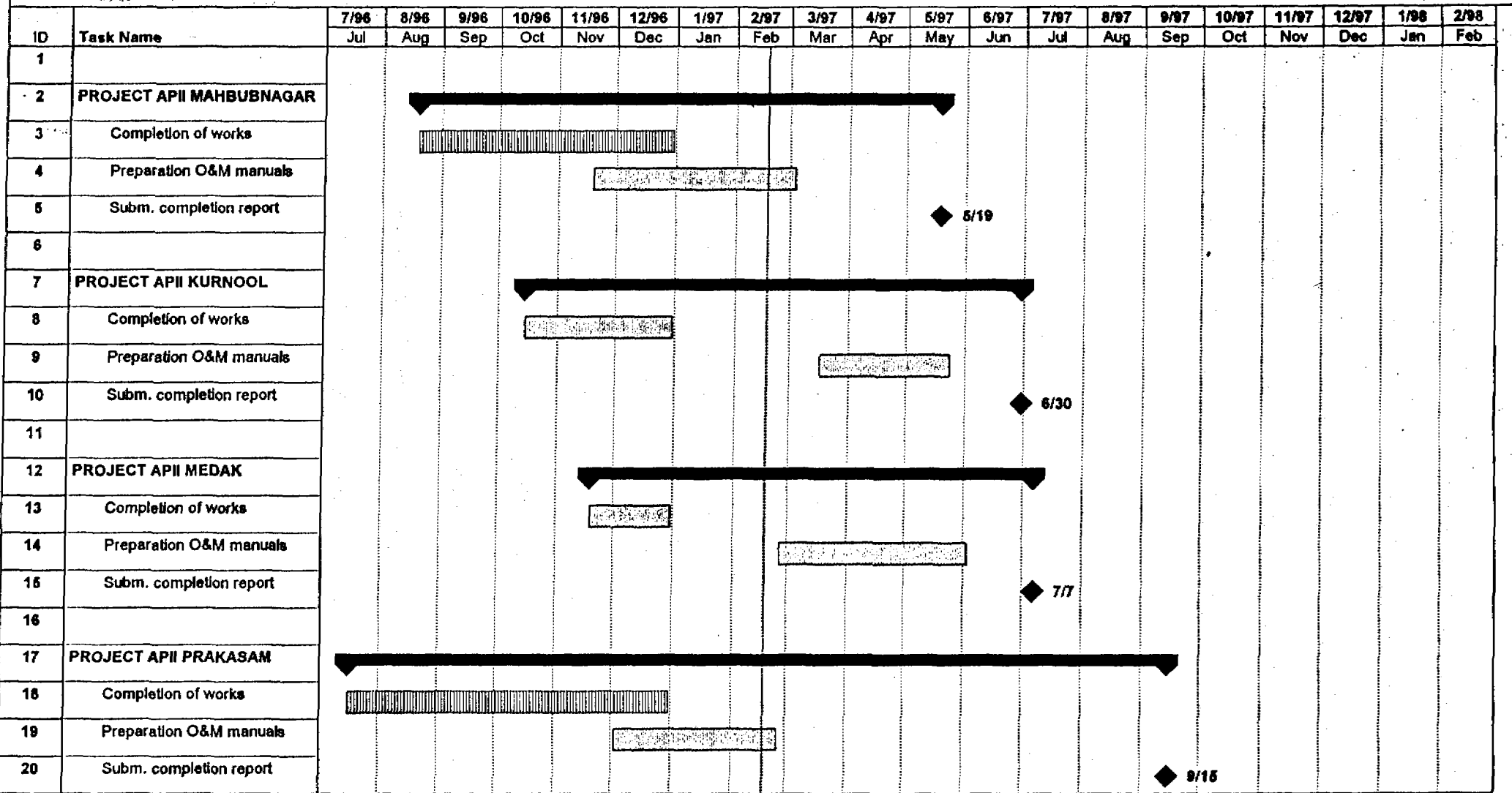
RNE has informed PRED and NAPO that after receipt of these completion reports a review / audit will be conducted by a Bilateral Mission.

o When all required information is available and assessed, financial completion and administrative completion can be conducted.

On financial expenditures, the Engineer-in-Chief PRED informed PRED AP II staff, NAP Office and the Support Mission, that as of 31 December no further expenditures shall be booked on the NAP II projects.

Works not finished by that time will of course be completed, but attributed to PRED' regular budgets.

SCHEDULE OF COMPLETION APII PROJECTS



Project: Date: 2/17/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

2.1 OVERALL COMPLETION STATUS AP-II (ending September 1996)

1. Basic data on AP II

2. AP II Schemes at a glance

The project AP II has achieved 97.6% financial progress i.e. an expenditure of Rs.3992.61 lakhs is incurred out of a Final Revised Estimate of Rs.4089 lakhs.

254 (90%) villages are covered with water supply out of total 283 villages in project area.

960 (94.5%) works out of total 1016 physical works are completed in the entire AP II project.

All the 12 CPWSS of AP II are in operation, during this period 2 IPWSS schemes of Kurnool (Halvi & Sathnur) are made operational.

Prakasam district has achieved 95% expenditure with 96% villages covered and 93% of the works are completed. All the balance works are pertaining to mop up activities.

Kurnool district has achieved 99.6% financial progress with 73% of villages covered (least percentage of all districts) with 95% of project works being completed.

Medak district has achieved 101% of financial expenditure with 95% of villages covered and 98% physical works completed.

Mahbubnagar district has achieved 94% financial progress with 89% of villages covered and 90% physical works being completed.

Lift Irrigation scheme has achieved 84.4% financial expenditure with 90% of irrigation potential created (while presently 3000 out of 10,000 acres are being irrigated) and 86% of the major works completed.

BASIC DATA ON AP II SCHEMES

Project/District	Target Villages	Villages presently with water supply		Cost in lakhs				Population	Source
		No.	%	Original Estimate	Revised Estimate	Re-revised Estimate	Final rvsd Estimate		
PRAKASAM									
CPWSS to AB Palem	20								N S Canal
CPWSS to MV Palem	9								N S Canal
CPWSS to Cherukuru	4								Komenur Canal
34 Individual Schemes	* (37+3) 40								N S Canal/K Canal
Total Prakasam	73	70	95.89	735.60	900.00	990.00	1061.20	246000	
KURNOOL									
CPWSS Halvi	26								Tungabhadra River
CPWSS Hanaval(+2 IPWSS)	8								Tunga Bhadra Low Level Canal
CPWSS Sathnur	16								Tungabhadra River
CPWSS Mancherla	7								Tungabhadra River
CPWSS Chinnakothiliki	7								Tungabhadra River
Total Kurnool	64	47	73.44	741.40	950.00	1040.00	1109.80	173363	
MEDAK									
CPWSS Ibrahimpur	46								Manjeera River
CPWSS Borancha	** (32+3) 35								Manjeera River
CPWSS Karasgutti	29								Manjeera River
Total Medak	110	105	95.45	640	840.00	1088	? 1088	176814	(114774+62040)
MAHBUBNAGAR									
CPWSS Chinnamaroor	36	32		432.60	698.00	780.00	830		Krishna River/Sri Sailam R/v
Lift Irrigation Scheme	10,000 acres			340.00	850.00	1150.00	1192.32		Krishna River/Sri Sailam R/v
Total Mahbubnagar	36	32	88.89	772.60	1548.00	1930.00	2022.32	106435	
	+ 10,000 acrs	-	-						
Grand Total: 12 CPWSS + 36 PWS	283	254	89.75	2889.60	4238.00	5048.00	5281.32	702612	
	+ 10,000 acres	-	-				1.83 times the original estimate	+ 10,000 acres irrigation facilities	

Note: Final Revised Estimate Costs as indicated by PRED in June 1995 agreed by PRED, informed by RNE to PRED

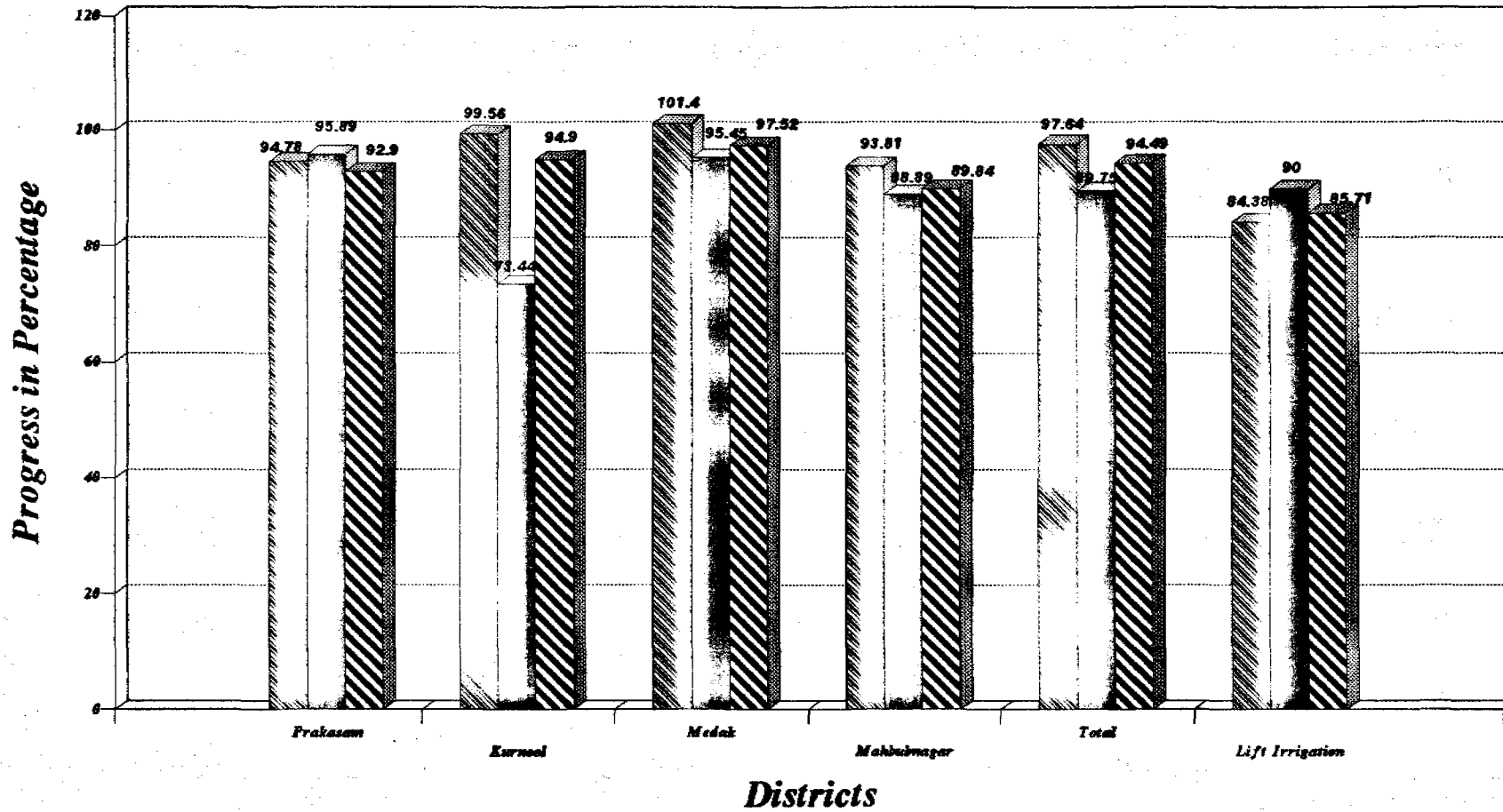
? Final Revised Estimate cost for Medak is not conveyed
Information is as per the re-imbusement claims of March 96 and latest progress reports

* 3 Villages are added as per FRE in Parchur

** 3 Additional Enroute Villages are added in Medak

AP II SCHEMES AT A GLANCE

Financial & Physical Progress (Sept 96)



Expenditure

Coverage

works completed

AP II Financial & Physical Progress and Works covered

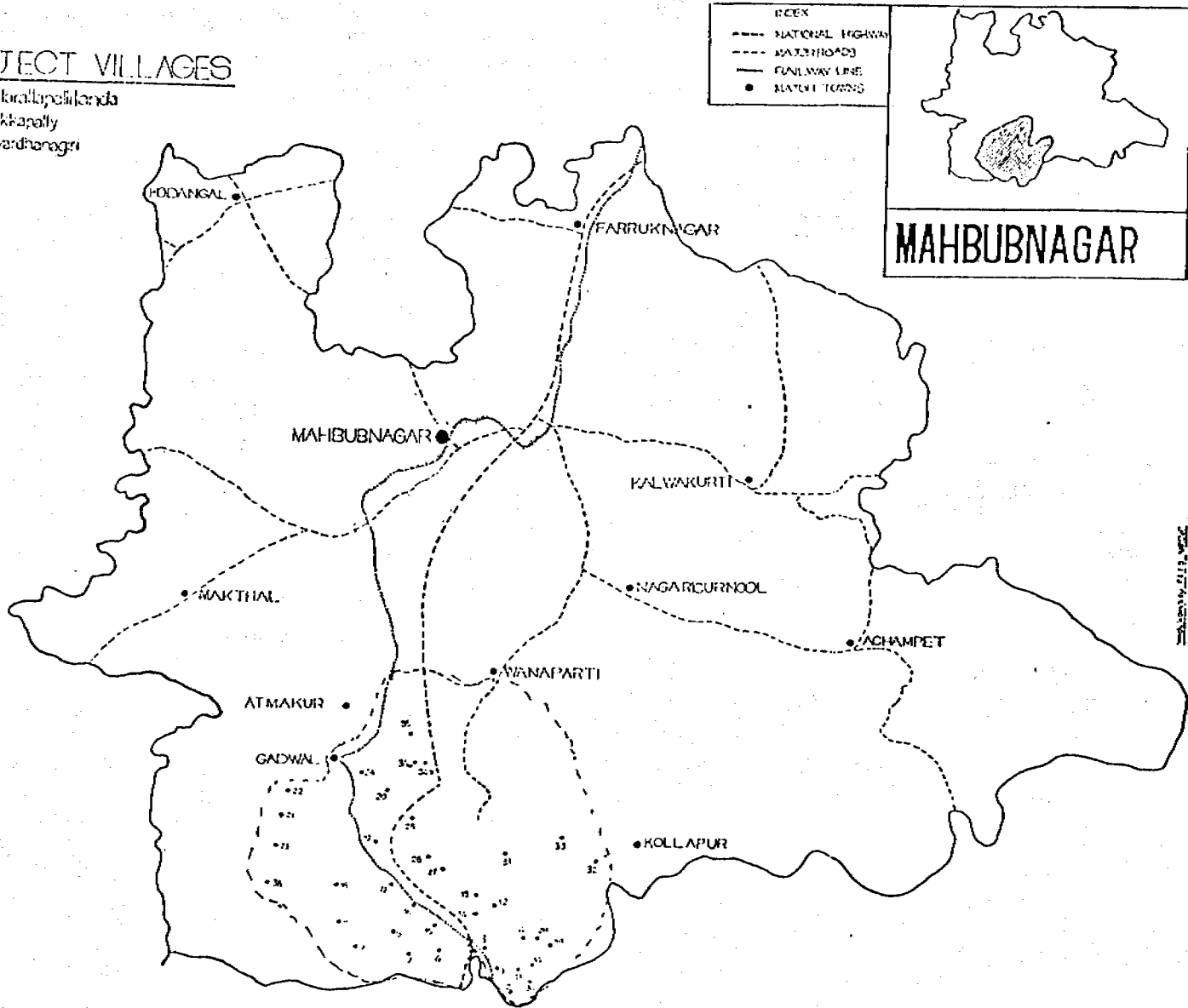
(Amount in Rs. lakhs)

District	FRE	Expendtr	Expendtr %	Balance Amount	Villages		Coverage %	Balance Number	Works		Completed %	Balance Works
					Total no.	Covered			Total	Complete		
Prakasam (Parchur)	1061.20	1005.77	94.78%	55.43	73	70	95.89%	3	310	288	92.90%	22
Kurnool (Yemmiganur)	1109.80	1104.87	99.56%	4.93	64	47	73.44%	17	255	242	94.90%	13
Medak	1088.00	1103.28	101.40%	-15.28	110	105	95.45%	5	323	315	97.52%	8
Mahbubnagar (Kollapur)	830.00	778.66	93.81%	51.34	36	32	88.89%	4	128	115	89.84%	13
Total	4089	3992.58	97.64%	96.42	283	254	89.75%	29	1016	960	94.49%	56
Mahbubnagar (LIS-Nagarkurnool)	1192.32	1006.11	84.38%	186.21	10000 acre	9000 acre	90.00%	1000 acre	14	12	85.71%	2

2.2 COMPLETION STATUS PER DISTRICT

2.2.1 MAHABUBNAGAR DISTRICT

Map 2 : Mahabubnagar








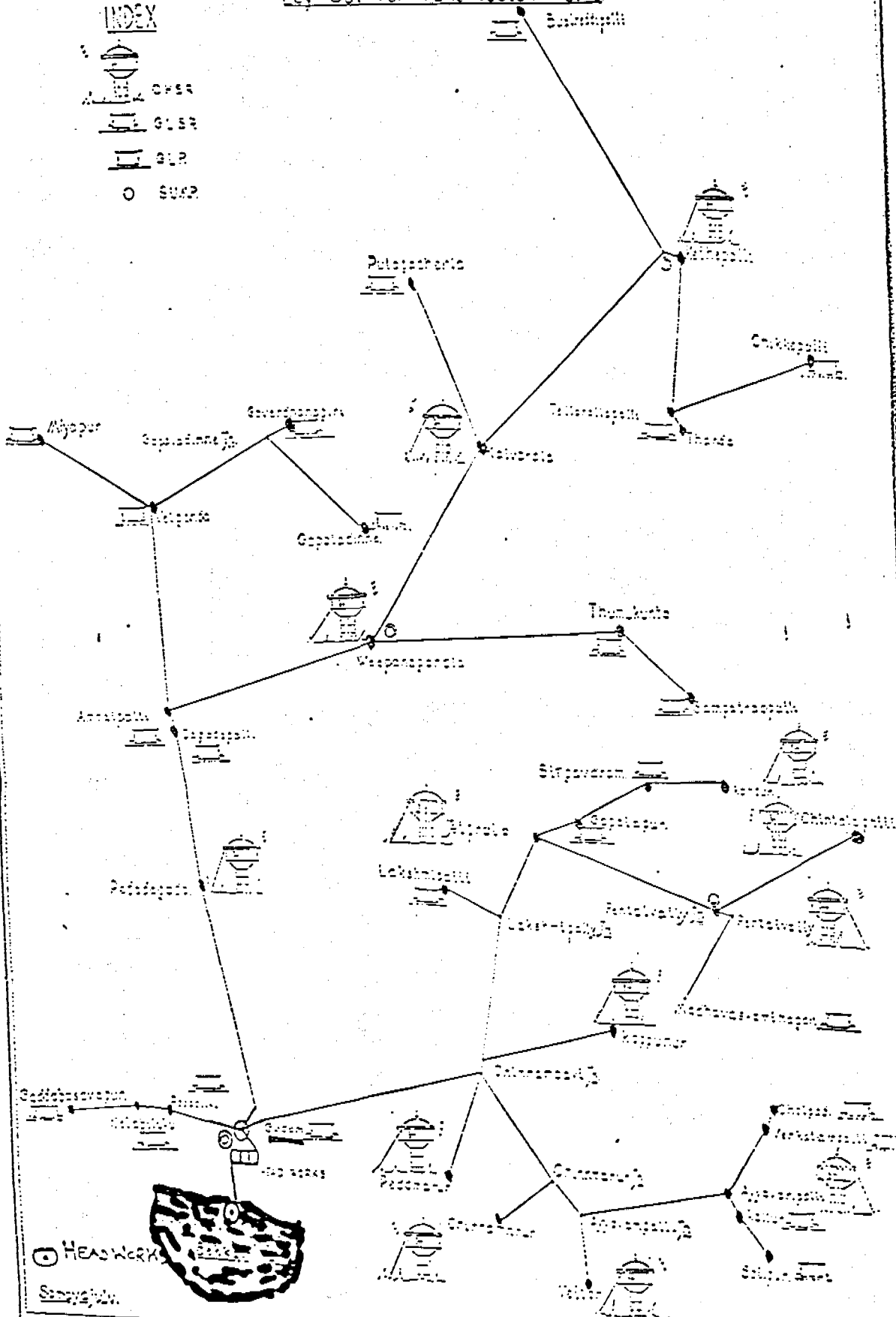
NAP AP-II PROJECT VILLAGES

- | | |
|---------------------|--------------------|
| 1. Chinnamoor | 31. Telkhalapalli |
| 2. Elkor | 32. Chikkapally |
| 3. Peddamoor | 33. Govardhanagiri |
| 4. Kopunoor | |
| 5. Netabilku | |
| 6. Gudam | |
| 7. Pochabilku | |
| 8. Miryapur | |
| 9. Gaddabaswapur | |
| 10. Ayyavarpalli | |
| 11. Kaloor | |
| 12. Jalprok | |
| 13. Gopalpoor | |
| 14. Akshampalli | |
| 15. Peddabagada | |
| 16. Dogachapalli | |
| 17. Ammaipalli | |
| 18. Velgonda | |
| 19. Weepangandla | |
| 20. Kalyarala | |
| 21. Pulgarcherla | |
| 22. Busireddyapalem | |
| 23. Gopidinne | |
| 24. Kothapalli | |
| 25. Thoemkunta | |
| 26. Sampathrapalli | |
| 27. Singavaram | |
| 28. Venkalampalli | |
| 29. Chellapad | |
| 30. Solipur | |
| 31. Kondur | |
| 32. Pentlavalli | |
| 33. Chintalapalli | |
| 34. Telkhalapalli | |

NAP: KOLLAPUR Lay Out for Transmission Lines

INDEX

-  TRANS
-  O.H.S.R.
-  GL.S.R.
-  S.L.R.
-  SUBS.



MAHBUBNAGAR PROJECT

Introduction

Mahbubnagar project consists of 1 CPWSS located at Chinnamaroor with 36 villages under its scope. The number of villages reached are 32 (89%)

As per the latest QPR and completion reports all works seem to be completed but for the pumping main (4 villages) and village distributions in some segments.

Status, the physical works:

Total	:	128
Complete	:	115
Incomplete	:	13
% of completion	:	90
% of incomplection	:	10
No. of completion reports approved	:	71

The pending works are:

I Pumping mains

1. K. Pally - B. Pally
2. K. Pally - T. Pally
3. T. Pally - C. Pally
4. T. Pally - TP thanda

II Village Distribution System in

5. Chinnamaroor
6. Veltoor
7. Koppunur
8. Jetprole
9. Kondur
10. Peddamaroor
11. Velgonda
12. Weepanagondla
13. K. Pally

The Physical Progress:

Status of Major Components (till end of 9/96)

Table : 1

District : Mahbubnagar

Items	Total orks	Complete till 1/96	Complete till 9/96	Progress 2/96 - 9/96	Balance 9/96
Filters	1	1	1	-	0
S.S.Tanks	-	-	-	-	-
S. Tanks	-	-	-	-	-
R/W Wells	1	1	1	-	0
C/W Sumps	5	3	5	2	0
Pump Houses	5	4	5	1	0
Pumping Units	2	2	2	-	0
OHSR	13	13	13	-	0
BR	-	-	-	-	-
GLSR	40	40	40	-	0
Cisterns	-	-	-	-	-
Buildings	10	5	8 + 2*	3	0
R/W tr lines(km)	0.8	*	*	-	*
C/W tr lines(km)	131.9	*	*	-	*
Dist.line village (km)	26.56	*	*	-	*

Note :

Analysis is based QPR end 6/96, 9/96 and fortnightly progress reports.

* Not Available

2 Buildings have been transferred to GP.

The Physical Progress during the reporting period:

- 2 C/W Sumps have been completed
- 1 pump house has been completed
- 3 buildings have been completed
- 2 buildings have been transferred to GP for construction

As per QPR/PR all the other major works such as filters, pump houses, R/W wells and Sumps are completed.

The Financial Progress:

Estimated cost (FRE)	:	Rs.830.00 lakhs
Expenditure	:	Rs.778.66 lakhs
Balance	:	Rs.51.34 lakhs
% Expenditure	:	94%
% Balance	:	6%

In Mahbubnagar district the financial expenditure is 94%, number of works completed is 90%, and number of villages covered is 89%.

ABSTRACT STATEMENT ON BUDGET & EXPENDITURE OF RWS KOLLAPUR (MAHBUBNAGAR PROJECT)

Total Number of Villages : 36

Amount in Rs.(lakhs)

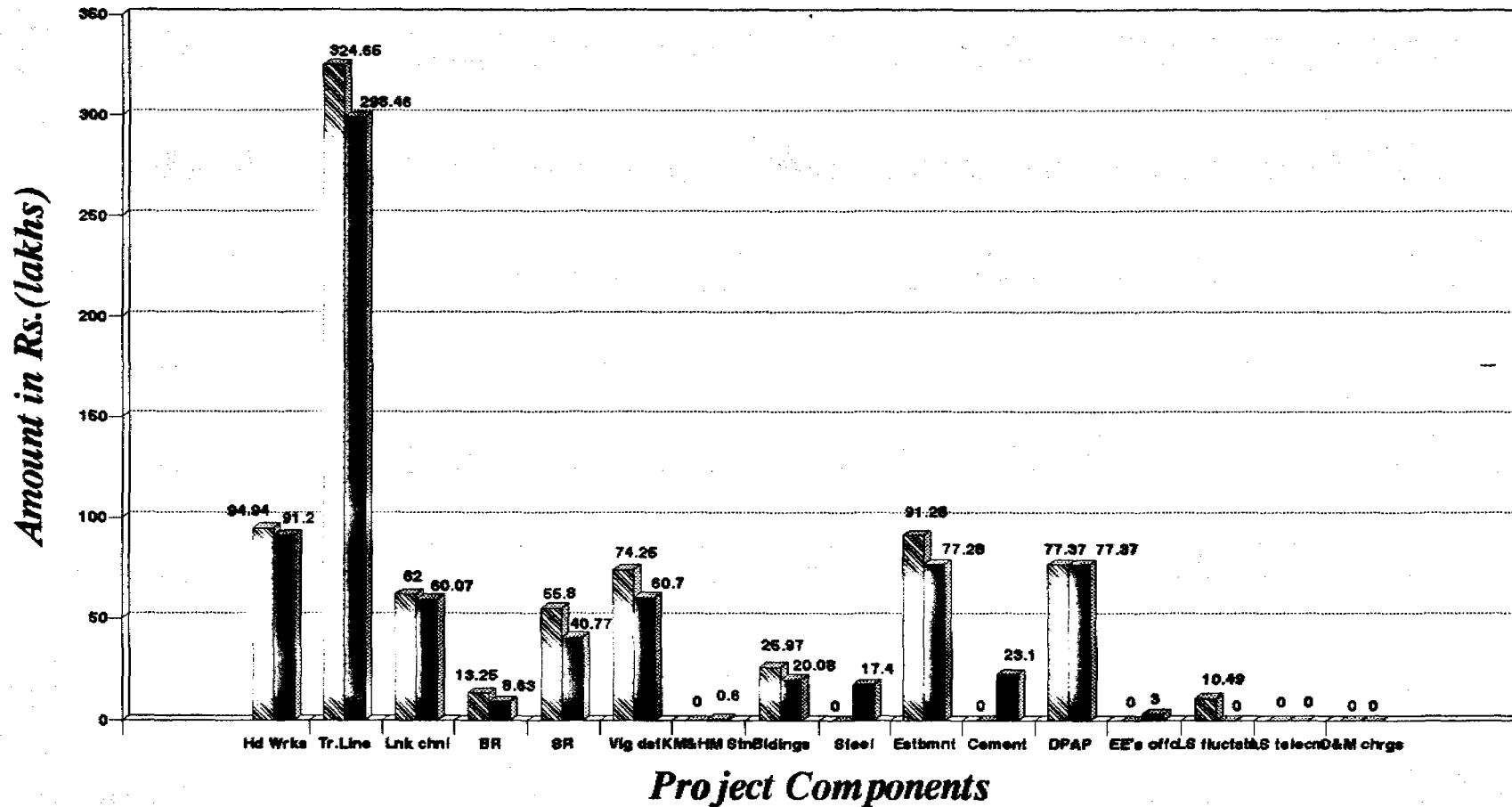
Sl. No.	Particulars	FRE	Expenditr(Rs.) end of 12/95	Expenditr(Rs.) end of 1/96	Expenditr(Rs.) end of 6/96	Expenditr(Rs.) end of 9/96	Balance till end of 9/96
1	Head Works	94.94	*	84.47	89.76	91.20	3.74
2	Transmission Line C.I. Specials	324.65	*	295.17	297.52	298.46	26.19
3	Link Channel	62.00	*	59.00	60.07	60.07	1.93
4	Balancing Reservoir	13.25	*	7.41	8.07	8.63	4.62
5	Service Reservoir	55.80	*	38.84	40.37	40.77	15.03
6	Village Distribution	74.25	*	49.27	55.68	60.70	13.55
7	K.M. & H.M. Stones	0	*	0.60	20.09	0.60	-0.60
8	Buildings	25.97	*	20.09	0.60	20.08	5.89
9	Steel	0.00	*	17.40	17.40	17.40	-17.40
10	Establishment	91.28	*	77.28	77.28	77.28	14.00
11	Cement	0.00	*	21.78	22.31	23.10	-23.10
12	DPAP	77.37	*	77.37	77.37	77.37	0.00
13	E.E.'s Office Buldin	0.00	*	3.00	3.00	3.00	-3.00
14	L. S. Fluctuation	10.49	*	0.00	0.00	0.00	10.49
15	L.S. Telecom	0.00	*	0.00	0.00	0.00	0.00
16	Eatablishment chrg on O&M from 3/94	0.00	*	0.00	21.17	0.00	0.00
TOTAL		830.00	*	751.68	790.69	778.66	51.34

(95.44-44.1)

Note : * QPR till end of 12/95 not submitted

Budget & Expenditure Abstract Statement

RWS Kollapur (September 96)

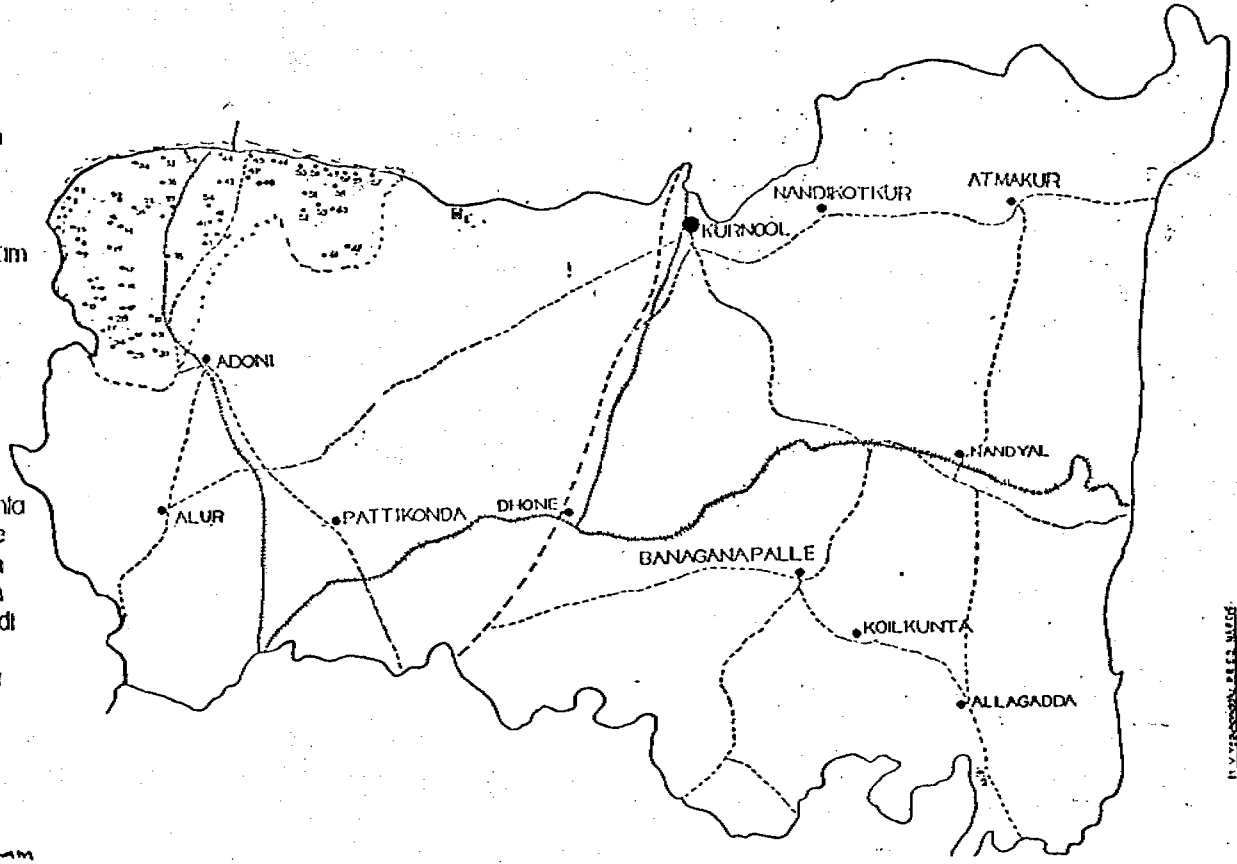
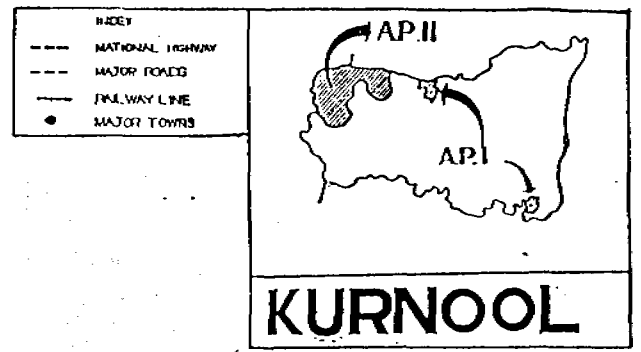


Final Revsd Estimte


Expenditure 9/96

2.2.2 KURNOOL DISTRICT

Map 4 : Kurnool

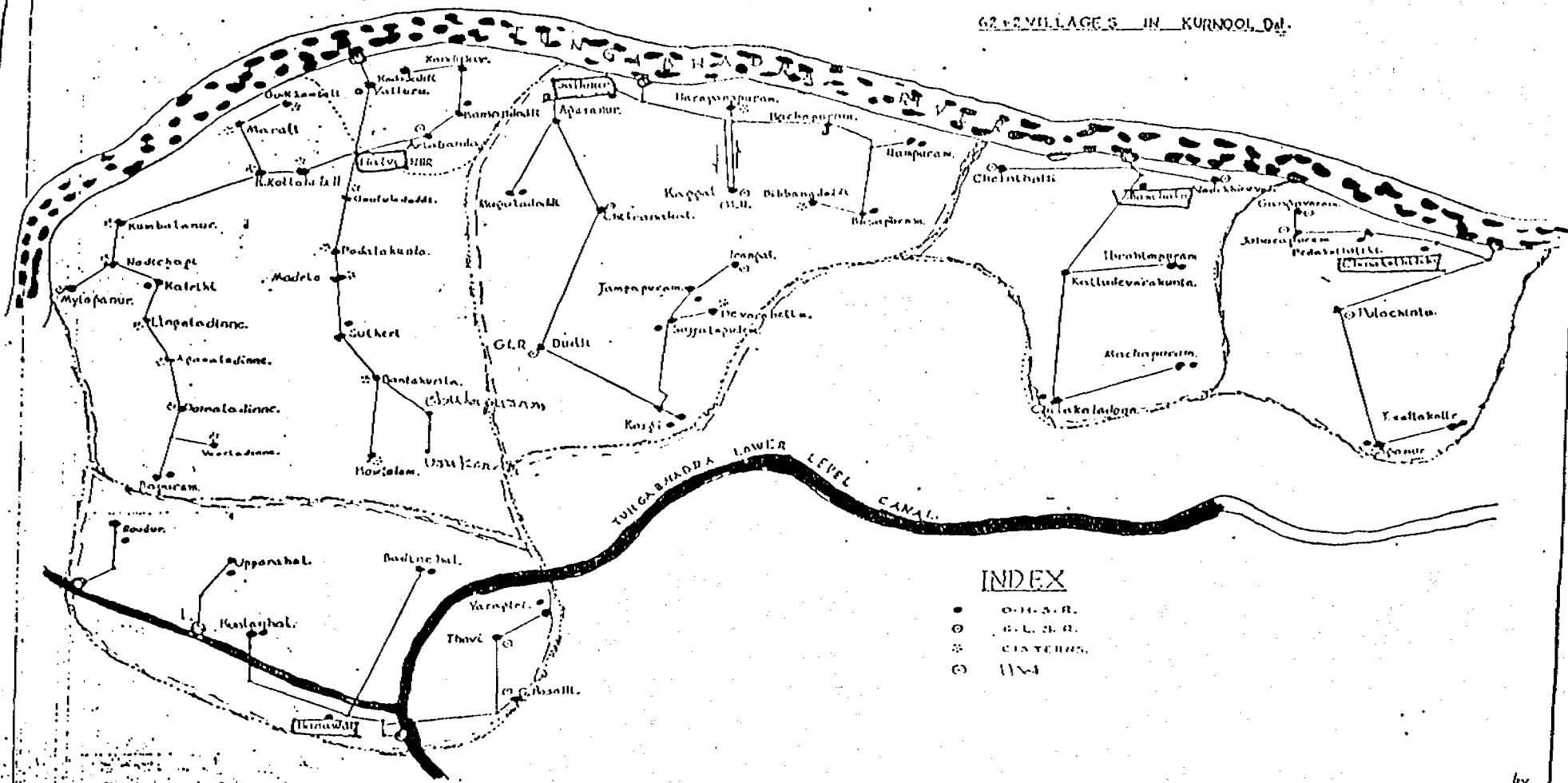


NAP AP II PROJECT VILLAGES

- | | |
|---|----------------------|
| 1 Halvi | 33 Agasonoor |
| 2 Gudikampalli | 34 Solanur |
| 3 Murali | 35 Chirafanaka |
| 4 Kumpalanur | 36 Mogaladoddi |
| 5 Kumpalanur Kollala | 37 Duddi |
| 6 Nadichagil | 38 Kosigi |
| 7 Mylaganur | 39 Deverabetta |
| 8 Kalriki | 40 Sajjalagudem |
| 9 Lingaladinne | 41 Jampapuram |
| 10 Domaladinne | 42 Irongal |
| 11 Agasaladinne | 43 Kaggal |
| 12 Veeraladinne | 44 Narayanapuram |
| 13 Bepuram | 45 Kachapuram |
| 14 Golluladoddi | 46 Ramapuram |
| 15 Podulakunta | 47 Dibbnadoddi |
| 16 Madira | 48 Basapuram |
| 17 Sulekeri | 49 Manchala |
| 18 Balakunta | 50 Chelnthalli |
| 19 Kowlhalam | 51 Kalladevairakunta |
| 20 Vailur | 52 Chilakadinne |
| 21 Ariabanda | 53 Machapuram |
| 22 Kamandoddi | 54 Ibrahimipuram |
| 23 Kadadoddi | 55 Nadikhyrawadi |
| 24 Kandukur | 56 Gangavaram |
| 25 Harwal | 57 Chinnakothilki |
| 26 Kuntanahal | 58 Peddakothilki |
| 27 Upparahat | 59 Johrapuram |
| 28 Badinchal | 60 Pulichenta |
| 29  Powdur | 61 Soganur |
| 30 S Hosalli | 62 T.Sallakur |
| 31 Thovi | 63 Obulapuram |
| 32 Yerigeri | 64 Urukundu |

NETWORK DIAGRAM

62 VILLAGES IN KURNOOL Dist.



INDEX

- O.L.S.R.
- ⊙ G.L.S.R.
- ⊗ CISTERN
- ⊖ WELL

by
S.M.A.S.H.V.

KURNOOL PROJECT

Kurnool district consists of 5 CPWSS and 2 IPWSS designed to cover 64 villages.

As per the latest reports (QPR/PR) 47 (73.5%) villages are covered with water supply.

Till last reporting period only 3 CPWSS (Manchala, Chinnakothiliki and Hanawal) were in operation. Presently it is reported that 5 schemes are in operation. 2 IPWSS which were part of Hanawal segment are yet to be completed.

Status, the physical works:

Total	:	255
Completed	:	242
Incomplete	:	13
% of completion	:	95
% of incomplection	:	5
No. of completion reports approved	:	44 (76 more are ready)

The pending works:

I. CPWSS Halvi

1. Gravity Main GLBR Halvi to 25 villages
2. Village Distr. System Vurukunda

II. CPWSS Hanawal

3. OHSR Upperhal
4. OHSR Rowdur
5. VDS Upperhal
6. VDS Rowdur

III. CPWSS Sathnur

7. Fencing at Sathnur H/W
8. GM Duddi to Segment I
9. GM Kaggal to Segment II
10. VDS Hoogala Doddi
11. VDS Sathnur
12. VDS Katchapuram
13. VDS to Basapuram

In CPWSS Manchala and Chinnakothiliki all physical works are completed and no physical work is pending.

The Physical Progress:

Status of Major Components (till end of 9/96)

Table : 2

District: *Kurnool*

Items	Total works	Works deleted	Complete till 2/96	Complete till 9/96	Progress 3/96-9/96	Balance 9/96
Filters	7	0	3	7	4	0
S.S.Tanks	3	0	1	3	2	0
S. Tanks	4	0	4	4	0	0
R/W Wells	6	0	6	6	0	0
C/W Sumps	7	0	6	7	1	0
Pump Houses	12	0	9	12	3	0
Pumping Units	23	*	*	*	*	*
OHSR	25	0	23	23	0	2
BR	4	0	4	4	-	0
GLSR	10	0	9	10	0	0
Cisterns	47	0	35	*	*	*
Buildings	15	0	12	15	0	0
R/W tr lines (km)	5.65	0	5.386	*	*	*
C/W tr lines (km)	197.6	0	190.89	*	*	*
Dist. line village(km)	25.6	0	15	*	*	*

Analysis is based on QPR (6/96, 9/96 and fortnightly progress reports)

* indicate that information is not available.

The Physical Progress during the reporting period:

- 4 filters have been completed
- One C/W sump has been completed
- 3 pump houses have been completed
- 2 Summer storage tanks have been completed

The Financial Progress:

Estimated cost (FRE)	:	Rs.1109.80 lakhs
Expenditure	:	Rs.1104.87 lakhs
Balance	:	Rs. 4.93 lakhs
% expenditure	:	99.55%
% Balance	:	0.45%

In the following components excess expenditure is observed:

Halvi CPWSS:

FRE	:	Rs.271.5 lakhs
Expenditure (9/96)	:	Rs.283.8 lakhs
Excess	:	Rs.12.3 lakhs

M.S. Charges:

FRE	:	Rs.130.0 lakhs
Expenditure (9/96)	:	Rs.142.86 lakhs
Excess	:	Rs.12.86 lakhs

To summarise the status of the Kurnool project, with 99.55% expenditure 95% of works are completed and 73% villages are covered.

ABSTRACT STATEMENT ON BUDGET & EXPENDITURE OF RWS YEMMIGANUR (KURNOOL PROJECT)

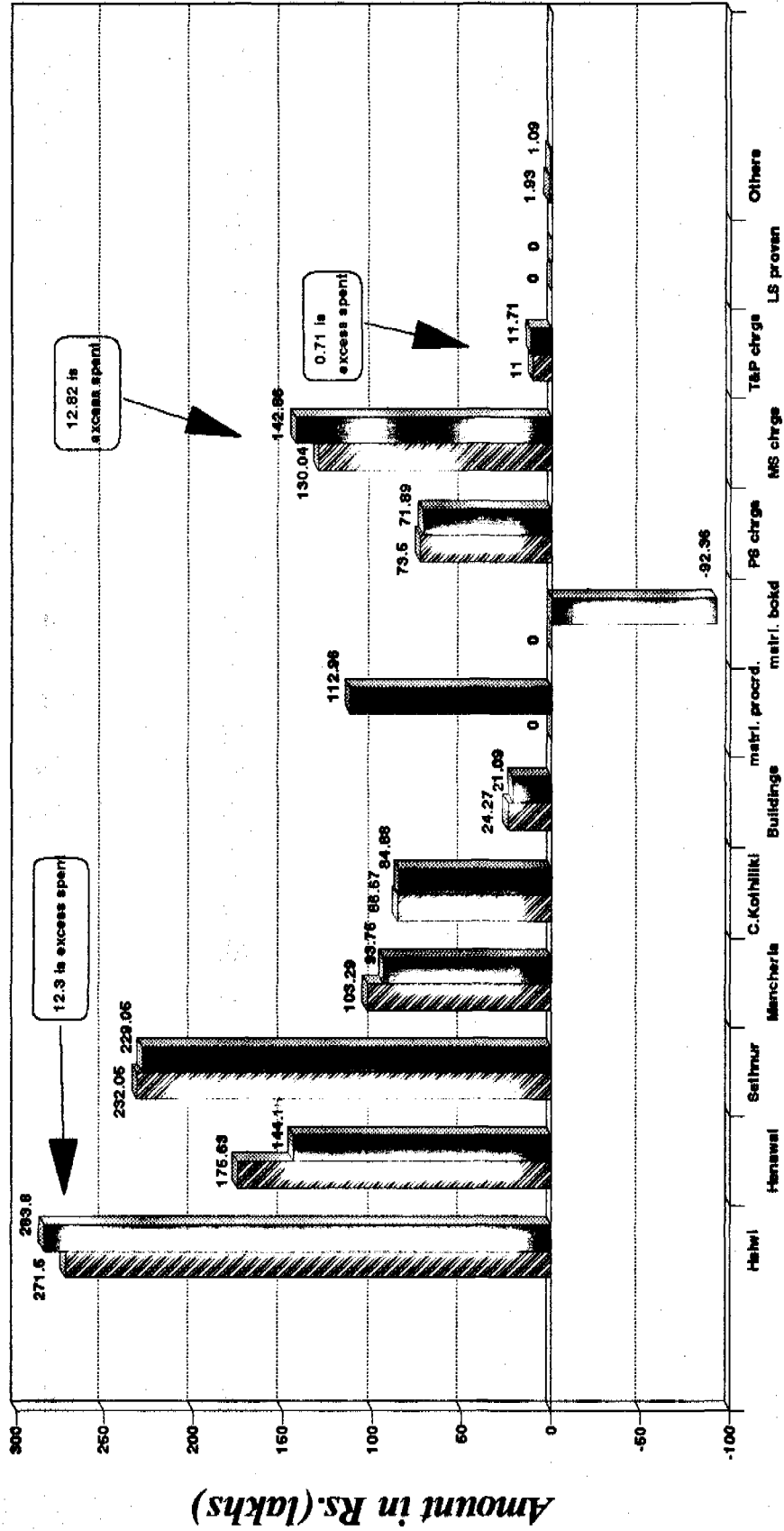
Amount in Rs. (lakhs)

Sl. No.	Particulars	Scope of Villages	FRE	Expenditr(Rs.) end of 12/95	Expenditr(Rs.) end of 2/96	Expenditr(Rs.) end of 6/96	Expenditr(Rs.) end of 9/96	Balance till end of 9/96
1	Zone 1 CPWSS Halwi	26	271.50	286.52	277.75	283.36	283.80	-12.30
2	Zone 2 CPWSS Hanawal	8	175.63	175.63	131.38	139.76	144.15	31.48
3	Zone 3 CPWSS Sathnur	16	232.05	232.05	218.7	225.15	229.05	3.00
4	Zone 4 CPWSS Mancherla	7	103.29	103.29	93.49	93.81	93.75	9.54
5	Zone 5 CPWSS Chinnakothiliki	7	86.67	86.77	85.19	84.85	84.88	1.79
6	Buildings	-	24.27	24.27	21.69	21.65	21.09	3.18
7	Steel & Cement procured	-	0.00	0.00	112.96	112.96	112.96	-112.96
8	Steel & Cement booked on works	-	0.00	0.00	-89.42	-91.19	-92.36	92.36
9	P.S.Charges	-	73.50	73.50	84.89	71.09	71.89	1.61
10	M.S.Charges	-	130.04	130.04	142.11	141.94	142.86	-12.82
11	T & P Charges	-	11.00	11.00	11.71	11.71	11.71	-0.71
12	L. S. Provision	-	0.00	0.00	6.72	0.00	0.00	0.00
13	Others	-	1.93	1.93	0.79	0.81	1.09	0.84
	TOTAL	64	1109.88	1125.00	1097.96	1095.90	1104.87	5.01

(143.8-138.79)

Budget & Expenditure Abstract Statement

RWS Yemmiganur (September 96)

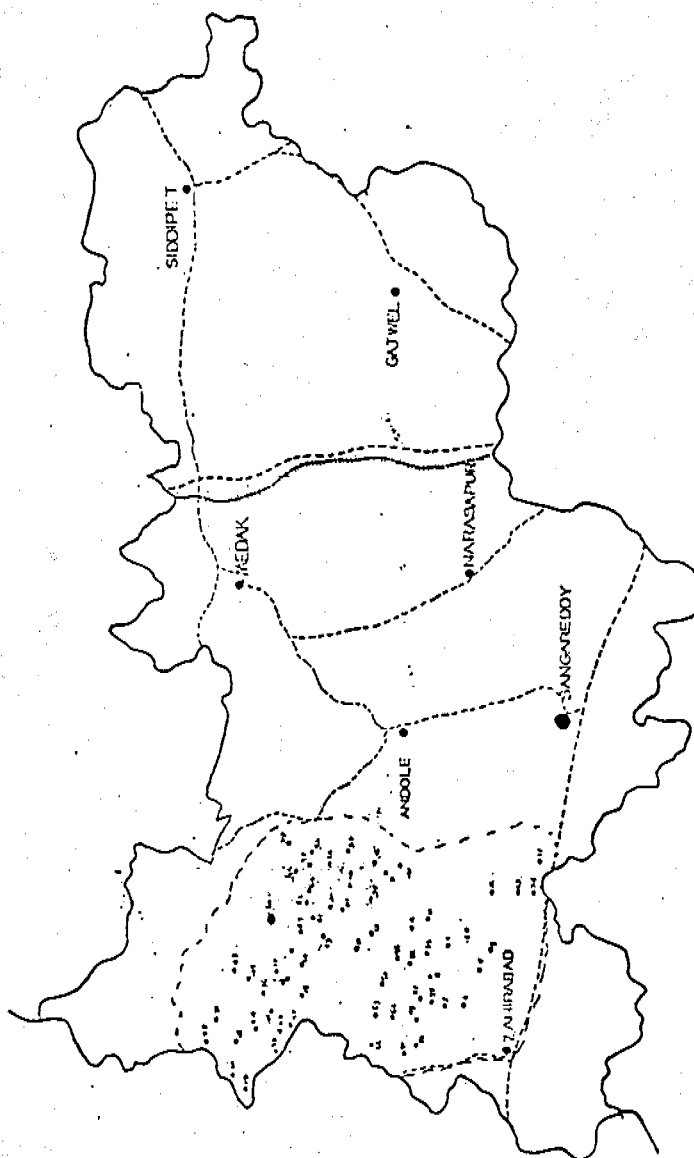
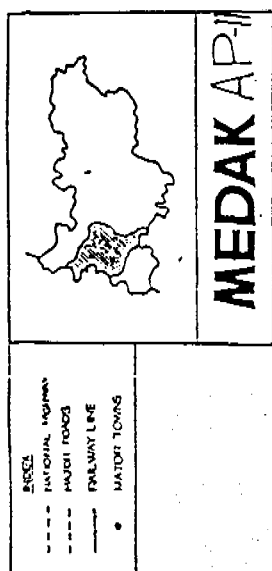


Project Components

Final Revised Estimt ■ Expenditure 9/96

2.2.3 MEDAK DISTRICT

Map 6 : Medak

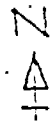


NAP AP-II PROJECT VILLAGES

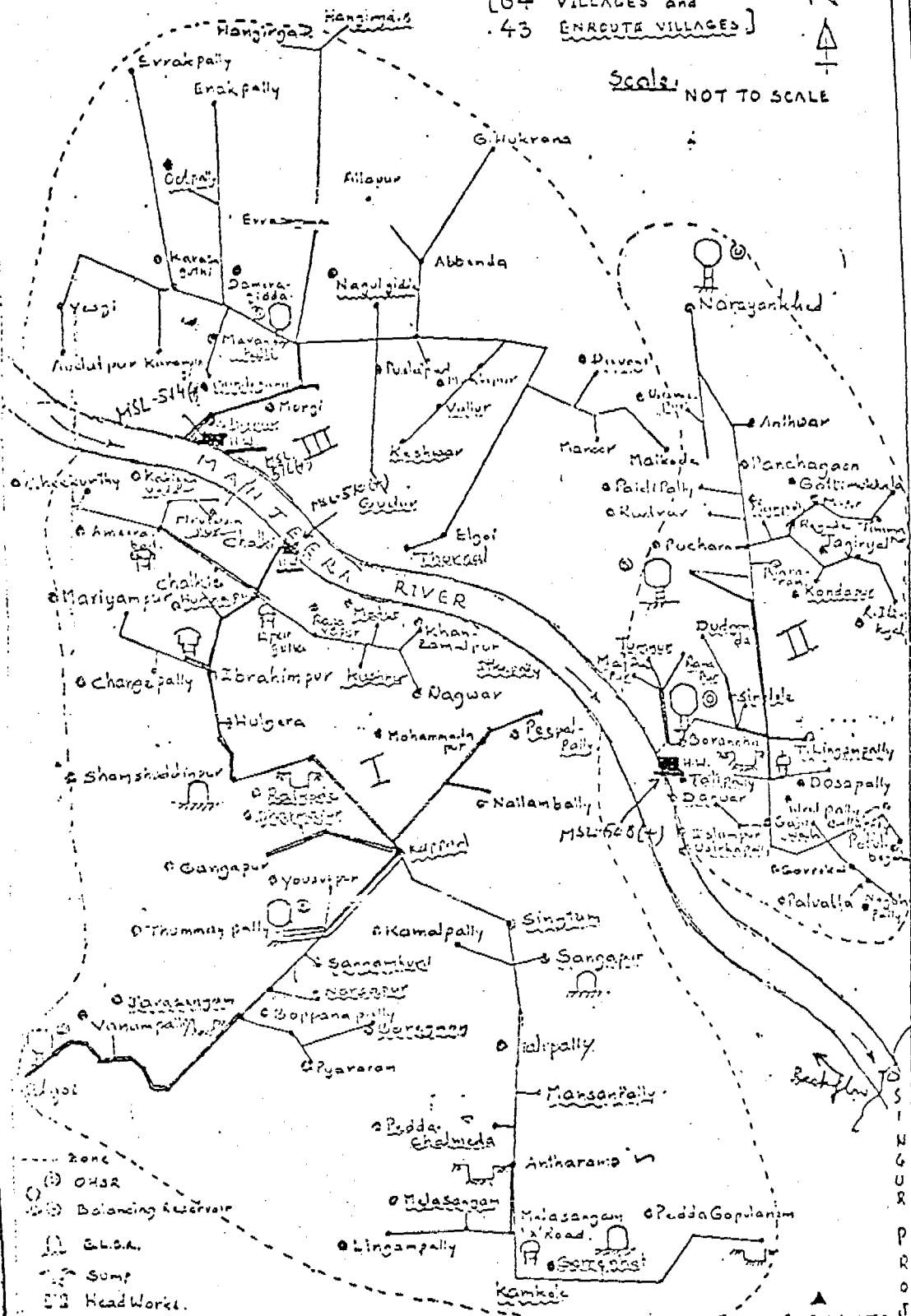
- | | |
|-----------------|-------------------|
| 1. Kantalapalli | 31. Venkatapur |
| 2. Turmedapalli | 32. Ilkial |
| 3. Youculur | 33. Polhulaboguch |
| 4. Mahamadapur | 34. Rogode |
| 5. Boppapalli | 35. Pyeraram |
| 6. Yelgol | 36. Jagriyal |
| 7. Vanampalli | 37. Walpalli |
| 8. Gangaapur | 38. Pocharam |
| 9. Dyararam | 39. Pulvala |
| 10. Nallampalli | 40. Damalgidda |
| 11. Boancho | 41. Hukrana |
| 12. Islampur | 42. Yerraboguda |
| 13. Maikod | 43. Allapur |
| 14. Mannoor | 44. Abbonda |
| 15. Eljoi | 45. Moorgi |
| 16. Pugalpatlad | 46. Hanyagakurd |
| 17. Mukthapur | 47. Ibrahimpur |
| 18. Karasgudi | 48. Chongopalli |
| 19. Auzalapur | 49. Marivanpur |
| 20. Yesgi | 50. Raghavapur |
| 21. Yonkapalli | 51. Amcorabad |
| 22. Irakapalli | 52. Chaiki |
| 23. Karamungi | 53. Khanjampapur |
| 24. Lingampalli | 54. Chikurthi |
| 25. Anatharam | 55. Hulgera |
| 26. Tatpalli | 56. Naywar |
| 27. Gopularam | 57. Shamsuddinpur |
| 28. Dosapalli | 58. Narayankhod |
| 29. Gollimukkal | 59. Panchageon |
| 30. Correkhal | 60. Athwar |
| 31. Nagulapalli | 61. Paidipalli |
| 32. Timmapur | 62. Rudrar |

4-13 EV +3AEV = 110 4

MEDAK A.P-II NETWORK DIAGRAM OF [64 VILLAGES and 43 ENACUTA VILLAGES]



Scale: NOT TO SCALE



- Zone
- (O) OHSR
- (B) Balancing Reservoir
- (S) G.S.A.
- (T) Somp
- (H) Head Works.
- PUMPING MAINS
- GRAVITY MAINS
- (C) VILLAGES COVERED 64 upto 31-1-45

SADASIVAR

MEDAK PROJECT

Medak district consists of 3 CPWSS in AP II with a coverage of 110 villages. By the end of Sept 96, 105 villages (95%) are covered with water supply.

Status, the physical works:

Total	:	323
Complete	:	315
Incomplete	:	8
% of completion	:	98
% of incomplection	:	2
No. of completion reports approved	:	297

The pending works:

I. CPWSS Borancha

1. Staff quarters Borancha
2. Ground Level Balancing Reservoir at Tumnurgutta
3. Booster at Nagulapally

II. CPWSS Karasguthy

4. SO Building at Headworks
5. Staff quarters at Headworks
6. GM Manual to Maikode
7. GM Abinda to Kukrana
8. GM to Yesgi & Audathpur

In CPWSS Ibrahimpur all the physical works are completed.

The Physical Progress:

Status of Major Components (till end of 9/96)

Table - 3

District : Medak

Items	Total works	Complete till 1/96	Complete till 9/96	Progress 2/96 - 9/96	Balance 9/96
Filters	3	3	3	-	0
S.S.Tanks	-	-	-	-	-
S. Tanks	3	3	3	-	0
R/W Wells	3	3	3	-	0
C/W Sumps	5	4	5	1	0
Pump Houses	7	6	7	1	0
Pumping Units	15	14	15	1	0
OHSR	4	4	4	-	0
BR	12	12	12	-	0
GLSR	96	90	95	5	1
Cisterns	-	-	-	-	-
Buildings	15	15	15	-	0
R/W tr lines(km)	0.9	0.9	0.9	-	0
C/W tr lines(km)	261.45	257.8	257.8	0	3.65
Dist.linevillage (km)	4	3.7	3.74	0	0.26

Analysis is based on QPR (6/96, 9/96 and fortnightly progress reports)

The Physical Progress during the reporting period:

- 1 C/W sumps has been completed
- 1 pump house has been completed
- 1 pumping unit has been completed
- 5 GLSRs have been completed

The Financial Progress:

Estimated cost (RRE)	:	Rs.1088.00 lakhs
Expenditure	:	Rs.1103.28 lakhs
Excess in expenditure	:	Rs. 15.28 lakhs
% Expenditure	:	101
% Balance	:	1

The excess expenditure incurred is as follows:

1. Cost of Materials:

Estimated Cost	:	0
Expenditure (9/96)	:	Rs.15.84 lakhs
Excess	:	Rs.15.84 lakhs

2. Cost of Excess steel and Cement:

Estimated cost	:	0
Expenditure (9/96)	:	Rs.13.66 lakhs
Excess	:	Rs.13.66 lakhs

3. Major Establishment charges

Estimated cost	:	Rs. 70.72 lakhs
Expenditure	:	Rs.156.41 lakhs
Excess	:	Rs. 85.69 lakhs

4. Transfer to Miryalaguda division:

Estimate cost	:	0
Expenditure	:	Rs.15 lakhs
Excess	:	Rs.15 lakhs

Cost of materials, steel and cement can be adjusted in civil works and as such they are not excess expenditure. The amount reported to have been transferred to Miriyalaguda division, Rs.15 lakhs, is coming from earlier funds available for preparation for AP III. This amount will NOT included in reimbursement claims for Medak AP II.

In short, Medak district has achieved 101 % financial progress with 95% villages covered and 98% items completed.

ABSTRACT STATEMENT ON BUDGET & EXPENDITURE OF RWS MEDAK

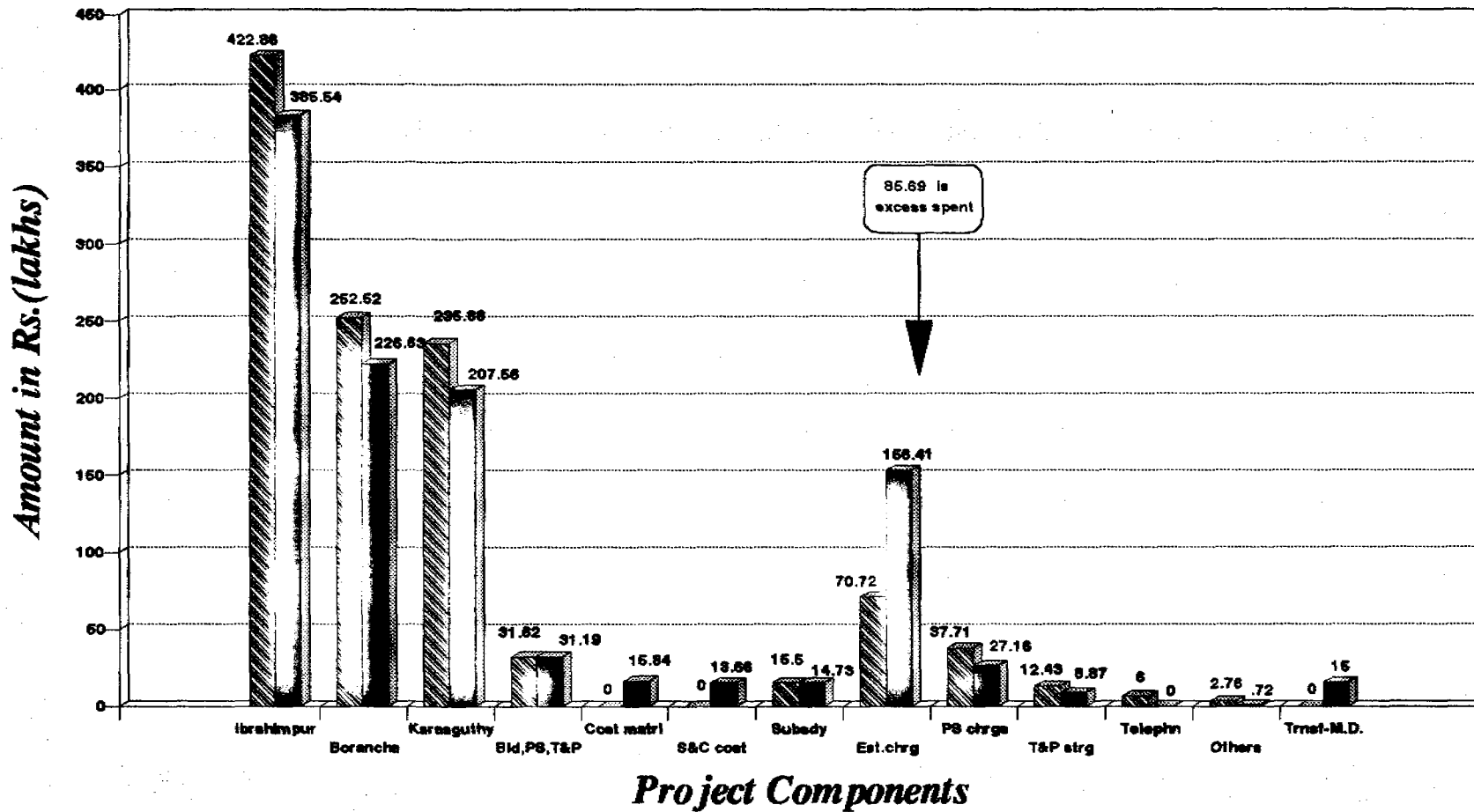
Amount in Rs.(lakhs)

Sl. No.	Particulars	Scope of Villages	RRE	Expenditr(Rs.) end of 12/95	Expenditr(Rs.) end of 3/96	Expenditr(Rs.) end of 6/96	Expenditr(Rs.) end of 9/96	Balance till end of 9/96
1	Zone 1 CPWSS Ibrahimpur	46	422.86	379.85	383.26	384.10	385.54	37.32
2	Zone 2 CPWSS Borancha	35 (32+3 AEV)	252.52	221.71	222.69	222.70	226.63	25.89
3	Zone 3 CPWSS Karasgutti	29	235.88	202.04	203.04	205.10	207.56	28.32
4	Buildings including P.S. and T&P	-	31.62	31.19	31.19	31.20	31.19	0.43
5	Cost of material	-	0.00	18.17	17.63	16.50	15.84	-15.84
6	Cost of Steel & Cement	-	0.00	15.11	14.02	15.40	13.66	-13.66
7	Subsidy paid to APSEB	-	15.50	14.33	14.33	14.70	14.73	0.77
8	Major establishment charges	-	70.72	145.47	149.52	152.70	156.41	-85.69
9	P.S. Charges	-	37.71	25.18	25.97	26.70	27.16	10.55
10	T & P storage	-	12.43	8.87	8.87	8.90	8.87	3.56
11	Telephone charges	-	6.00	0.00	0.00	0.00	0.00	6.00
12	Other unforeseen items	-	2.76	0.72	0.72	0.70	0.72	2.04
13	Transfer to Miryalguda division	-	0.00	15.00	15.00	15.00	15.00	-15.00
TOTAL		110	1088.00	1077.63	1086.24	1093.70	1103.28	-15.28

(114.91-130.18)

Budget & Expenditure Abstract Statement

RWS Medak (September 96)

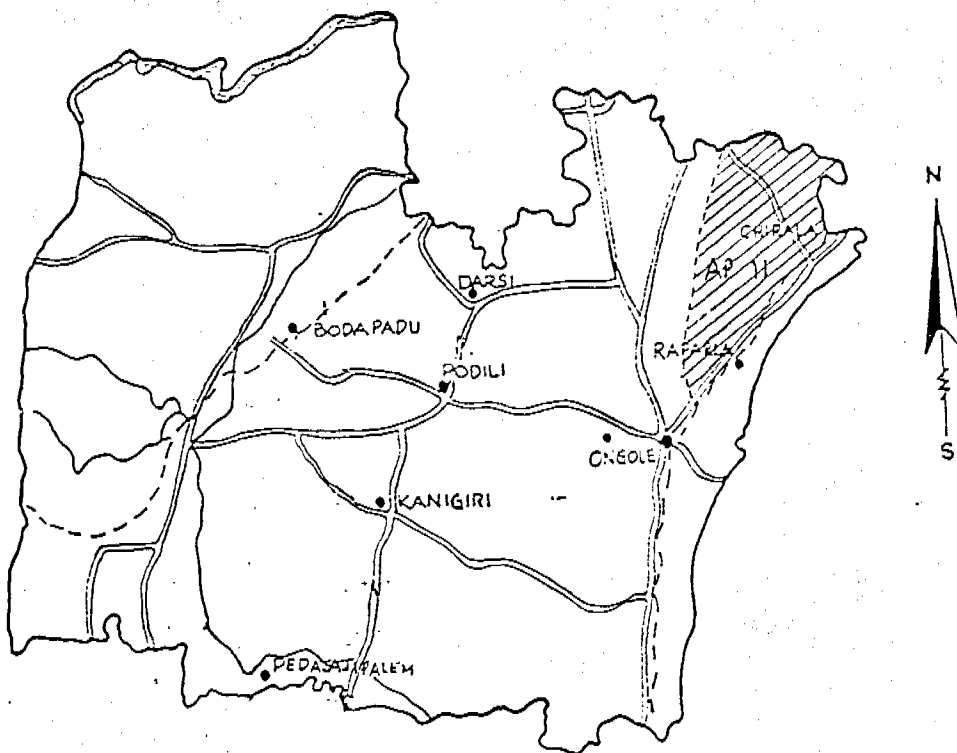
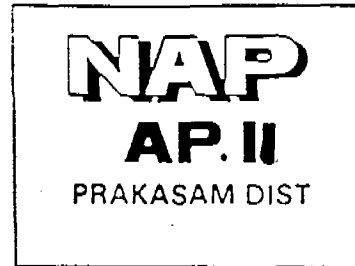


Re-revised Estimate

Expenditure 9/96

2.2.4 PRAKASAM DISTRICT

Map 8 : Prakasam



INDEX	
	MAJOR ROAD
	NATIONAL HIGHWAY
	RAILWAY LINE
	RIVERS

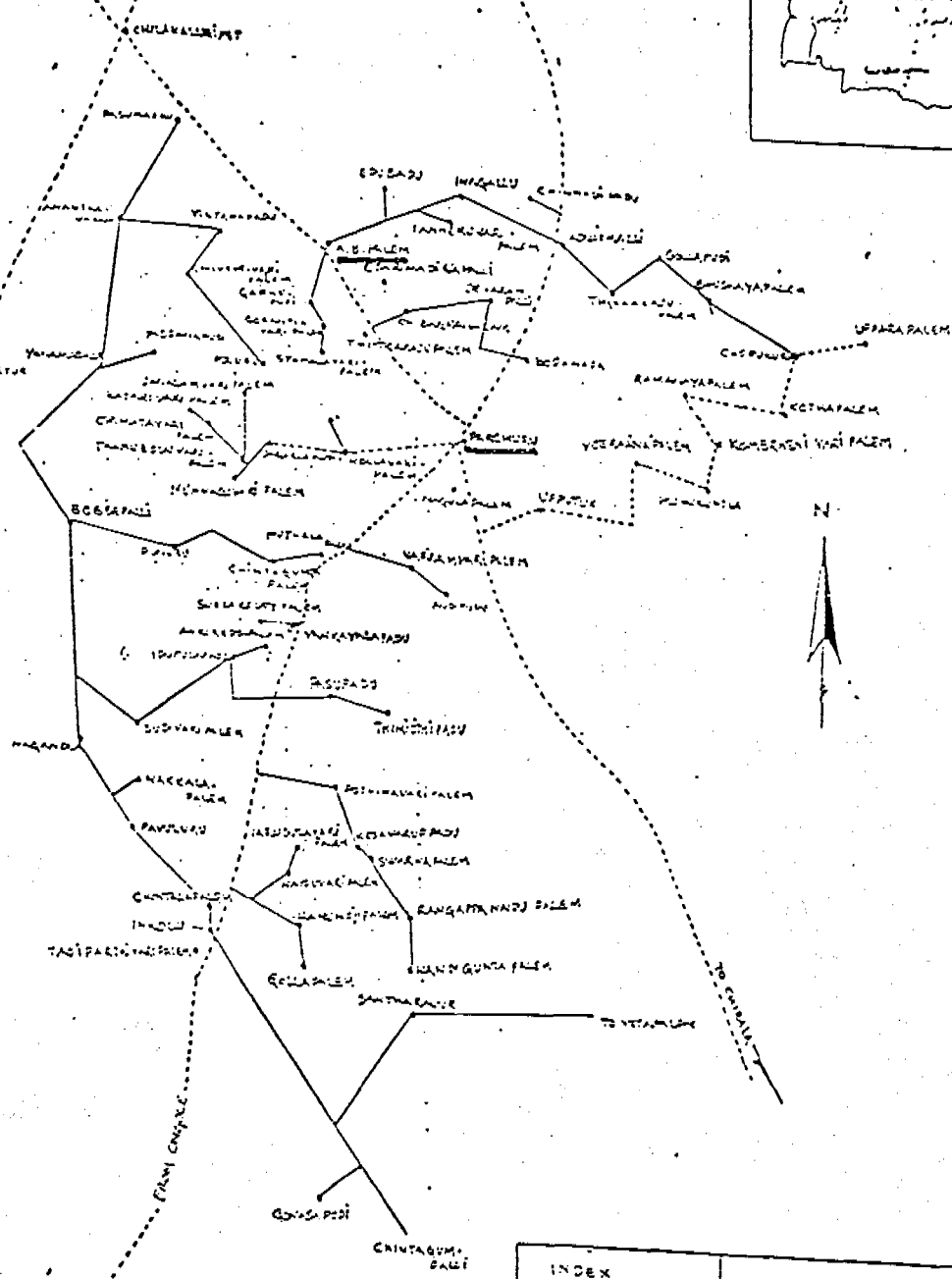
NAP AP. II

PRAKASAM DIST
70 VILLAGE S



TO HANAMKOT PET

TO HANAMKOT PET



TO GUNTUR

MATTICENTA

INDEX	DISTANCE
..... FOOT PATH	
..... R.B. ROADS	
—— P.R. ROADS	
• VILLAGE	
	• PARUCHUR TO CHIRALA 17 Km
	• PARUCHUR TO GUNTUR 50 Km
	• PARUCHUR TO CHILAKALURIPET 30 Km
	• PARUCHUR TO ONGOLE 55 Km
	• MARRUR TO ONGOLE 75 Km
	• MARRUR TO CHILAKALURIPET 15 Km
	• CHILAKALURIPET TO GUNTUR 45 Km

PRAKASAM PROJECT

Introduction

Prakasam district consists of 3 CPWSS and 34 IPWSS with a total target of 73 villages out of which 70 villages were receiving water (96%) by the end of September 1996.

Status, the physical works:

Total	:	310
Complete	:	288
Incomplete	:	22
% of completion	:	93
% of incompleteness	:	7
No. of completion reports approved	:	197

The pending works are:

I. CPWSS AB Palem

1. Stone filling intake of SST AB Palem
2. Extension R/W Gravity main Bobbeipalli
3. C/W Sump Adusumalli
4. C/W Sump Inagallu
5. C/W Sump Cpadu
6. Extension VDS AB Palem II
7. Extension VDS Deverapalli II
8. Extension VDS Bodawada II
9. Canal off take of GM BPalli

II. CPWSS MV Palem

10. Additional pumps at Punur
11. Extension VDS MV Palem & 40 other villages

III. IPWSS

12. Augmentation PWSS Daggubadu
13. Augmentation PWSS Subbareddy Palem
14. Augmentation PWSS Inkollu
15. Augmentation Ankireddypalem
16. RW Gravity main to Bodawada
17. VDS Bodawada
18. RW GM to Pavluru
19. Booster station RW Palem
20. VDS Kothapalem
21. VDS Zarubulavaripalem
22. VDS Nakkalapalem

All these pending works belong to mop up activities

The Physical Progress:

Status of Major Components (till end of 9/96)

Table : 4

District: *Parchur*

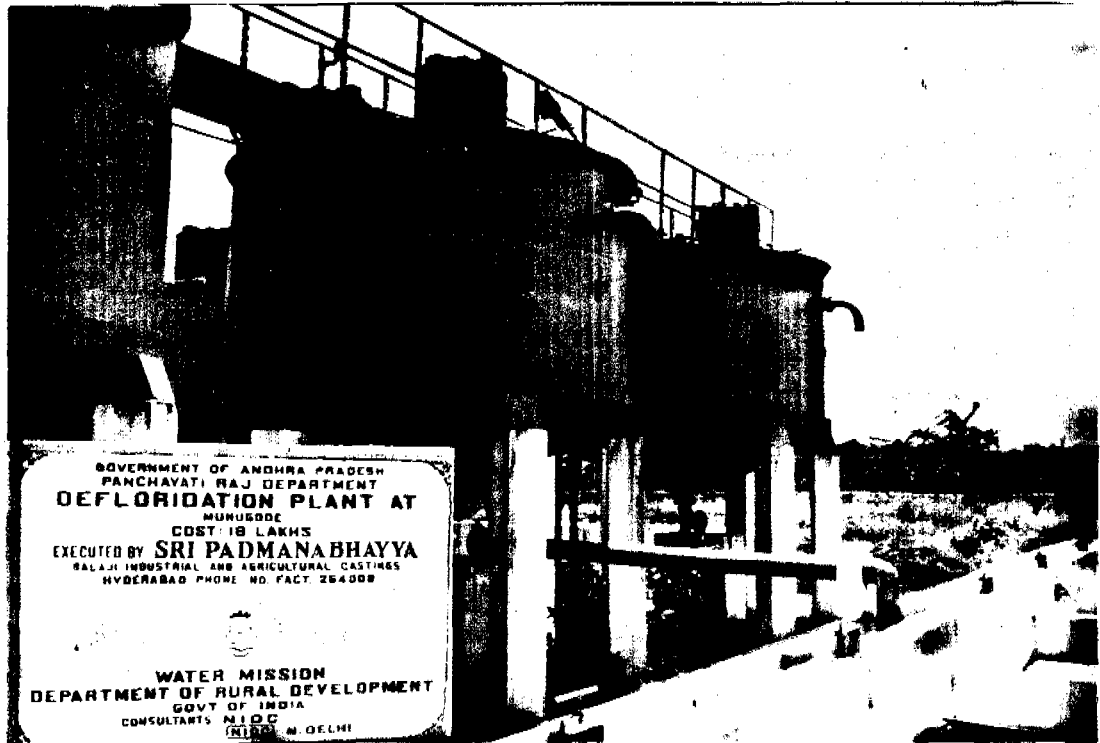
Items	Total works	Works deleted	Complete till 2/96	Complete till 9/96	Progress 3/96-9/96	Balance 9/96
Filters	27	1	22	26	4	0
S.S.Tanks	40	13	27	27	-	0
S. Tanks	-	-	-	-	-	
R/W Wells	53	7	45	46	1	0
C/W Sumps	26	0	26	26	-	0
Pump Houses	52	5	41	47	6	0
Pumping Units	151	0	139	149	10	2
OHSR	35	0	-	35	*	0
BR	1	0	1	1	-	0
GLSR	-	-	-	-	-	-
Cisterns	-	-	-	-	-	-
Buildings	10	0	*	*	*	*
R/W tr lines (km)	69.65	0	*	*	*	*
C/W tr lines (km)	59.34	0	*	*	*	*
Dist. line village(km)	89.35	0	*	*	*	*

Analysis is based on QPR (6/96, 9/96 and progress reports)

* indicate that information is not available.

The Physical Progress during the reporting period:

- 4 filters are completed
- 1 R/W well is completed
- 6 pump houses are completed
- 10 pumping units are completed



De-fluoridation plant in Mungode, Nalgonda at cost of Rs.18 lakhs, never operated



Relocation of intake AB Palem, Prakasam, pipe laying now completed, (500 mm pipe/2 kms) connection will be made during canal closure April 1997



Village meeting during PRFS village study Nov ' 96 - Villagers, PRED & NAPO

The Financial Progress:

Estimated cost (FRE)	:	Rs.1061.20 lakhs
Expenditure	:	Rs.1005.80 lakhs
Balance	:	Rs. 55.40 lakhs
% expenditure	:	95
% Balance	:	5

In Prakasam project there is no real excess expenditure. The excess expenditure on material, steel and cement could be adjusted against civil works.

Prakasam district has achieved 95% financial progress with 96% villages covered and 93% of physical works completed.

ABSTRACT STATEMENT ON BUDGET & EXPENDITURE OF RWS PARCHUR (PRAKASAM PROJECT)

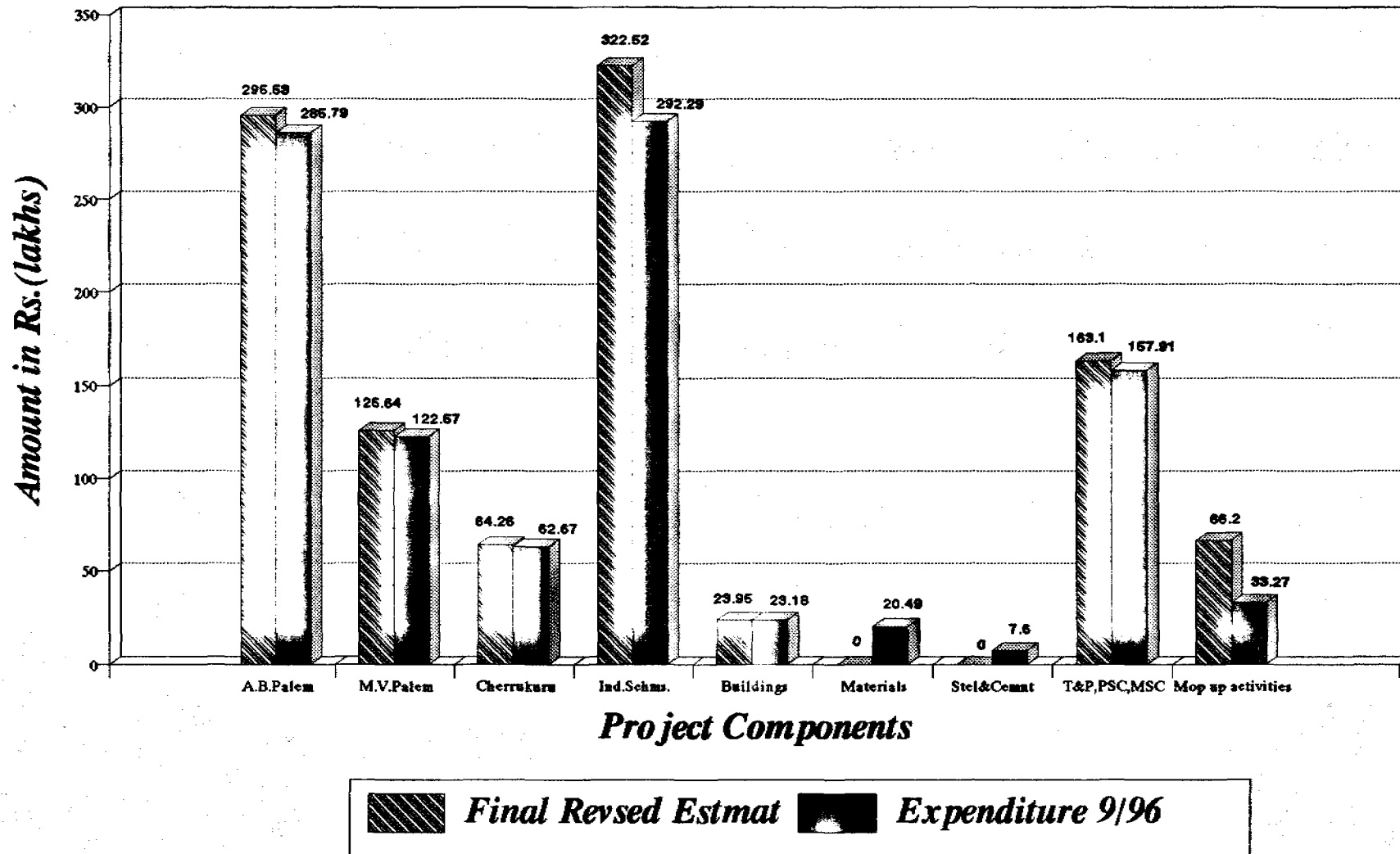
Amount In Rs.(lakhs)

Sl. No.	Particulars	Scope of Villages	FRE	Expenditr(Rs.) end of 12/95	Expenditr(Rs.) end of 3/96	Expenditr(Rs.) end of 6/96	Expenditr(Rs.) end of 9/96	Balance till end of 9/96
1	Zone 1 CPWSS A.B. Palem	20	295.53	284.28	284.65	284.65	285.79	9.74
2	Zone 2 CPWS M.V. Palem	9	125.64	118.93	120.09	120.76	122.57	3.07
3	Zone 3 CPWSS Cherrukuru	4	64.26	60.45	61.70	61.76	62.67	1.59
4	Zone 4 Individual Schemes	40 (37+3 AEV)	322.52	286.87	287.08	288.02	292.29	30.23
5	Buildings	-	23.95	23.18	23.18	23.18	23.18	0.77
6	Materials Central stores	-	0.00	18.43	20.49	21.29	20.49	-20.49
7	Steel & Cement	-	0.00	2.38	2.38	3.79	7.60	-7.60
8	T&P and PSC, MSC	-	163.10	157.91	157.91	157.91	157.91	5.19
9	Mop up activities	-	66.20	20.67	22.26	25.19	33.27	32.93
TOTAL		73	1061.20	973.10	979.74	986.55	1005.77	55.43

(83.4-28.1)

Budget & Expenditure Abstract Statement

RWS Parchur (September 96)



2.3 Completion planning per district

After having detailed discussion between NAPO, Support Mission and the field engineers and senior engineers of PRED on elaborate planning for completion was prepared for each district.

In the planning not only physical works but also other related aspects such as

- System stabilisation
- Technical audit
- Rectification
- Preparation of final completion reports

were considered and planned for

Similarly a very detailed schedule is prepared for completion of following general tasks for each district, some of them were overdue.

- Internal Inventory
- Completion reports
- As built drawings
- O & M Manual
- Train O & M Staff
- O & M Budget
- Performance monitoring

COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
1	GENERAL ACTIVITIES	257d	11/19/96	11/12/97	[Thick black bar spanning from Nov 1996 to Nov 1997]																
2	Basic information	115d	11/19/96	4/28/97	[Thick black bar from Nov 1996 to Apr 1997]																
3	Internal inventory	2w	11/19/96	12/2/96	[Small white box]																
4	Compl. reports-item	19w	11/19/96	3/31/97	[Hatched bar from Nov 1996 to Mar 1997]																
5	Revision compl. reports	2w	4/15/97	4/28/97	[Small hatched box]																
6	As-built drawings	2w	11/19/96	12/2/96	[Small white box]																
7	Operation & Maintenance	125d	11/19/96	6/12/97	[Thick black bar from Nov 1996 to Jun 1997]																
8	O&M Manuals	75d	11/19/96	3/3/97	[Thick black bar from Nov 1996 to Mar 1997]																
9	Draft Version	10w	11/19/96	1/27/97	[White box from Nov 1996 to Jan 1997]																
10	Comments NAPO	2w	1/28/97	2/10/97	[Small white box]																
11	Final version	3w	2/11/97	3/3/97	[Small white box]																
12	Training O&M staff	55d	1/28/97	4/14/97	[Thick black bar from Jan 1997 to Apr 1997]																
13	Identification needs	1w	1/28/97	2/3/97	[Small white box]																
14	Design training plan	2w	2/4/97	2/17/97	[Small white box]																
15	Conduct training	8w	2/18/97	4/14/97	[Hatched bar from Feb 1997 to Apr 1997]																
16	O&M Budget	51d	3/3/97	5/12/97	[Thick black bar from Mar 1997 to May 1997]																
17	Budget Preparation	2w	3/3/97	3/14/97	[Small white box]																
18	Allocation by PRED	6w	4/1/97	5/12/97	[Hatched bar from Apr 1997 to May 1997]																
19	Performance Monitoring	248d	12/2/96	11/12/97	[Thick black bar from Dec 1996 to Nov 1997]																
20	Aggr. pump data	242.5d	12/2/96	11/5/97	[Thin black bar from Dec 1996 to Nov 1997]																

Project: Completion APII Kollapur Date: 2/17/97	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
33	Aggr. delivery data	242.5d	12/2/96	11/5/97																	
46	Analysis by HQ/NAPO	244d	12/6/96	11/12/97																	
59	CPWSS CHINNAMAROOR	105d	11/19/96	4/14/97	[Rolled Up Progress]																
60	Outstanding works	30d	11/19/96	12/30/96	[Rolled Up Progress]																
61	PM KPally-BPally	6w	11/19/96	12/30/96																	
62	PM KPally-TPally	6w	11/19/96	12/30/96																	
63	PM TPally-CPally	6w	11/19/96	12/30/96																	
64	PM TPally-TPthanda	6w	11/19/96	12/30/96																	
65	VDS -Chinnamaroor	6w	11/19/96	12/30/96																	
66	VDS-Velloor	6w	11/19/96	12/30/96																	
67	VDS-Koppunur	6w	11/19/96	12/30/96																	
68	VDS-Jetprole	6w	11/19/96	12/30/96																	
69	VDS-Kondur	6w	11/19/96	12/30/96																	
70	VDS-Peddamaroor	6w	11/19/96	12/30/96																	
71	VDS-Velgonda	6w	11/19/96	12/30/96																	
72	VDS-Weepanagandla	6w	11/19/96	12/30/96																	
73	VDS-KPally	6w	11/19/96	12/30/96																	
74	Scheme stabilisation	15w	11/19/96	3/3/97	[Summary]																
76	Technical audit	2w	3/4/97	3/17/97																	
78	Rectifications	4w	3/18/97	4/14/97																	

Project: Completion APII Kollapur
Date: 2/17/97

Task



Summary



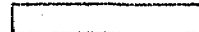
Rolled Up Progress



Progress



Rolled Up Task



Milestone



Rolled Up Milestone



COMPLETION APII MAHBUBNAGAR

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
77	PROJECT COMPLETION	130d	11/19/96	6/19/97																
78	Prep. draft final report	21w	11/19/96	4/14/97																
79	Final completion report	4w	4/15/97	5/12/97																
80	Submission to RNE	1w	5/13/97	5/19/97																

Project: Completion APII Kollapur
Date: 2/17/97

Task

Progress

Milestone

Summary

Rolled Up Task

Rolled Up Milestone

Rolled Up Progress

	Item	Target Date
1.	Physical works	31/12/96
2.	Scheme stabilisation	03/03/97
3.	Technical Audit	14/03/97
4.	Rectification	14/04/97
5.	Internal Inventors	02/12/96
6.	Completion Report	28/04/97
7.	As built drawings	02/12/96
8.	O & M Manual	03/03/97
9.	Training O&M Staff	14/04/97
10.	Final Completion report	19/05/97

In Mahbubnagar physical works are scheduled to be completed by December end and scheme stabilisation is in progress which is scheduled for completion by 03/03/97.

Final completion report is scheduled for 10/05/97 after giving allowance for other preparatory activities such as internal reports preparations, internal audit and rectification.

COMPLETION APII KURNOOL

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20	Aggr. pump data	242.5d	12/2/96	11/5/97	□	□	□	□	□	□	□	□	□	□	□	□	□	□
33	Aggr. delivery data	242.5d	12/2/96	11/5/97	□	□	□	□	□	□	□	□	□	□	□	□	□	□
46	Analysis by HQ-NAPO	244d	12/6/96	11/12/97	□	□	□	□	□	□	□	□	□	□	□	□	□	□
59	CPWSS HALVI	135d	11/19/96	5/26/97														
60	Outstanding works	30d	11/19/96	12/30/96														
61	GM GLBR Halvi-25 Villages	6w	11/19/96	12/30/96														
62	VDS Urukonda	4w	11/19/96	12/16/96														
63	Scheme stabilisation	19w	11/19/96	3/31/97														
64	Technical audit	4w	4/1/97	4/28/97														
65	Rectifications	4w	4/29/97	5/26/97														
66	CPWSS HANAWAL	135d	11/19/96	5/26/97														
67	Outstanding works	30d	11/19/96	12/30/96														
68	OHSR Upperhal	6w	11/19/96	12/30/96														
69	OHSR Rowdur	6w	11/19/96	12/30/96														
70	VDS- Upperhal	6w	11/19/96	12/30/96														
71	VDS- Rowdur	6w	11/19/96	12/30/96														
72	Scheme stabilisation	19w	11/19/96	3/31/97														
73	Technical audit	4w	4/1/97	4/28/97														
74	Rectifications	4w	4/29/97	5/26/97														

Project: Completion APII Kurnool Date: 12/19/98	Task		Summary		Rolled Up Progress	
	Progress		Rolled Up Task			
	Milestone		Rolled Up Milestone			

COMPLETION APII KURNOOL

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
94	Rectifications	4w	2/25/97	3/24/97					▬										
95	PROJECT COMPLETION	160d	11/19/96	6/30/97															
96	Prep. draft final report	27w	11/19/96	5/26/97															
97	Final completion report	4w	5/27/97	6/23/97															
98	Submission to RNE	1w	6/24/97	6/30/97															

Project: Completion APII Kurnool
Date: 12/19/96

Task
 Progress
 Milestone

Summary
 Rolled Up Task
 Rolled Up Milestone

Rolled Up Progress

Item	Target Date
1. CPWSS Halvi	26/05/97
2. CPWSS Hanawal	26/05/97
3. CPWSS Sathnur	26/05/97
4. CPWSS Manchala	24/03/97
5. CPWSS C hinnakothiliki	24/03/97

CPWSS Halvi, Hanawal and Sathnur have physical works pending which is why completion of those schemes is scheduled up to 26/05/97.

CPWSS Manchala and Chinnakothiliki do not have any physical works pending but other tasks are still to be completed such as :

- i. Scheme stabilisation
- ii. Technical Audit
- iii. Rectification

Simultaneously, the following works which are common for the district are scheduled.

Item	Target Date
1. Inventory	24/02/97
2. Completion report	31/03/97
3. As-built drawings	24/02/97
4. O & M Manual	23/05/97
5. Training O&M Staff	11/07/97
6. Final Completion report	30/06/97

In Kurnool project scheme stabilization is continuing up to 31/03/97 hence over all completion of schemes is extending up to 25/05/97.

Allowing a months time, the preparation of final completion report is scheduled to be submitted to RNE by 30/06/97.

COMPLETION APII MEDAK

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	GENERAL ACTIVITIES	267d	11/19/96	11/12/97	[Summary bar from Nov 1996 to Nov 1997]														
2	Basic Information	135d	11/19/96	5/26/97	[Summary bar from Nov 1996 to May 1997]														
3	Internal inventory	2w	11/19/96	12/2/96	[Task bar from Nov 1996 to Dec 1996]														
4	Compl. reports-Item	10w	11/19/96	1/27/97	[Task bar from Nov 1996 to Jan 1997]														
5	Revision compl. reports	2w	5/13/97	5/26/97	[Task bar from May 1997 to May 1997]														
6	As-built drawings	4w	1/28/97	2/24/97	[Task bar from Feb 1997 to Feb 1997]														
7	Operation & Maintenance	95d	2/25/97	7/7/97	[Summary bar from Feb 1997 to July 1997]														
8	O&M Manuals	70d	2/25/97	6/2/97	[Summary bar from Feb 1997 to June 1997]														
9	Draft Version	8w	2/25/97	4/21/97	[Task bar from Feb 1997 to April 1997]														
10	Comments NAPO	2w	4/22/97	5/5/97	[Task bar from April 1997 to April 1997]														
11	Final version	4w	5/6/97	6/2/97	[Task bar from May 1997 to May 1997]														
12	Training O&M staff	85d	4/22/97	7/7/97	[Summary bar from April 1997 to July 1997]														
13	Identification needs	1w	4/22/97	4/28/97	[Task bar from April 1997 to April 1997]														
14	Design training plan	2w	4/29/97	5/12/97	[Task bar from April 1997 to April 1997]														
15	Conduct training	8w	5/13/97	7/7/97	[Task bar from May 1997 to July 1997]														
16	O&M Budget	51d	3/3/97	5/12/97	[Summary bar from March 1997 to May 1997]														
17	Budget Preparation	2w	3/3/97	3/14/97	[Task bar from March 1997 to March 1997]														
18	Allocation by PRED	6w	4/1/97	5/12/97	[Task bar from April 1997 to April 1997]														
19	Performance Monitoring	248d	12/2/96	11/12/97	[Summary bar from Dec 1996 to Nov 1997]														
20	Aggr. pump data	242.5d	12/2/96	11/6/97	[Summary bar from Dec 1996 to Nov 1997]														

Project: Completion APII Medak
Date: 2/14/97

Task	[White box]	Summary	[Thick black bar]	Rolled Up Progress	[Thick black bar]
Progress	[Thin black bar]	Rolled Up Task	[White box]		
Milestone	[Black diamond]	Rolled Up Milestone	[White diamond]		

COMPLETION APII MEDAK

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
33	Aggr. delivery data	242.5d	12/2/96	11/5/97																
46	Analysis by HQ-NAPO	244d	12/6/96	11/12/97																
59	CPWSS IBRAHIMPUR	125d	11/19/96	5/12/97																
60	Scheme stabilisation	19w	11/19/96	3/31/97																
61	Technical audit	2w	4/1/97	4/14/97																
62	Rectifications	4w	4/15/97	5/12/97																
63	CPWSS BORANCHA	125d	11/19/96	5/12/97																
64	Outstanding works	30d	11/19/96	12/30/96																
65	Staff quarters Borancha	4w	11/19/96	12/16/96																
66	GLBR at Tumnurgutta	4w	11/19/96	12/16/96																
67	Booster NPally	6w	11/19/96	12/30/96																
68	Scheme stabilisation	19w	11/19/96	3/31/97																
69	Technical audit	2w	4/1/97	4/14/97																
70	Rectifications	4w	4/15/97	5/12/97																
71	CPWSS KARASGUTHY	125d	11/19/96	5/12/97																
72	Outstanding works	30d	11/19/96	12/30/96																
73	SO building at h/w	2w	11/19/96	12/2/96																
74	Staff quarters h-w	4w	11/19/96	12/16/96																
75	GM Mannur to Maikode	2w	11/19/96	12/2/96																
76	GM Abenda to Hukrana	6w	11/19/96	12/30/96																

Project: Completion APII Medak Date: 2/14/97	Task 	Summary 	Rolled Up Progress 	
	Progress 	Rolled Up Task 		
	Milestone 	Rolled Up Milestone 		

COMPLETION APII MEDAK

ID	Task Name	Duration	Start	Finish	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
77	GM to Yesgi & Audathpur	4w	11/19/96	12/16/96															
78	Scheme stabilisation	19w	11/19/96	3/31/97															
79	Technical audit	2w	4/1/97	4/14/97															
80	Rectifications	4w	4/15/97	5/12/97															
81	PROJECT COMPLETION	166d	11/19/96	7/7/97															
82	Prep. draft final report	21w	11/19/96	4/14/97															
83	Final completion report	4w	6/3/97	6/30/97															
84	Submission to RNE	1w	7/1/97	7/7/97															

Project: Completion APII Medak Date: 2/14/97	Task	Summary	Rolled Up Progress
	Progress	Rolled Up Task	
	Milestone	Rolled Up Milestone	

Item	Target Date
1. CPWSS Ibrahimpur	12/05/97
2. CPWSS Borancha	12/05/97
3. CPWSS Karasguthy	12/05/97

Other general activities are scheduled as

Internal Inventory	02/12/96
O & M Manual	02/06/97
Completion Reports	26/05/97
As built drawings	24/02/97
Training of O&M staff	07/07/97
Final Completion report	07/07/97

There are no physical works pending but for scheme stabilisation time is given up to 31/03/97 and 6 weeks time is reserved for technical audit and rectification, hence completion of scheme is scheduled for 12/05/97.

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	GENERAL ACTIVITIES	257d	11/19/96	[Summary bar]															
2	Basic Information	155d	11/19/96	[Summary bar]															
3	Internal Inventory	2w	11/19/96	[Task]															
4	Compl. reports-Item	19w	11/19/96	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
5	Revision compl. reports	2w	6/10/97								[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
6	As-built drawings	2w	11/19/96	[Task]															
7	Operation & Maintenance	115d	12/3/96	[Summary bar]															
8	O&M Manuals	60d	12/3/96	[Summary bar]															
9	Draft Version	7w	12/3/96	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
10	Comments NAPO	2w	1/21/97			[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
11	Final version	3w	2/4/97			[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
12	Training O&M staff	55d	1/21/97	[Summary bar]															
13	Identification needs	1w	1/21/97	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
14	Design training plan	2w	1/28/97	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
15	Conduct training	8w	2/11/97			[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
16	O&M Budget	51d	3/3/97	[Summary bar]															
17	Budget Preparation	2w	3/3/97			[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
18	Allocation by PRED	6w	4/1/97			[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]
19	Performance Monitoring	248d	12/2/96	[Summary bar]															
20	Aggr. pump data	242.5d	12/2/96	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]	[Task]

Project: Completion APII Parchoor
Date: 2/17/97

Task [White Box] Summary [Black Arrow] Rolled Up Progress [Thick Black Bar]
 Progress [Thick Black Bar] Rolled Up Task [White Box]
 Milestone [Black Diamond] Rolled Up Milestone [White Diamond]

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
33	Aggr. delivery data	242.5d	12/2/96	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	
46	Analysis by HQ/NAPO	244d	12/6/96	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	
59	CPWSS ABPALEM	125d	11/19/96	▬																
60	Outstanding works	30d	11/19/96	▬																
61	Stone filling around intake	6w	11/19/96	▬																
62	Extn RW GM Bpalli	5w	11/19/96	▬																
63	CW Sump Adusumalli	6w	11/19/96	▬																
64	CW Sump Inagallu	6w	11/19/96	▬																
65	CW Sump Cpadu	6w	11/19/96	▬																
66	Extn VDS ABPAlem II	6w	11/19/96	▬																
67	Extn VDS Deverapalli II	6w	11/19/96	▬																
68	Extn VDS Bodawada II	6w	11/19/96	▬																
69	Canal off take for GM BPalli	8w	3/3/97	▬																
70	Scheme stabilisation	19w	11/19/96	▬																
71	Technical audit	2w	4/1/97	▬																
72	Rectifications	4w	4/15/97	▬																
73	CPWSS MVPALEM	80d	11/19/96	▬																
74	Outstanding works	30d	11/19/96	▬																
75	Addi. Pumps at Punur	6w	11/19/96	▬																
76	Extn VDS MVPalem &4	6w	11/19/96	▬																

Project: Completion APII Parchoor Date: 2/17/97	Task	▬	Summary	▬	Rolled Up Progress	▬
	Progress	▬	Rolled Up Task	▬		
	Milestone	◆	Rolled Up Milestone	◇		

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
77	Scheme stabilisation	4w	12/31/96			▬														
78	Technical audit	2w	1/28/97			▬														
79	Rectifications	4w	2/11/97			▬														
80	CPWSS CHERUKURU	25d	1/28/97			▬														
81	Technical audit	2w	1/28/97			▬														
82	Rectifications	3w	2/11/97			▬														
83	INDIV. SCHEMES	145d	11/19/96	▬																
84	Outstanding works	30d	11/19/96	▬																
85	Augm. PWSS Daggubadu	6w	11/19/96	▬																
86	Augm. PWSS Subbareddyp	6w	11/19/96	▬																
87	Augm. PWSS Inkollu	6w	11/19/96	▬																
88	Augm. PWSS Ankirpalem	6w	11/19/96	▬																
89	RW GM to Bodawada	6w	11/19/96	▬																
90	VDS Budawada	6w	11/19/96	▬																
91	RW GM to Pavuluru	6w	11/19/96	▬																
92	Booster stn RNPalem	6w	11/19/96	▬																
93	VDS Kothapalem	6w	11/19/96	▬																
94	VDS ZVPalem	6w	11/19/96	▬																
95	VDS Nakkalapalem	6w	11/19/96	▬																
96	Scheme stabilisation	19w	11/19/96	▬																

Project: Completion APII Parchoor Date: 2/17/97	Task Progress Milestone 	Summary Rolled Up Task Rolled Up Milestone 	Rolled Up Progress
--	--	---	---

COMPLETION APII PRAKASAM

ID	Task Name	Duration	Start	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	7/97	8/97	9/97	10/97	11/97	12/97	1/98	2/98	
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
97	Technical audit	6w	4/1/97																	
98	Rectifications	4w	5/13/97																	
99	PROJECT COMPLETION	215d	11/19/96																	
100	Prep. draft final report	38w	11/19/96																	
101	Final completion report	4w	8/12/97																	
102	Submission to RNE	1w	9/9/97																	

Project: Completion APII Parchoor
Date: 2/17/97

Task **Summary**
Progress **Rolled Up Task**
Milestone **Rolled Up Milestone**

Item	Target Date
1. CPWSS AB Palem	12/05/97
2. CPWSS MV Palem	10/03/97
3. CPWSS Cherukuru	03/03/97
4. IPWSS	09/06/97.

Physical works and scheme stabilisation for AB Palem is continuing till 12/05/97.

Similarly scheme stabilisation and technical audit for a number of individual schemes result in a completion target of IPWSS for 09/06/97.

The general activities schedule is as follows :

Internal Inventory	02/12/96
Completion Reports	31/03/97
As-built drawings	02/12/96
O & M Manual	24/02/97
Training O&M staff	07/04/97
Final completion report	15/09/97

As there are so many individual augmentation schemes, preparation of Final completion report requires relatively more time and it is linked to many of the above activities (such as scheme completion, completion report, etc.) and targeted up to 15/09/97.

3. OPERATION & MAINTENANCE

3.1 Functioning of schemes as per NAPO monitoring format :

Since 1995 NAPO has been making efforts to introduce a comprehensive monitoring system to assess the utilisation of water supply infrastructure, performance of the schemes and delivery of water supply at village level.

Along with PRED and NGOs working in the NAP project area monitoring formats have been developed and NAPO is receiving monthly information accordingly.

The two tiers of monitoring information received are

- * **Aggregate pumping data :** PRED is submitting monthly aggregate pumping data both for raw water and clear water for all the schemes
- * **Village level water monitoring formats :** In the villages where NGOs are working, users are collecting the information related to daily supply and through NGOs it being routed to NAP Office for analysis.

Recently it was agreed upon that PRED will start monitoring village level supply on the lines of what NGOs are coordinating and provide this information to NAPO.

Analysing and comparing the above two tiers of information for the reporting period (Apr, 96 to Sept, 96) with the capacities as stated by the PRED in internal inventory formats, an effort is made to assess the volume of raw and clear water pumped, and LPCD supplied at village level. The comparison of these data with the design criteria provides insights to the level of utilisation of RWS infrastructure as built.

(Please refer annexure 3 to find the methodology of analysis.)

Data and Analyses for monitoring of water delivery :

In spite of energetic efforts from NAPO and PRED, the first presentation of such data is far from complete.

On several schemes it proved impossible for the PRED to provide the required data, and these schemes then had to be excluded from the presentation.

On none of the schemes, has PRED been able to provide the data per sub-zone, as was agreed earlier in developing the formats for inventory and pumping data.

The lack of this information prevents us from being able to assess sub-zone and village specifics. Hence the present data, constitute averages per scheme, but do not allow a comparison between the various zones or branches of the schemes, which in our opinion may vary in actual practice.

As for the data on water received in the villages, NAPO can only record these in the villages covered by the community participation programme.

Recording on all the villages of the AP II projects is possible by increasing the coverage of the NGO programme and by PRED's efforts to involve sarpanches in the respective villages to get recordings at village level..

In addition PRED staff would have to be further convinced of the purpose and usefulness of this monitoring, and perceive this as INTERNAL MONITORING, rather than consider it as external monitoring by NAPO.

In spite of the imperfections cited above, NAPO would like to present the results of the monitoring data and analyses as a first effort to introduce the system.

We look forward to PRED's response to these data and their follow up to further fine-tune and introduce a system of monitoring the actual water delivery, within the PRED NAP programme.

3.1.1 MAHABUBNAGAR

Mahabubnagar district consists of one CPWSS, Chinnamaroor. PRED has submitted the aggregate pumping data for the reporting period and the analysis of this information is as follows.

In Mahabubnagar project area it is reported that 32 villages out of 36 are covered with water supply but the aggregate pumping data provided by PRED does not cover the details of second stage pumping at Pentlavally, Kondur, Weepanagandla and Kethepally. It would be interesting to know the pumping details at these second stage pumping stations to analyse transmission losses. However after analysing the data submitted to NAPO, the LPCD and pumping details are as follows

Mahabubnagar-Chinnamaroor LPCD trend

Table - 5

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	38.82	17.68	60.51	55.01	39.04	79.22
Clear Water	29.15	14.50	36.70	32.35	24.78	42.74

Mahabubnagar - Chinnamaroor CPWSS capacity utilisation

Table - 6

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	53%	24%	69%	63%	44%	90%
C/W pumped	40%	19%	42%	37%	28%	49%
Village Delivery	NA	NA	NA	NA	NA	NA

As there is no NGO working in the project area, village delivery details are not available. (NA)

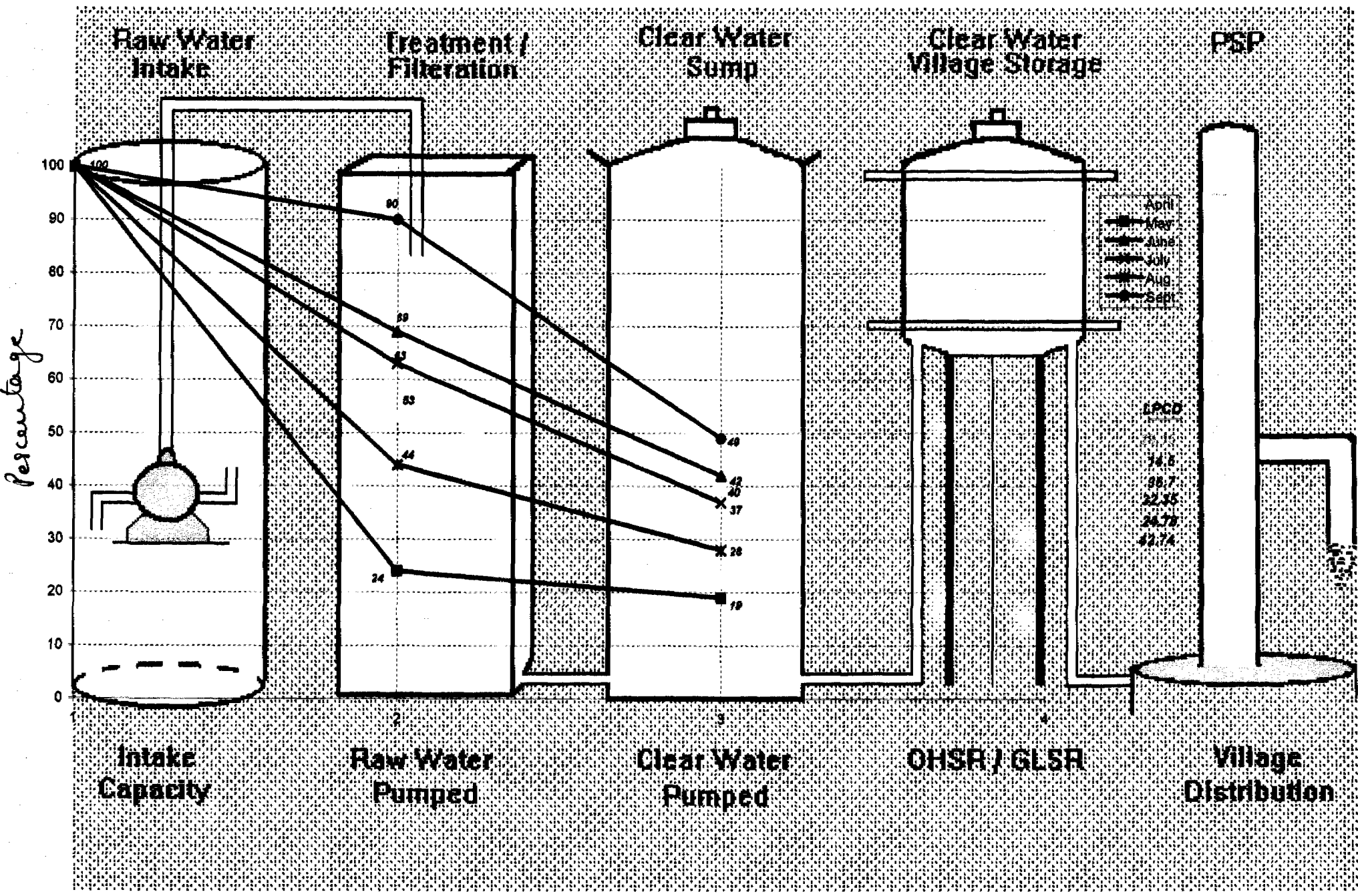
The clear water LPCD is varying between 14.5 to 42.74 and the corresponding variation in raw water LPCD pumped is between 17.68 to 79.22 (this figure is derived from the pumping data). As it is evident from the table 3.1.2 there is significant & inconsistent variation in the r/w LPCD and c/w LPCD.

Actual village delivery could be less than the above figure after accounting for transmission losses & water consumed for testing the transmission lines.

The fall in LPCD of May, 96 can be attributed to the drying up of Bekkam tank in May, 96. The rise in LPCD of Sept, 96 could be due to the fact that SRISAILAM reservoir is filled to the brim by Sept, 96.

The scheme is functioning between 19%(May 96) to 49%(Sept, 96) of its capacity.

UTILISATION OF INFRASTRUCTURE - MAHBUBNAGAR PUMPING INFO (Apr-Sept 96)



Percentage losses in operation

Table - 7

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	13%	5%	27%	26%	16%	41%

There is no particular pattern in losses in treatment. The loss percentage is as high as 41% in Sept 96. NAPO advises PRED to look into the details and improve on losses .

3.1.2 KURNOOL

Even though in Kurnool district, all the 5 CPWSS are commissioned, aggregate pumping data were submitted for only 3 CPWSS namely Chinnakothiliki, Manchala and Hanawal.

For CPWSS Sathnur and CPWSS Halvi aggregate pumping were not made available, in spite of repeated requests to the concerned staff in the PRED.

PRED has informed NAPO that these schemes are not yet stabilized, and hence no data on aggregate pumping could be made available.

NAPO begs to disagree with that, because regular or irregular, data on actual pumping can and should be recorded.

These two schemes could hence not be included in the monitoring system.

CHINNAKOTILIKI

Chinnakothiliki LPCD trend

Table - 8

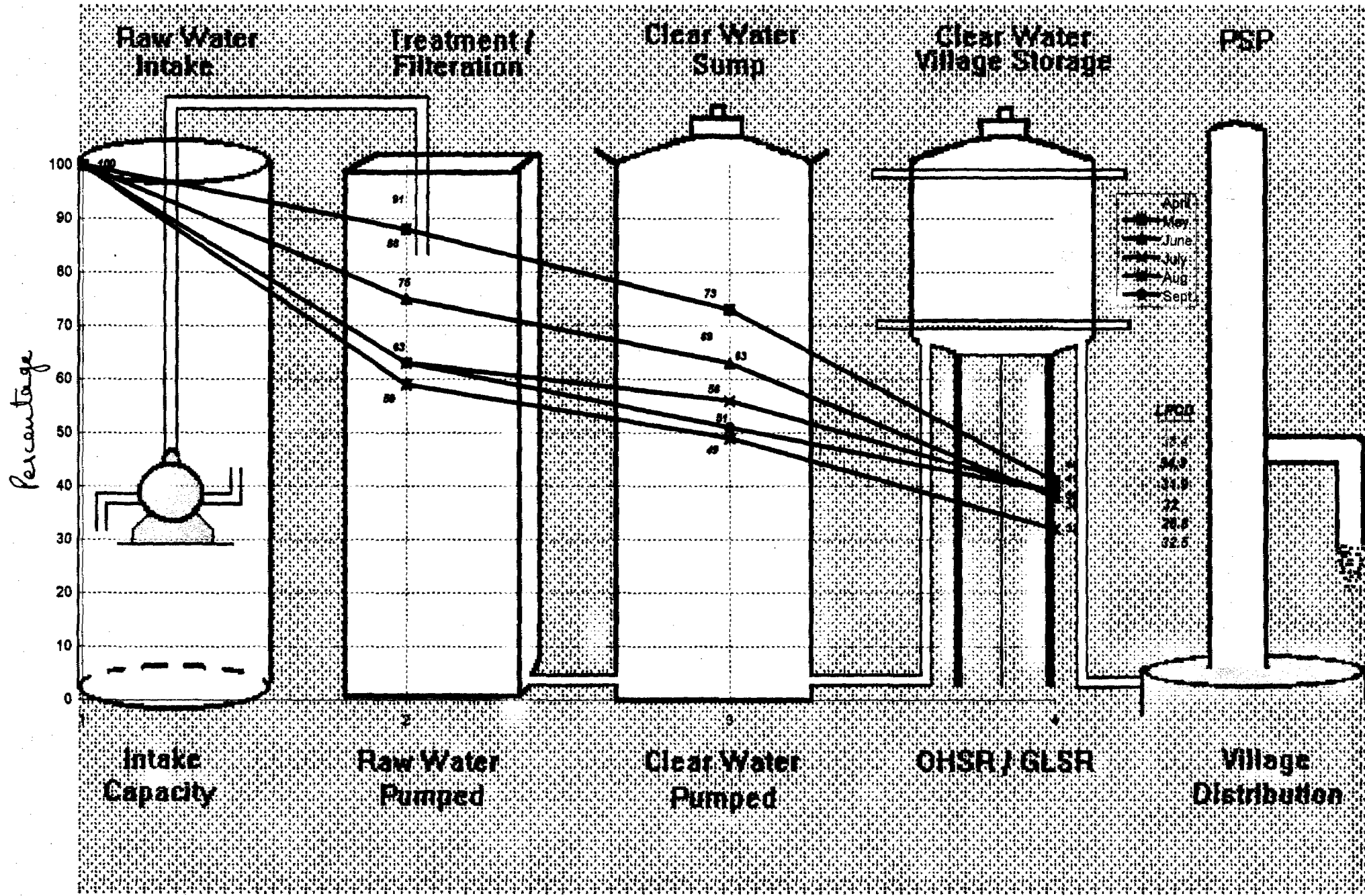
Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	75.3	72.7	62.3	51.9	49.3	51.9
Clear Water	57.7	60.9	52.4	46.4	40.9	42.5
Vill. Supply	38.4	34.3	31.9	32.0	26.8	32.5

Chinnakothiliki CPWSS capacity utilisation

Table - 9

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	91%	88%	75%	63%	59%	63%
C/W pumped	69%	73%	63%	56%	49%	51%
Village Delivery	44%	41%	38%	39%	32%	39%

UTILISATION OF INFRASTRUCTURE - CHINNAKOTHILIKI PUMPING INFO (Apr-Sep 96)



For the reporting period LPCD (Raw Water pumped) is varying from 51.9 to 75.3 and LPCD (Clear Water pumped) is varying from 46.4 to 57.7 and the corresponding LPCD (village delivery) is varying from 25.6 to 38.4. At every stage there is decrease in the quantity.

The scheme is functioning between 32% to 44% of its capacity.

Percentage losses in operation

Table - 10

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	22%	15%	12%	7%	10%	12%
C/W pumping - Vill. supply	25%	32%	25%	17%	17%	12%

In the design parameters the total losses are projected as 20%, but the actual situation shows a poor performance with losses as high as 45% (22% + 25%) in Apr 96.

Manchala

Manchala LPCD trend

Table - 11

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	31.0	43.5	35.0	36.2	39.1	29.0
Clear Water	30.0	31.7	29.0	34.5	34.9	35.0
Vill. Supply	23.0	16.0	20.0	21.7	20.9	19.0

Manchala CPWSS capacity utilisation

Table - 12

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	67%	94%	75%	78%	84%	63%
C/W pumped	64%	68%	63%	74%	75%	75%
Village Delivery	49%	34%	43%	47%	45%	41%

For the reporting period LPCD (R/W pumped) is varying from 43.5 to 31 and LPCD (C/W pumped) is varying from 31.7 to 30 and the corresponding LPCD (village delivery) is varying from 16 to 23. At every stage there is decrease in the quantity due to operation of the system, leakages at plant, transmission losses & testing of transmission lines. May be pumping capacities of the motors need to be verified to know whether they are functioning up to its rated capacities or not.

The scheme is functioning between 34% to 49% of its capacity.

In the villages of these two schemes, NGO HERSELF is working hence the data of village level delivery are available.

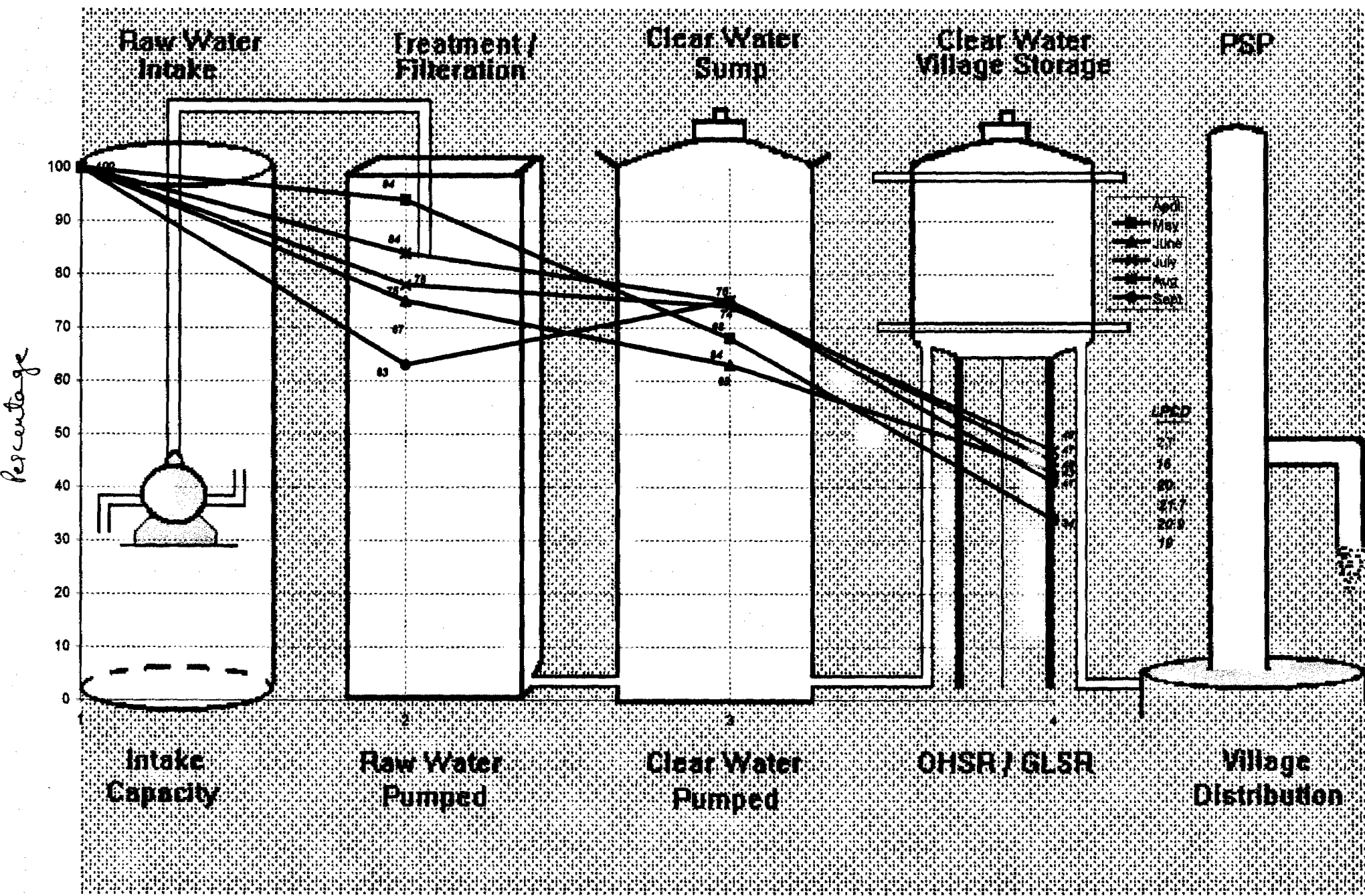
Percentage losses in operation

Table - 13

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	3%	26%	12%	4%	9%	(-12%)
C/W pumping - Vill. supply	15%	34%	20%	27%	30%	34%

In this case also irregular pattern in losses can be noticed and -12% losses (is in fact 12% gain in treatment) cannot be explained logically, as it seems impossible to pump more clear water than raw water. PRED is requested to look into the reliability of data.

UTILISATION OF INFRASTRUCTURE - MANCHALA PUMPING INFO (apr-Sep 96)



Hanawal

Hanawal LPCD trend

Table - 14

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	NA	NA	NA	NA	NA	NA
Clear Water	11.3	14.5	10.0	8.0	33.1	7.6
Vill. Supply	NA	NA	NA	NA	NA	NA

Hanawal CPWSS capacity utilisation

Table - 15

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	NA	NA	NA	NA	NA	NA
C/W pumped	14%	18%	12%	10%	41%	9%
Village Delivery	NA	NA	NA	NA	NA	NA

In the villages of this scheme, there is no NGO involvement, hence village level data are not available.

For the reporting period LPCD (R/W pumped) information has not been made available.

The trajectory of the scheme is from the Tungabhadra LLC (lower level canal), in to a summer storage tank by means of pumping as well as gravity. Pumping data have not been recorded.

As the monitoring system developed earlier describes raw water production in terms of pumping.

As there was no prescription for taking the raw water, taken through gravity into consideration, PRED local staff have decided to abandon the entire monitoring effort altogether.

NAP Office would like to encourage the Engineers at Hanawal to apply their engineering background and genius and their creativity to come up with their own ways to assess the volume of raw water produced.

While NAP Office and PRED head Office can and will help in developing ideas and models and guidelines, these are provided as examples and not as prescriptions that are rigid and to be followed to the letter.

The attitude taken on water monitoring in Hanawal can so far only be interpreted as a lack of interest and hardly constructive.

NAPO suggests that the hours of operating the valve for the gravity pipe are recorded and quantity will be calculated on the basis of the dimension of the pipe.

The same system should be applied in the recording of Raw Water supply from the Summer storage tank to the filter, which is also done by pumping and by gravity.

The LPCD (Clear Water pumped) is varying from 7.6 to 33.1.

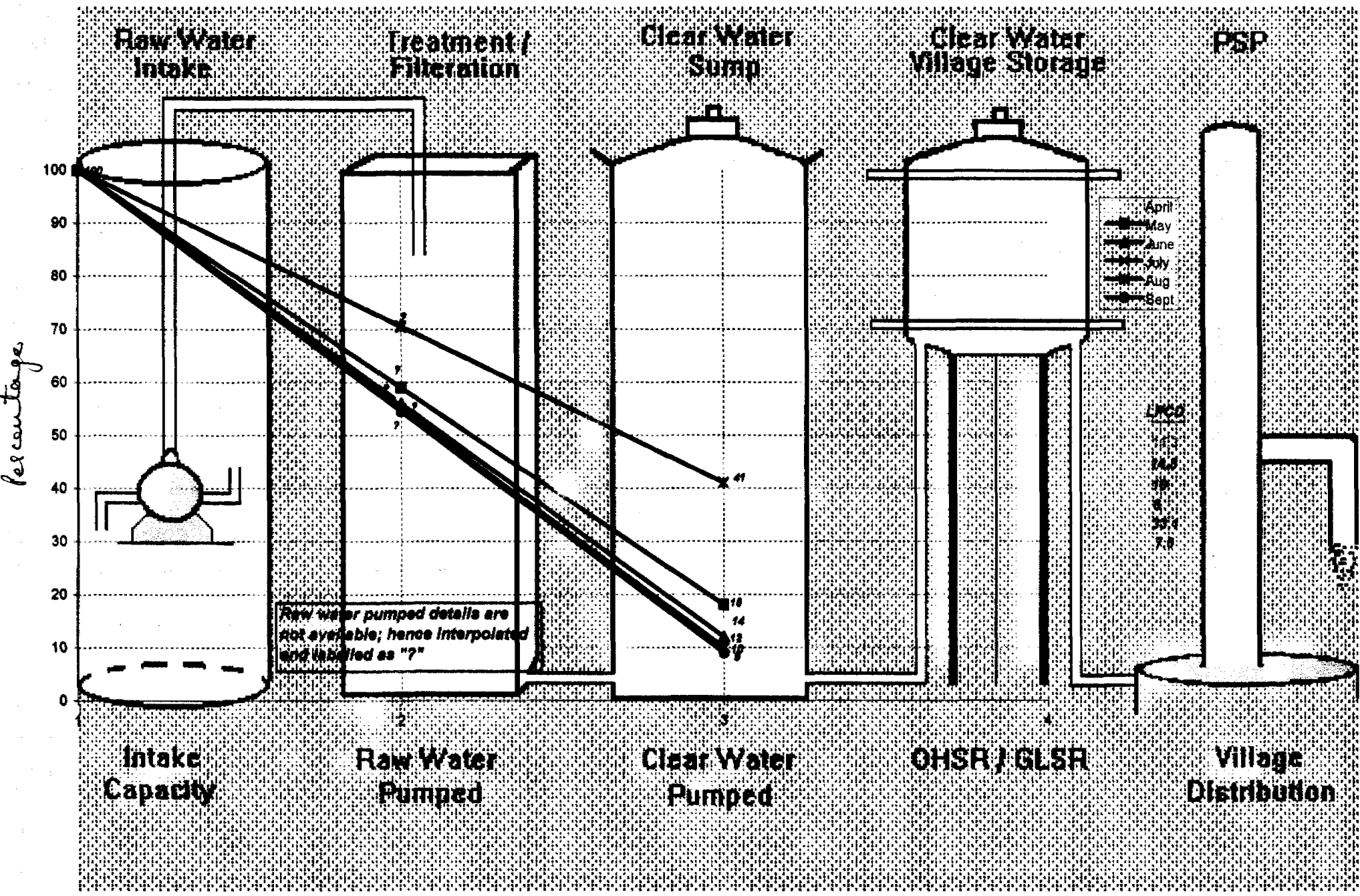
The scheme is functioning between 9% to 41% of its capacity.

The reason for such a low performance during the months April, May and June lies in the fact that the SST, which is meant to store the water to bridge the summer time, could not be filled in time from LLC of Tungabhadra project, before the canal closure on 15 March 1996.

The LPCD for the month of August is reasonable at 33.1, but for September the LPCD drops to 7.7. Similar to August, water was provided almost daily, but the number of hours of clear water pumping dropped from 10 hrs per day in August to some two to three hours of clear water pumping in September.

The reasons for this drop should be investigated.

UTILISATION OF INFRASTRUCTURE - HANAWAL PUMPING INFO (Apr-Sep 96)



3.1.3 MEDAK

CPWSS Ibrahimpur

Ibrahimpur LPCD trend

Table - 16

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	48.2	44.7	47.4	80.1	81.0	51.9
Clear Water	40.2	36.8	39.5	61.2	66.5	43.8

Ibrahimpur CPWSS capacity utilisation

Table - 17

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	49%	45%	48%	81%	82%	52%
C/W pumped	41%	37%	40%	62%	67%	44%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 44.7 to 81 and LPCD (C/W pumped) is varying from 36.8 to 66.5.

The scheme is functioning between 37% to 67% of its capacity (Clear Water pumped to full capacity).

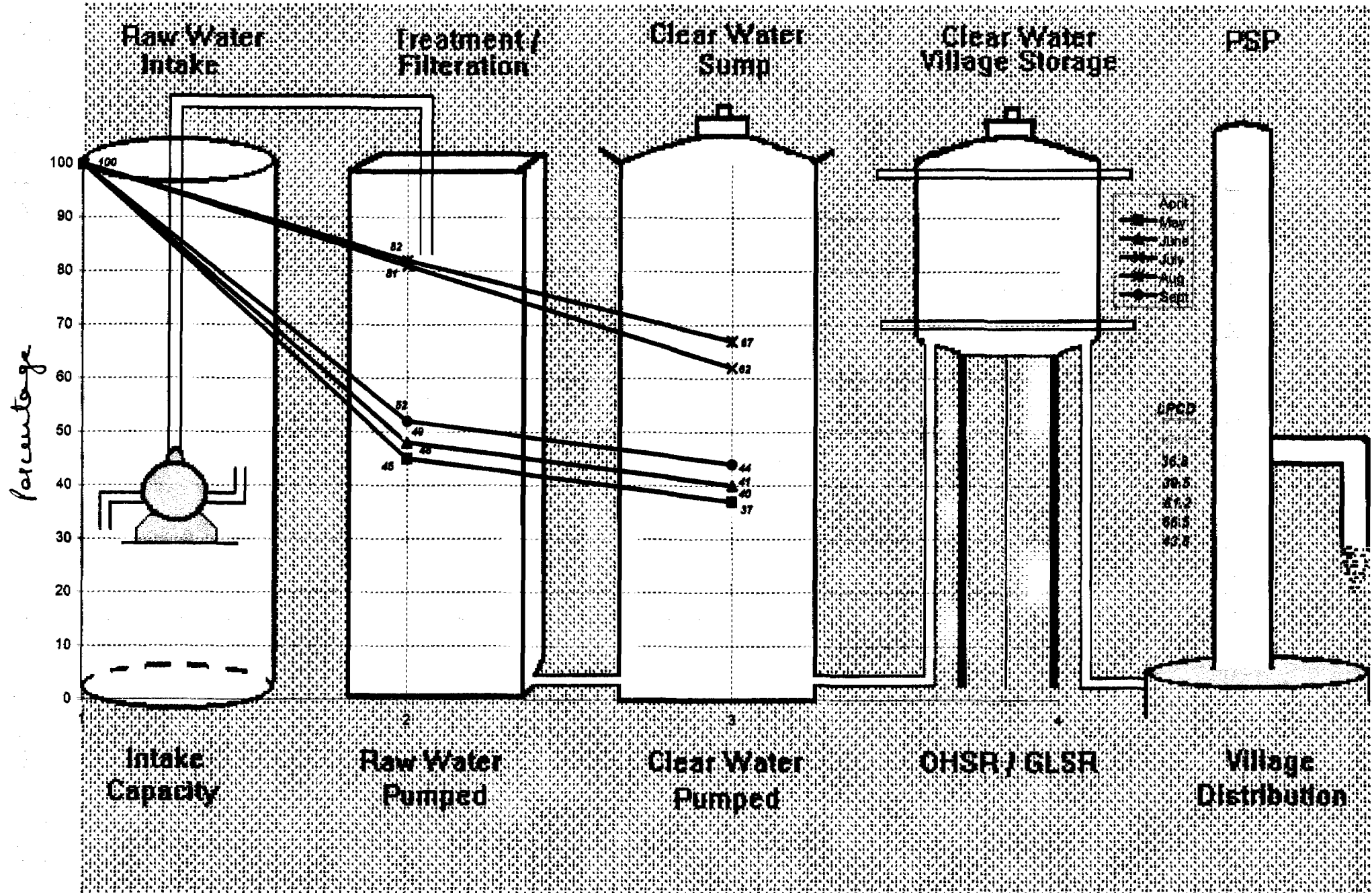
Percentage losses in operation

Table - 18

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	8%	8%	8%	19%	15%	8%

In July 96 and August 96 losses percentage has risen is it related to the volume treated ?

UTILISATION OF INFRASTRUCTURE - IBRAHIMPUR PUMPING INFO (Apr-Sept 96)



Karaguthy

Karaguthy LPCD trend

Table - 19

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	45.0	53.6	45.5	18.5	10.1	40.9
Clear Water	48.8	55.4	47.6	21.4	9.4	48.2

Karaguthy CPWSS capacity utilisation

Table - 20

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	64%	74%	64%	27%	14%	58%
C/W pumped	69%	76%	68%	29%	13%	68%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 10.1 to 45 and LPCD (C/W pumped) is varying from 9.4 to 48.8. This figure is very low given the fact that there is water available in the river(back water) and generators are available in the scheme.

For the months April, May, June, July and September c/w pumped is more than r/w pumped. It is technically not feasible to have more clear water than raw water and in this case either the pumping capacity or the data on pumping hours provided are not reliable.

The scheme is functioning between 13% to 76% of its capacity (Clear Water pumped to total capacity).

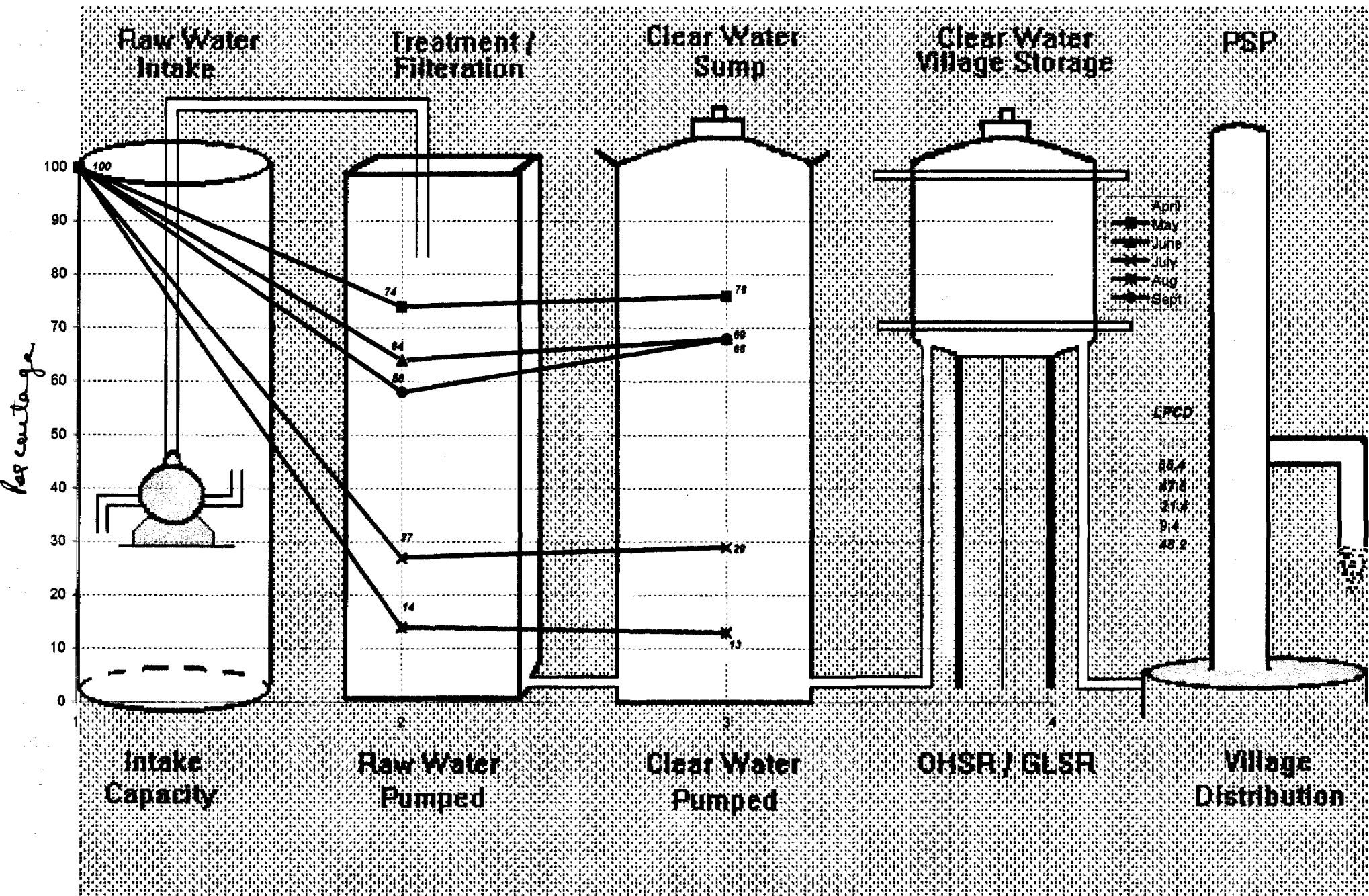
Percentage losses in operation

Table - 21

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	-5%	-2%	-4%	-2%	1%	-10%

PRED is requested to look into the reliability of data.

UTILISATION OF INFRASTRUCTURE - KARASGUTHY PUMPING INFO (Apr-Sept 96)



Borancha CPWSS

Borancha LPCD trend

Table - 22

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	53.9	58.3	39.5	50.7	47.8	63.0
Clear Water	46.9	48.7	31.1	41.1	31.7	51.3

Borancha CPWSS capacity utilisation

Table - 23

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	85%	89%	62%	77%	73%	99%
C/W pumped	74%	74%	49%	63%	48%	81%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 39.5 to 63 and LPCD (C/W pumped) is varying from 31.1 to 51.3.

The scheme is functioning between 45% to 81% of its capacity.

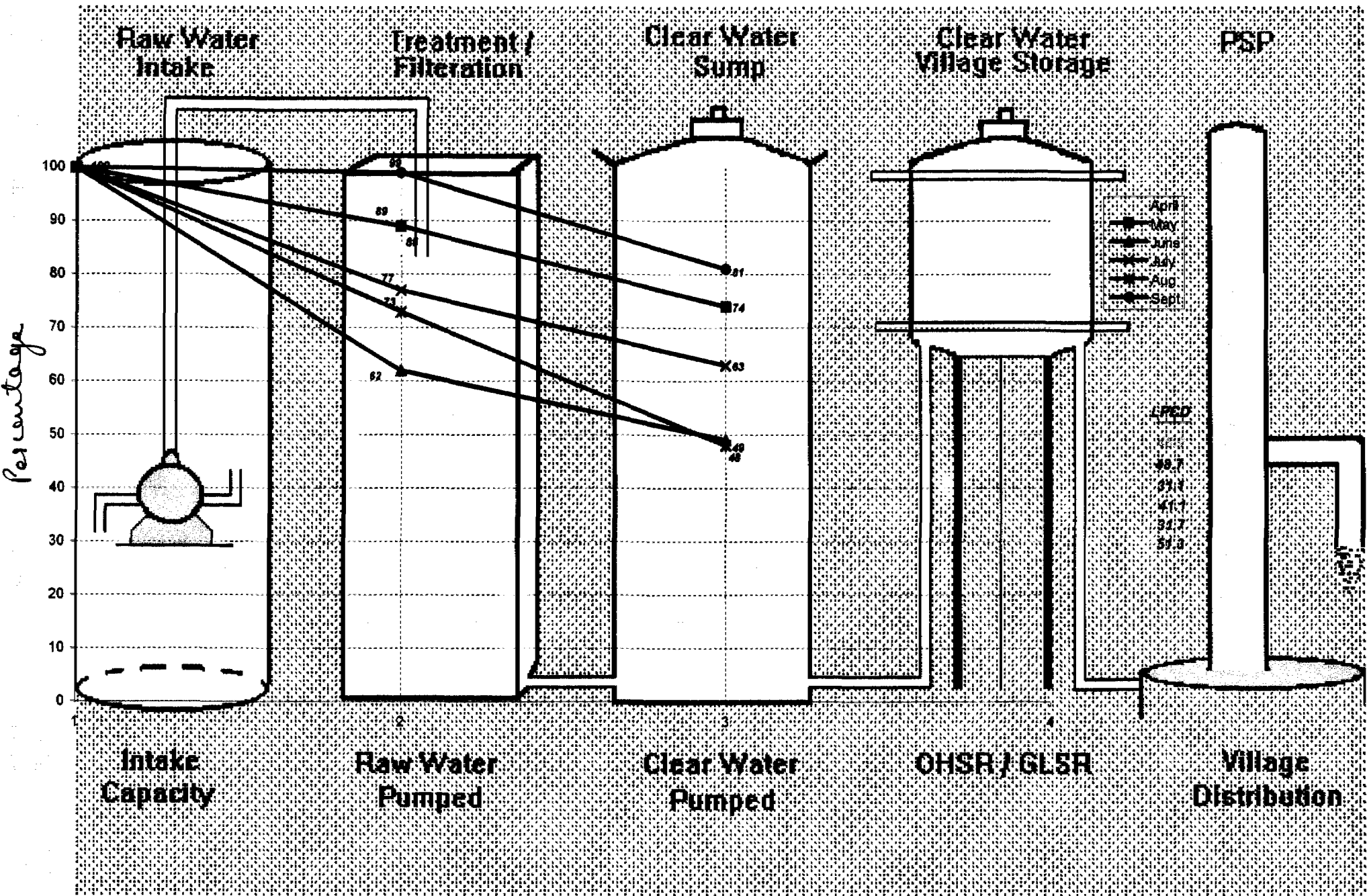
Percentage losses in operation

Table - 24

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	11%	15%	13%	14%	25%	18%

In Aug 96 the losses percentage is highest and it could be related to the pipe line (Borancha-Sindhole) breakage.

UTILISATION OF INFRASTRUCTURE - BORANCHA PUMPING INFO (Apr-Sep 96)



MARI Project area in CPWSS Boranacha :

Information on the level of RWS actually received at village level is available for 10 villages, out of the total of 35 villages of the Boranacha CPWSS, where NGO MARI is working.

Analysing this information along with aggregate pumping data of the Boranacha CPWSS, LPCD details & capacity utilisation trend is presented below.

MARI Project Area LPCD trend (Boranacha CPWSS)

Table - 25

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	53.9	58.3	39.5	50.7	47.8	63.0
Clear Water	46.9	48.7	31.1	41.1	31.7	51.3
Vill. Supply	13.0	10.3	6.8	7.3	3.1	16.0

MARI project villages capacity utilisation (Boranacha CPWSS)

Table - 26

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	85%	89%	62%	77%	73%	99%
C/W pumped	74%	74%	49%	63%	48%	81%
Village Delivery	21%	16%	11%	11%	5%	25%

Average LPCD varies from 3.1 litre (Aug 96) to 16 litres (September 96) and corresponding capacity utilisation percentages are 5 and 25 for these villages.

Percentage losses in operation

Table - 27

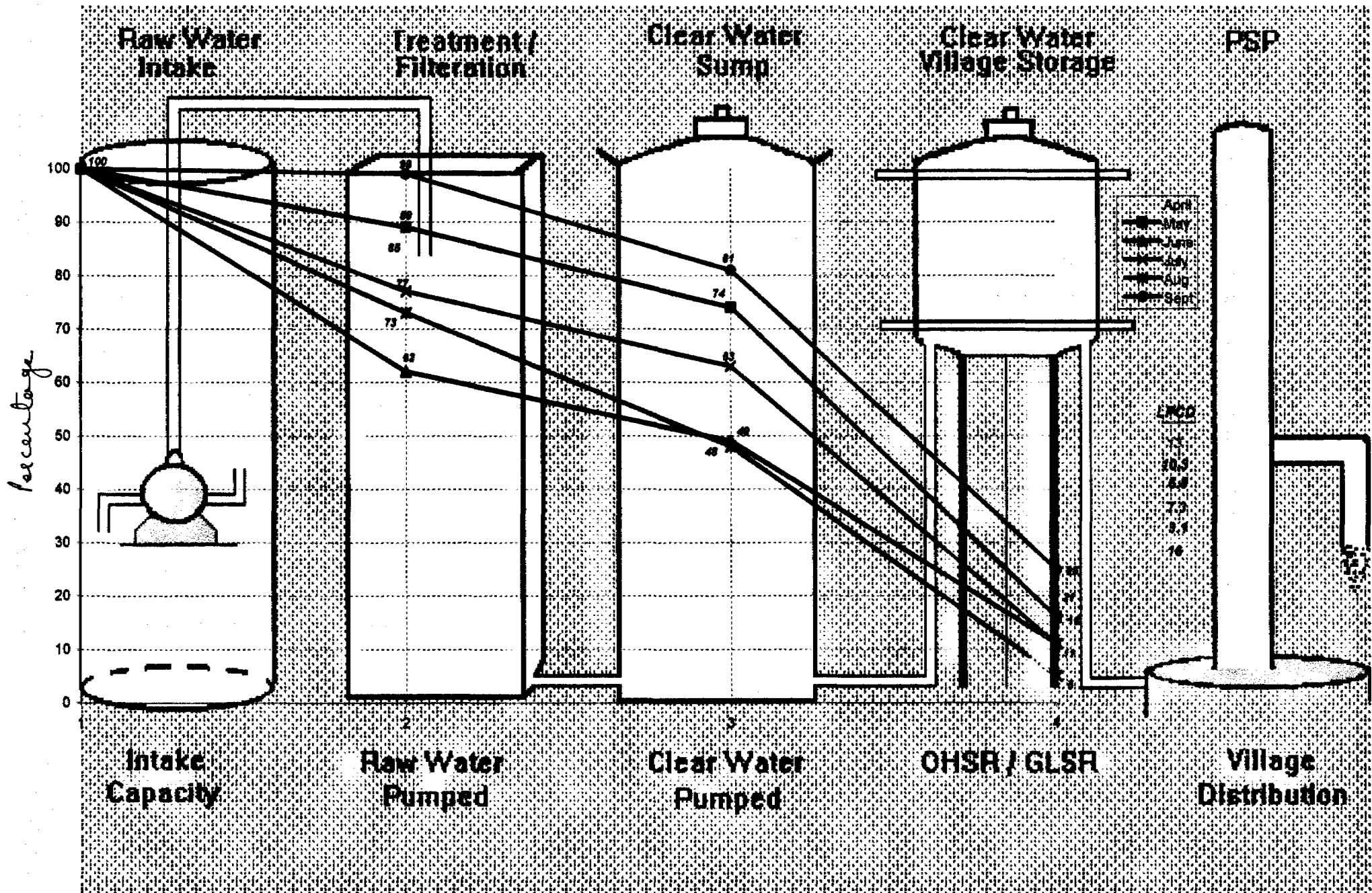
Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	11%	15%	13%	14%	25%	18%
C/W pumping - Vill Supply	53%	58%	38%	52%	43%	56%

It was observed that supply to these villages are scheduled to serve alternate days and the gap between c/w water pumped(%) and village supply(%) in table 3.3.12 can be explained by this fact. During the reporting period supply is disrupted by pipe line breakages (Aug 96) & generator failures hence performance level in these villages is very low.

It may be pointed out that the repair of the motor took two weeks, and after re installation the pipeline blew, which took another few weeks to repair.

RWS being a basic requirement PRED staff make look into possibilities to reduce the time taken for repairs.

UTILISATION OF INFRASTRUCTURE - MARI PROJECT AREA (Apr-Sep 96)



3.1.4 PRAKASAM

In Prakasam district there are 3 CPWSS and the aggregated pumping data related to all these 3 CPWSS were provided.

NGO ASSIST is working in the 11 villages of project area. But these villages are spread over 2 schemes AB Palem and MV Palem and some of them are only r/w augmentation to individual schemes. Hence that analysis is presented separately.

AB Palem

AB Palem LPCD trend

Table - 28

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	13.9	17.4	17.3	9.5	14.2	13.3
Clear Water	15.6	17.8	13.9	1.7	2.5	14.4

AB Palem CPWSS capacity utilisation

Table - 29

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	38%	46%	47%	25%	38%	36%
C/W pumped	43%	47%	38%	5%	7%	39%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 9.5 to 14.7 and LPCD (C/W pumped) is varying from 1.7 to 2.5.

For the months of April, May and September clear water pumped is more than raw water pumped. It is technically not feasible to have pumped more clear water than raw water and in this case either the pumping capacity or the data on pumping hours are not reliable.

Based on the data provided, the scheme is functioning between 5% to 43% of its capacity. This could be because of lack of water supply through the NS canals, while the "MOP UP" activities towards augmentation of available water supply, which was earlier based on erroneous assumptions of 250 days, have not yet been completed.

Especially in the months of July and August the performance was very low.

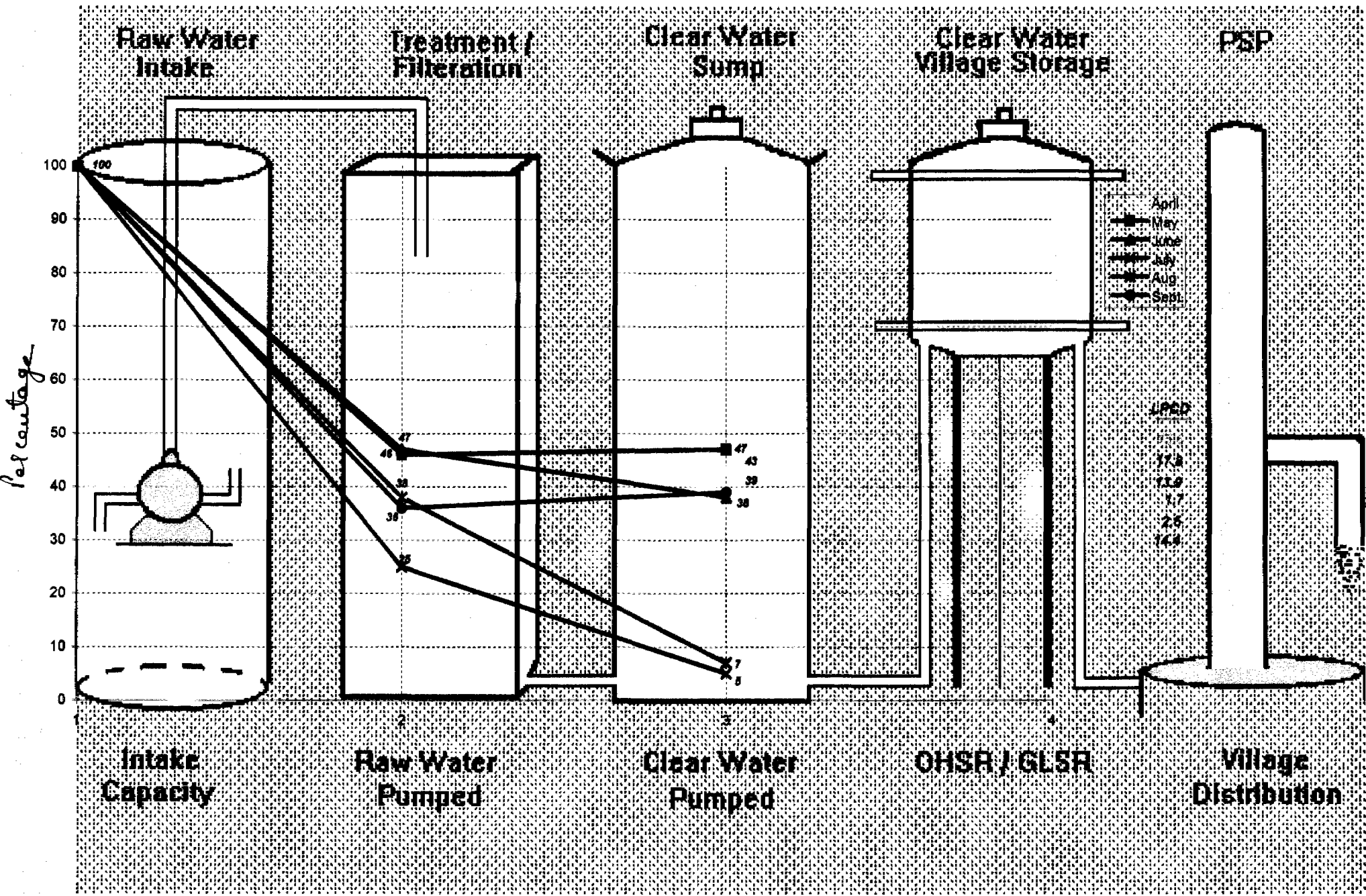
Percentage losses in operation

Table - 30

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	-5%	-1%	9%	20%	31%	-3%

PRED is requested to look into the reliability of data.

UTILISATION OF INFRASTRUCTURE - A B PALEM PUMPING INFO (Apr-Sep 96)



MV Palem CPWSS

MV Palem LPCD trend based on Population estimate of 4474 (PRED pumping data)

Table - 31

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	24.8	27.4	27.3	26.2	20.8	22.6
Clear Water	24.4	22.9	22.1	20.8	18.7	18.3

MV Palem CPWSS capacity utilisation

Table - 32

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	38%	40%	41%	38%	30%	34%
C/W pumped	37%	33%	33%	30%	27%	28%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 20.8 to 27.4 and LPCD (C/W pumped) is varying from 18.7 to 22.9.

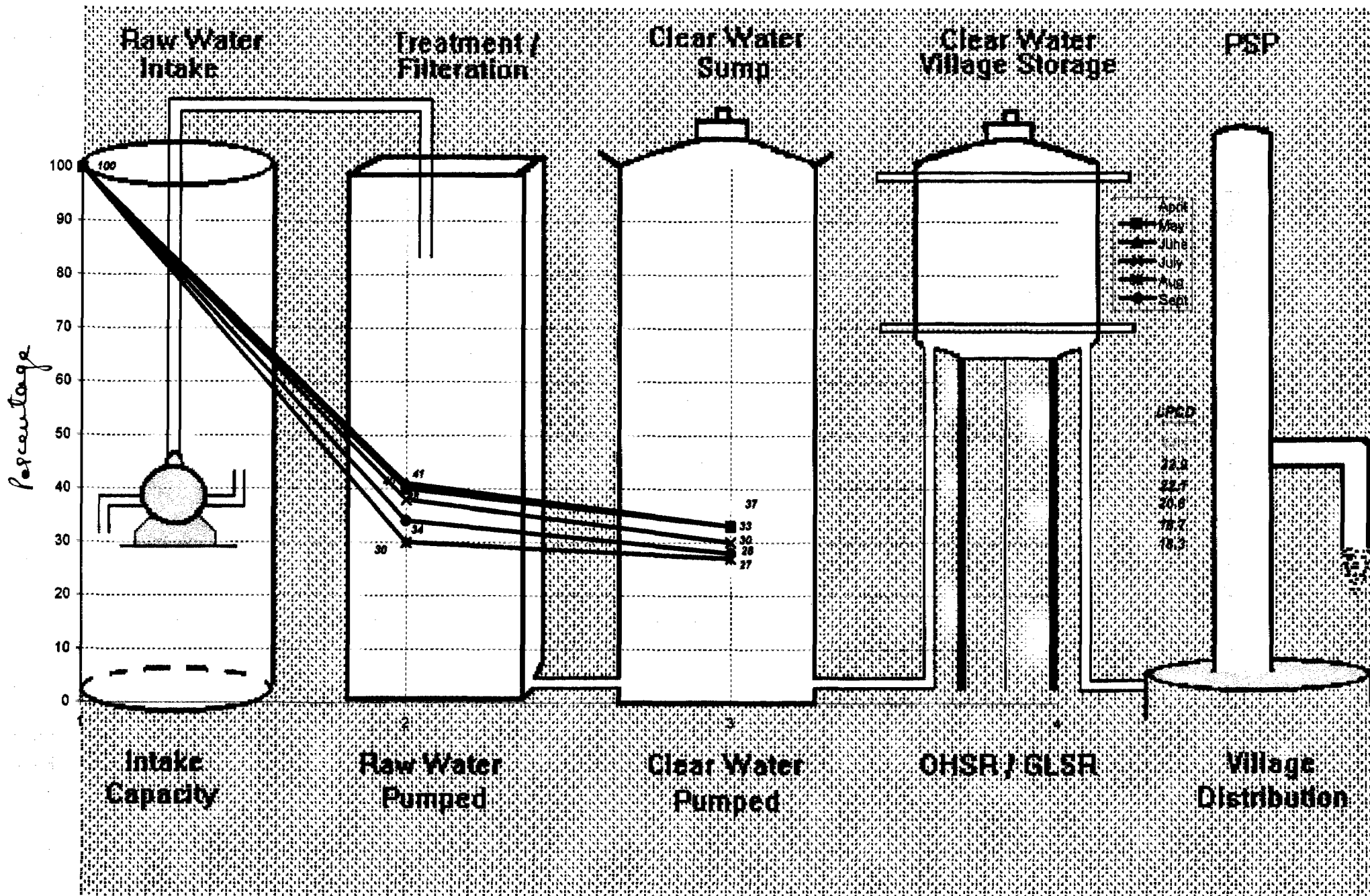
The scheme is functioning between 27% to 37% of its capacity. lack of water in NS canal affects this scheme too.

Percentage losses in operation

Table - 33

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	1%	7%	8%	8%	3%	6%

Compared to other schemes the loss percentages are much lower.



ASSIST Project area :

NGO ASSIST is working in 4 Villages of MV Palem scheme and for these villages, village level water supply data is available and the analysis of this data along with aggregate pumping data is presented below.

ASSIST Project area LPCD trend (MV Palem CPWSS) based on population figure of 2474 (supplied by NGO) Table - 34

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	44.8	49.6	49.4	47.3	37.6	40.9
Clear Water	44.1	41.4	39.9	37.6	33.8	33.0
Vill. Supply	49	48	49	47	49	49

ASSIST project area capacity utilisation (M V Palem)

Table - 35

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	38%	40%	41%	38%	30%	34%
C/W pumped	37%	33%	33%	30%	27%	28%
Village Delivery	41%	41%	41%	41%	41%	41%

In MV Palem villages RWS received is 41% of the capacity, which runs consistently through out the 6 months period, as supply was supplied on all the days of the six months .

Here one factor to be noted is that village level supply figures are higher than both raw water pumped and clear water pumped figures.

NAPO thinks this may be based on erroneous assumptions in the calculation, taking one reservoir capacity water, as supplied every day, which could be wrong as the reservoir may not be fully filled daily.

Another variation to be noted is in the population figures; the pumping data states the total population covered is 4474 where as NGO gives a figure of 2474 (which matches with the inventory information).

Analysis is made by considering both the population figures and presented separately.

Information is available for 6 villages of AB Palem which are raw water augmentation villages and for these six villages even though average LPCD details are worked out for the reporting period, it is not useful to give the capacity utilisation trend as the corresponding capacity, raw water pumped and clear water pumped details are not there.

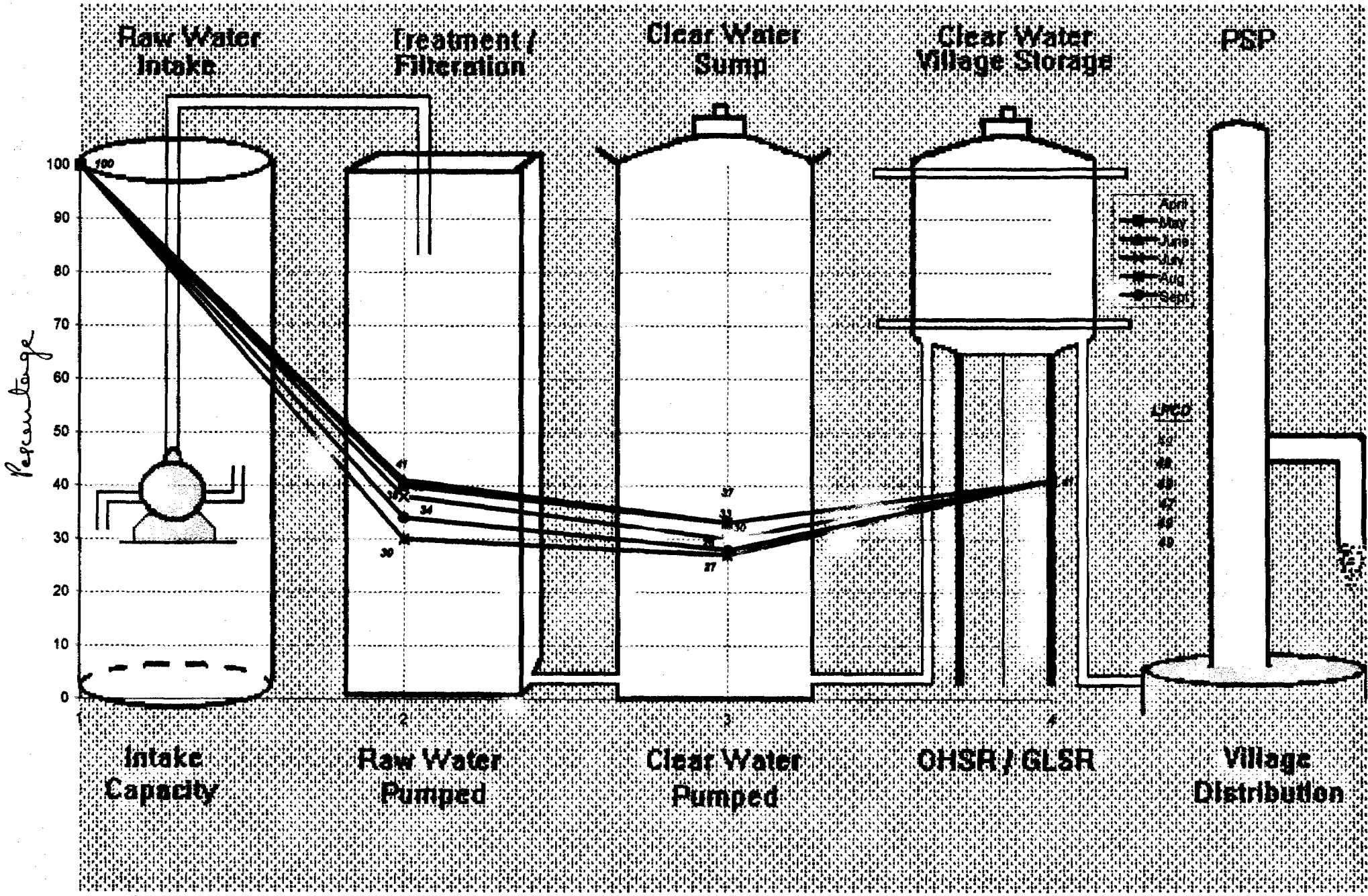
Percentage losses in operation

Table - 35

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	1%	7%	8%	8%	3%	6%
C/W pumping - Vill. supply	-4%	-8%	-8%	-11%	-14%	-13%

The assumption of one filling of reservoir may contribute to negative losses in village supply.

UTILISATION OF INFRASTRUCTURE - ASSIST PROJECT AREA (Apr-Sep 96)



Cherukuru

Cherukuru LPCD trend

Table - 36

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Raw Water	17.4	7.5	23.2	18.2	26.7	24.3
Clear Water	24.9	24.2	17.5	20.1	23.9	22.8

Cherukuru CPWSS capacity utilisation

Table - 37

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
Capacity	100%	100%	100%	100%	100%	100%
R/W pumped	35%	15%	47%	36%	52%	49%
C/W pumped	51%	48%	35%	39%	47%	46%
Village Delivery	NA	NA	NA	NA	NA	NA

For the reporting period LPCD (R/W pumped) is varying from 7.5 to 26.7 and LPCD (C/W pumped) is varying from 24.2 to 23.9.

In the months of April, May, June & July clear water is more than raw water pumped. It is technically not feasible to have more clear water than raw water and in this case either the pumping capacity or the pumping hours data is not reliable.

The scheme is functioning between 47% to 35% of its capacity.

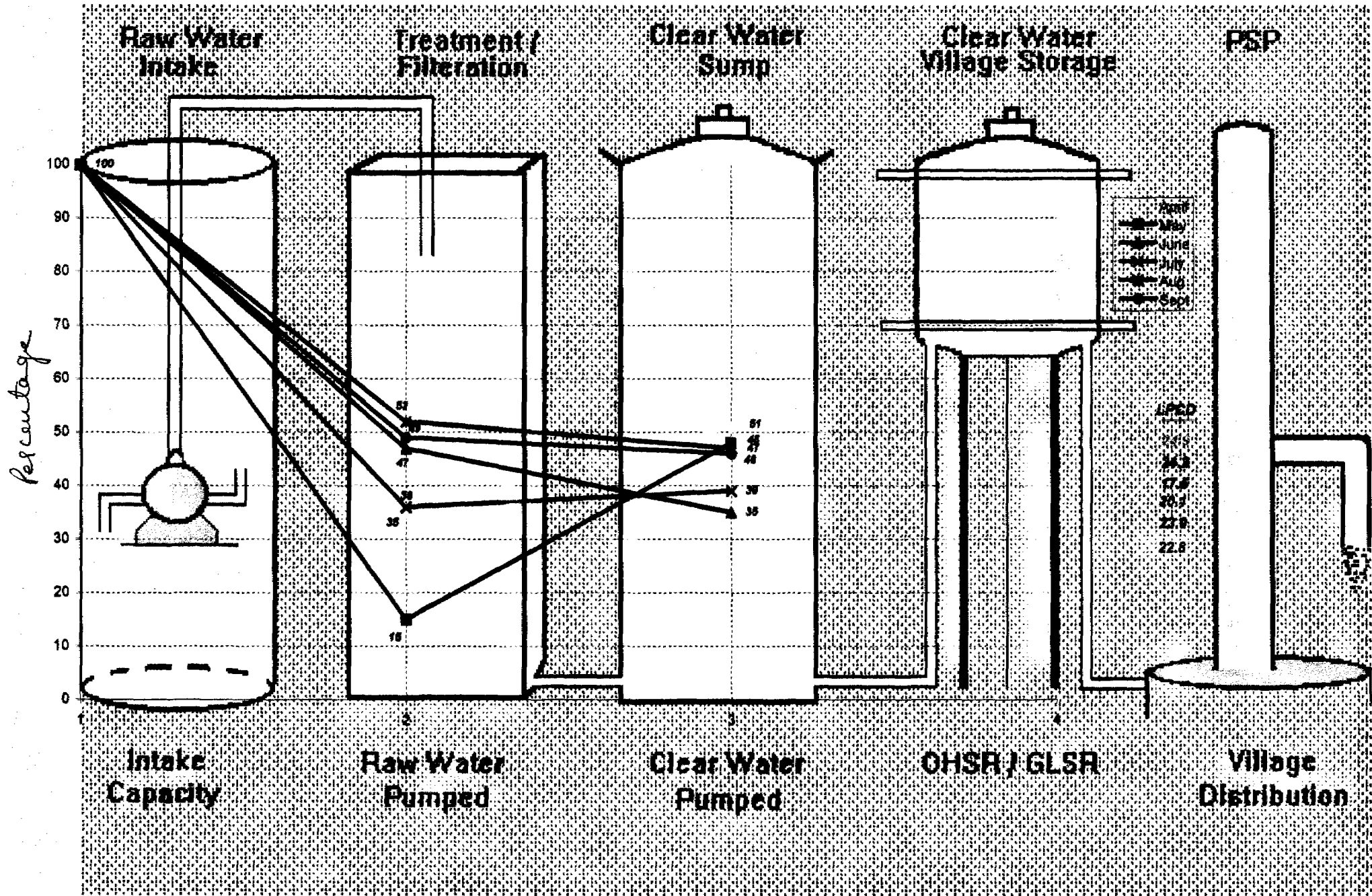
Percentage losses in operation

Table - 38

Month	Apr 96	May 96	Jun 96	Jul 96	Aug 96	Sept 96
R/W pumping - C/W pumping	-16%	-33%	12%	-3%	5%	3%

PRED is requested to look into the reliability of data.

UTILISATION OF INFRASTRUCTURE - CHERUKURU PUMPING INFO (Apr-Sep 96)



SNIRD project area :

Under NAP programme NGO SNIRD is operating in 26 villages of Chandavaram CPWSS in Prakasam district and this scheme belongs to AP I phase. Through this NGO village level water supply information is gathered but , for this scheme aggregate pumping data is not available.

Hence no of days delivery per month and ALPCD for month per village is presented in Table... and corresponding graphs are also presented which illustrate that

- * In Anantavaram and Khambampadu villages there is no water supply at all.
- * West Gangavaram , Veerepalli, Vaddipadu and Sangapuram supply is very erratic.
- * Many villages such as Donakonda, Indlacheruvu, G Donakonda, Aravellapadu ,Polepalli have alternate days of supply.
- * Chinagudipadu is have disproportionately big GLSR hence higher LPCD (varying between 40.6 to 86.8)
- * LPCD for many villages (around 20) is less than 20 (except NNpalem for the months of 4/96, 7/96 and 9/96 and Tummedalapadu for 4/96).

ANALYSIS WATER SUPPLY FORMATS

NGO : SNIRD

PROJECT : CHANDAVARAM (PRAKASHAM) AP I

MONITORED BY : NAPO

DATA,SOURCE : VILLAGE COMMITTEES THROUGH NGO

No	VILLAGE	4/96 DAYS	4/96 ALPCD	5/96 DAYS	5/96 ALPCD	6/96 DAYS	6/96 ALPCD	7/96 DAYS	7/96 ALPCD	8/96 DAYS	8/96 ALPCD	9/96 DAYS	9/96 ALPCD
1	Donakonda	15.0	5.6	16.0	5.8	14.0	5.3	15.0	5.4	14.0	5.1	15.0	5.6
2	VVPuram	15.0	9.4	16.0	9.7	14.0	8.8	9.0	5.4	12.0	7.3	8.0	5.0
3	Indlacheruvu	12.0	11.4	10.0	9.2	11.0	10.5	7.0	6.5	4.0	3.7	18.0	17.1
4	W Gangavaram	9.0	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	NNPalem	25.0	27.8	13.0	14.0	11.0	12.2	26.0	28.0	7.0	7.5	26.0	28.9
6	G donakonda	12.0	16.0	8.0	10.3	7.0	9.3	0.0	0.0	0.0	0.0	3.0	4.0
7	Badapuram	16.0	*	15.0	*	12.0	*	13.0	*	13.0	*	18.0	*
8	Aravellapadu	13.0	8.7	12.0	7.7	7.0	4.7	10.0	6.5	12.0	7.7	15.0	10.0
9	Thummedalapadu	26.0	27.1	12.0	12.1	6.0	6.3	8.0	8.1	8.0	8.1	15.0	15.6
10	Gangadevipalli	25.0	18.5	14.0	10.0	1.0	0.7	4.0	2.9	8.0	5.7	12.0	8.9
11	Chinagudipadu	22.0	76.4	13.0	43.7	20.0	69.4	24.0	80.6	12.0	40.3	25.0	86.8
12	Veerepalli	3.0	2.3	2.0	1.5	1.0	0.8	0.0	0.0	0.0	0.0	16.0	12.5
13	Vaddipadu	5.0	11.9	2.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	11.0	26.2
14	Sangapuram	1.0	2.1	2.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	20.8
15	Chandavaram	15.0	10.5	23.0	15.6	18.0	12.6	27.0	18.3	22.0	15.0	28.0	19.7
16	Lakshnipuram	26.0	11.3	31.0	13.0	16.0	6.9	23.0	9.7	17.0	7.1	30.0	13.0
17	Kallur	28.0	13.3	19.0	8.8	11.0	5.2	20.0	9.2	3.0	1.4	27.0	12.9
18	Polepalli	15.0	7.1	26.0	12.0	16.0	7.6	21.0	9.7	24.0	11.1	28.0	13.3
19	Kandulavaripalli	15.0	*	26.0	*	11.0	*	21.0	*	22.0	*	28.0	*
20	West Kasipuram	30.0	17.9	25.0	14.4	15.0	8.9	22.0	12.7	16.0	9.2	30.0	17.9
21	Rudra Samudram	20.0	18.9	13.0	11.9	9.0	8.5	13.0	11.9	10.0	9.1	21.0	19.8
22	Manginipudi	10.0	8.3	0.0	0.0	17.0	14.2	26.0	21.0	3.0	2.4	26.0	21.7
23	Kocherlakota	16.0	16.0	11.0	10.6	5.0	5.0	13.3	12.6	5.0	4.8	16.0	16.0
24	Ramapuram	18.0	14.6	18.0	14.2	17.0	13.8	24.0	18.9	0.0	0.0	25.0	20.3
25	Anantavaram	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Khambampadu	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ALPCD is average LPCD for the month based on no of days supplied

Anantavaram and Khambampadu don't receive water supply

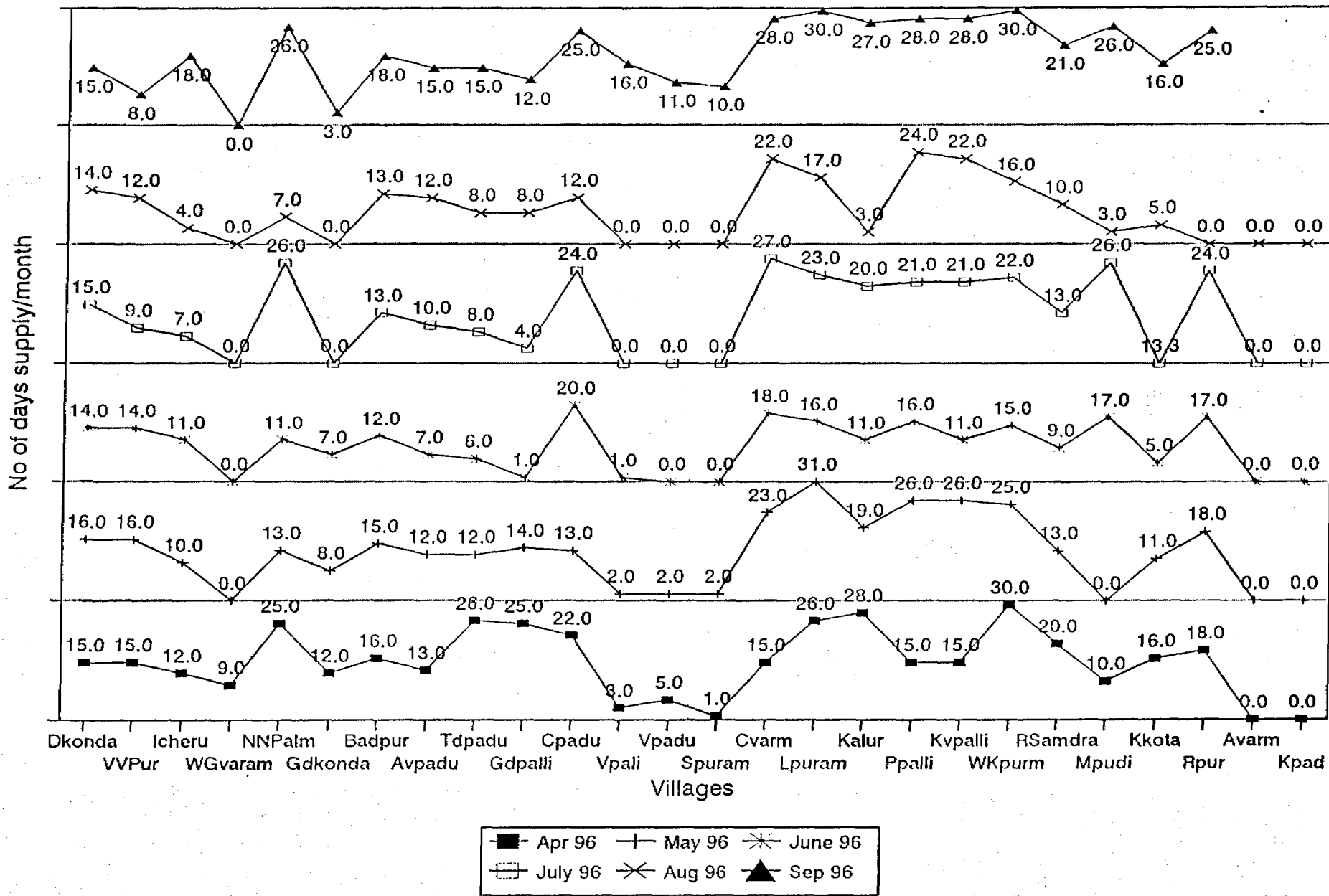
West gangavaram is also a problem village

Chinagudipadu is having a disproportionately big GLSR hence more supply.

Apr 96 - Aug 96 supply to Veerepalli, Vaddipadu and Sangapuram was very erratic.

Badapuram & Kandulavaripalli information is not fully available

Water supply trend (Apr 96-Sep 96)
SNIRD Project area



3.2 SUMMARY OF WATER MONITORING and the need for PRED to introduce the system in AP II projects.

Table 39 provides average utilization per scheme, regarding Clear Water pumping as percentage of the capacity of the scheme.

Where ever known the same is provided for the % of capacity received at village level

Table - 39

Scheme	Clear Water		Clear Water at Village		Remarks
	LPCD	% Capacity	LPCD	% Capacity	
Mahabubnagar Chinnamaroor	30	35.8 %	NA	NA	--
Kurnool Chinnakothiliki	50	60 %	32.6	40 %	--
Manchala	32	69 %	20	43 %	--
Hanawal	14	17 %	NA	NA	--
Medak Ibrahimpur	48	49 %	NA	NA	--
Karasgutti	38	54 %	NA	NA	C/W > R/W
Borancha	42	65 %	9.4	15% In MARI villages	
Prakasam AB Palem	11	29 %	NA	NA	C/W > R/W
MV Palem	21	41 %	48.5	41 % in ASSIST villages	full filling of reservoir questionable
Cherukuru	22	43 %	NA		C/W > R/W

A rough and average assessment indicates that the utilization of the capacity for the production of Clear Water for distribution in the AP II schemes stands at about 50 % of the capacity.

The indications of the volume of Clear Water received in relation to the capacity of the schemes, at villages, for which we have the information available, seems to be 20 - 25 % lower.

The % utilization of the capacity, however should not be confused with the LPCD, as schemes have been designed for ultimate design parameters, which are much higher.

Summarizing the chapter of Water monitoring, it seems clear that many improvements on the monitoring system can still be made.

PRED may be well advised to conduct internal workshops to refresh their staffs memory on the methodology of compiling the required data and on the usefulness of the exercise towards recording and improving the level of functioning of the schemes.

On the analysis part this first effort provides indications of the potential utility of the system, which once a routine exercise, will provide access to factual information per month; showing breakdowns

and inefficiencies at major points in the schemes, as well as providing the actual volumes delivered, and per year; where the recordings will indicate the performance throughout the year, allowing a comparison through the dry and wet seasons as well as a comparison over the years.

In spite of the imperfections of the monitoring system at this early stage, all indications have it that the schemes are producing way below design capacity, and the level of functioning and losses, has to be urgently addressed.

As discussed before NAPO would like to encourage PRED to review the monitoring system for its internal purpose, (including ways and means to get recordings of received RWS at village level), and to introduce the system throughout the NAP II programme.

The first and most obvious rationale for the speedy introduction would be to monitor the present level of RWS delivery in the AP II projects, towards improvements of the level of functioning of the completed schemes and to improve O&M on these schemes.

4. SANITATION

CUMULATIVE STATEMENT SHOWING THE FINANCIAL AND PHYSICAL PROGRESS REPORT ON SANITATION IN AP-I & AP-II OF PRAKASAM & GUNTUR DISTRICTS

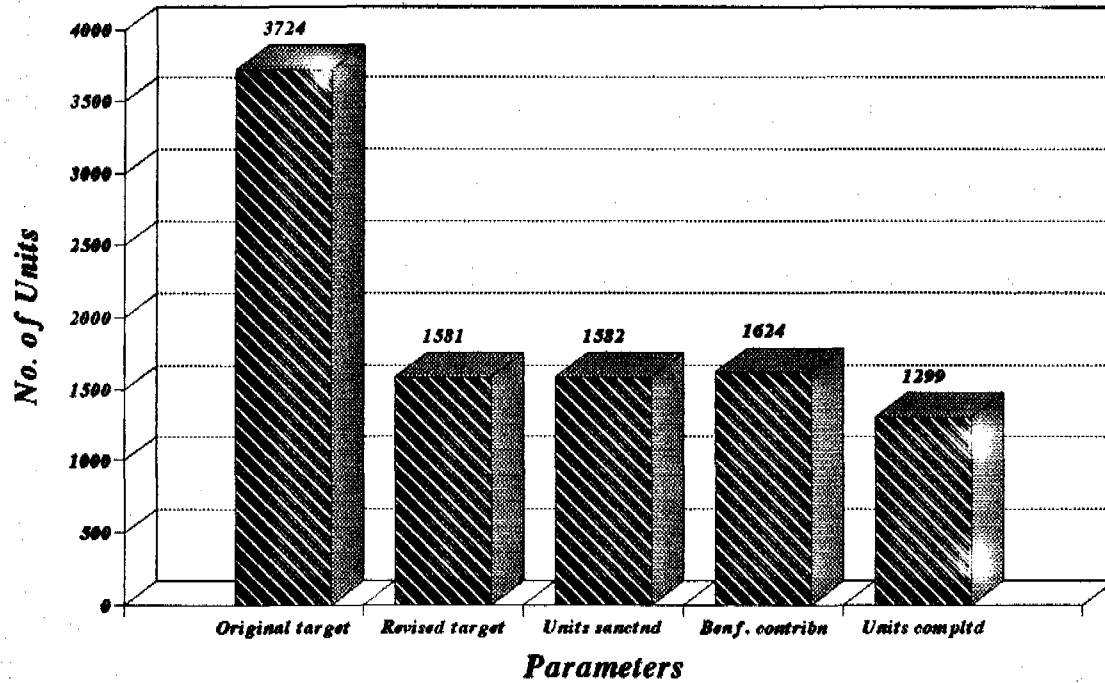
Original Target : 3724 Units Sanctioned : 1582
Revised Target : 1581 Beneficiary Contribution : 1624

(Rs. in lakhs)

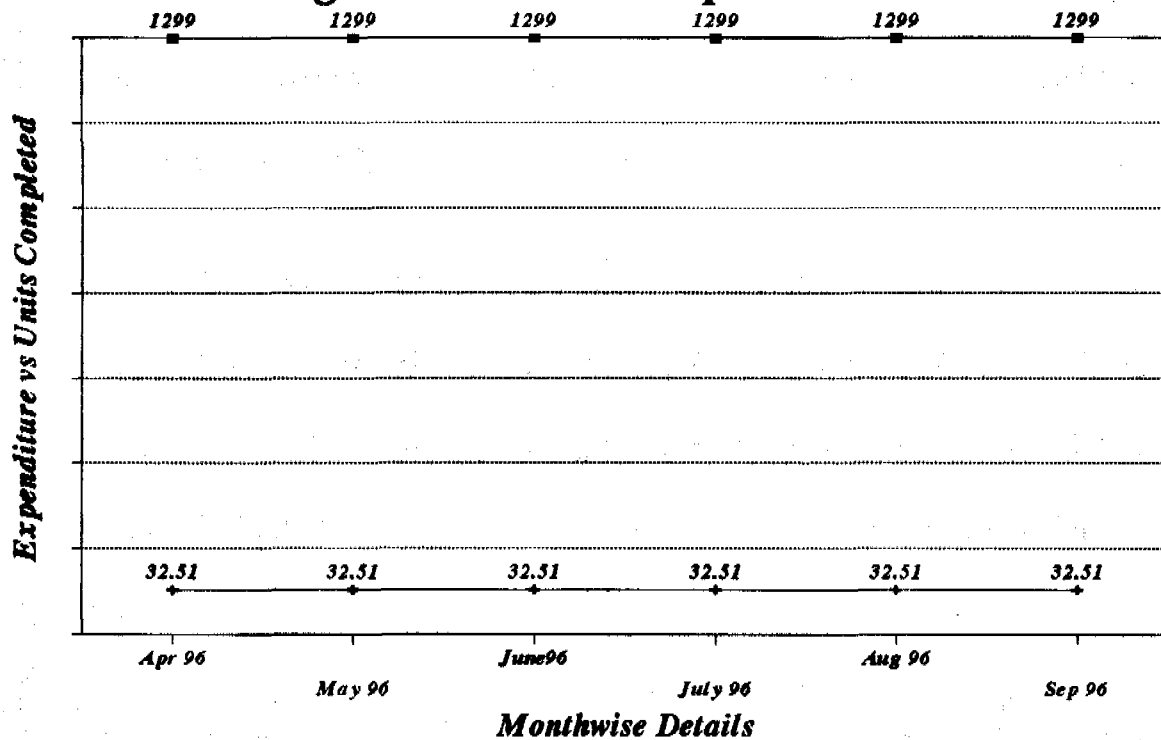
Sl. No.	Month	Units Completed	Work in Progress	Expenses			Cum. Expense (RNE release + GOAP + Interst + Ben. contrbn)	Balance with PRE
				Previous Expense	Current Expense	Cumulative Expense		
1	Jan 95	1255	128	29.10	0.60	29.70	83.647	53.947
2	Feb 95	1255	129	29.70	0.17	29.87	83.647	53.777
3	Mar 95	1256	148	29.95	0.00	29.95	83.647	53.697
4	Apr 95	1259	152	29.95	0.00	29.95	83.647	53.697
5	May 95	1268	149	29.95	0.03	29.98	83.647	53.667
6	Jun 95	1271	151	29.98	0.86	30.84	83.647	52.807
7	Jul 95	1275	161	30.84	1.01	31.85	83.647	51.797
8	Aug 95	1275	161	31.85	0.00	31.85	83.647	51.797
9	Sep 95	1288	155	31.85	0.19	32.04	83.647	51.607
10	Oct 95	1298	155	32.04	0.10	32.14	83.647	51.507
11	Nov 95	1298	155	32.14	0.00	32.14	83.647	51.507
12	Dec 95	1298	155	32.14	0.00	32.14	83.647	51.507
13	Jan 96	1298	155	32.14	0.00	32.14	83.647	51.507
14	Apr 96	1299	144	32.14	0.37	32.51	84.397	51.887
15	May 96	1299	144	32.51	0.00	32.51	84.397	51.887
16	June 96	1299	144	32.51	0.00	32.51	84.397	51.887
17	July 96	1299	144	32.51	0.00	32.51	84.397	51.887
18	Aug 96	1299	144	32.51	0.00	32.51	84.397	51.887
19	Sep 96	1299	144	32.51	0.00	32.51	84.397	51.887

SANITATION PROJECT

Physical Status as on September 1996



Progress Trend till September 1996



Units completed
 Cumlt Expns Rs.lakh

4.1 Project Clean Village

The pilot project "Clean Village", starting 1993 was targeted for some 3500 latrines in 18 villages in Prakasam and Gander.

Targets were later reduced to 1581 latrines.

The project was expected to be implemented within 12 months.

Three year later the progress stands at 82 % physical completion of the revised targets and at RS. 32.51 lakhs (38.5 %) of the advanced fund of Rs. 84.397 lakhs.

The progress reported during this period consists of 1 latrine, and Rs.0.37 lakhs (on works in progress?)

While good progress was earlier achieved in 1996, on drafting an alternative approach to sanitation for the AP II projects, the efforts seem to have fizzled out in the course of the year.

In view of the present level of completion of the AP II RWS projects, it may not be advisable to revive the issue, as an alternative project on sanitation would not fit the completion schedules for the AP II projects

NAPO would like to reiterate its interest in reviewing the possible future approaches to sanitation with RNE and the PRED, which in our view might concentrate on hygiene promotion and environmental aspects of sanitation rather than on the construction of individual household latrines.

5 COMMUNITY PARTICIPATION AND INVOLVEMENT OF NGOS IN AP II

5.1 Involvement of NGOs Community Participation

Introduction:

Community Participation continues to be one of the important components in the RWS and Sanitation programme in AP II. The involvement of the NGOs to set up water committees has been a major component of the RWS programme. The NGO involvement has been restricted to 47 villages in 2 Districts, covered by three NGOs; MARI, ASSIST and SNIRD.

The NGO ASSIST is predominantly involved with the hardware component in sanitation, with a focus on construction of latrines and hygiene promotion. SNIRD and MARI have been working in the areas of enlisting community support and responsibility in the RWS and Sanitation programme.

HERSELF though completed its contractual agreement with the RNE continues skeletal work mainly filling in the water monitoring formats and an occasional VAC meeting in the same 20 villages with the organisations own interest, support and financial commitment.

The Social Sector in NAPO saw the need for a change in the approach and strategy in enlisting community support. The better understanding of the field resulted in giving a direction to the NGOs involved in the programme. The need to be able to measure the inputs visa vis outputs was realised. This resulted in the social sector having a specific action plan.

The first in the series was defining the field visits . For NAPO it was referred as issue based intervention . This was followed by NAPO organising two workshops for the NGO partners. The period also witnessed the introduction of the NGO specific monitoring and impact indicators and a quarterly reporting monitoring format in addition to the regular monitoring and support services.

5.2 Workshops

NAPO had organised a strategic workshop for the NGOs in May 1995. A decision was taken that similar thematic workshops would be organised. The fact that the NGOs need specific inputs to be more effective in their involvement was realised. This was formalised by way of two workshops one on **Review and monitoring** and the other on **Communication methods**. The review and monitoring workshop was planned keeping in mind the phasing out of the project and the need for the NGOs to review targets and introduce the monitoring indicators.

The objectives of the workshop on review and monitoring are:

- i. To review the performance of the previous months of programme implementation
- ii. Strengthen the conceptual understanding and clarity of the project partners regarding the RWS and Sanitation programme
- iii. To explore possibilities for change in approach and strategies to expedite the process of goal reaching.

The objectives of the workshop on communication are:

- i. To review and assess the validity of the methods being used hitherto by the NGOs
- ii. Expose the participants to other participatory methods of communication.

The Project Directors, Project coordinators and the NAP desk incharge from all the partner NGOs were called for these workshops.

(For further details see Annexure IV)

5.3 Field Visits:

Field visits were planned to ensure that each NGO was visited on an average for 5 days in a month.

The purpose of the visit was broadly defined as monitoring and support services. However, each visit was further defined and a checklist prepared incorporating the requests from each NGO and the issue to be addressed in the present quarter.

The field visits included visits to the target villages, discussion with the village based organisations and with the community at large - Clarifying and reiterating the purpose and the goal of the programme. Visits also witnessed the activities undertaken by the NGO and observed / participated in their internal training programmes, either as co-trainers or as facilitators. The field visits were scheduled to streamline the NGO activities.

Discussions were held with the GP representatives and the village leaders. Efforts were made to meet with the field Engineers of the PRED and give feedback.

The field visits often concluded with a staff meeting at the NGO level where the NGO action plan for the previous quarter was reviewed and new targets set. Monitoring also included the physical and financial monitoring.

5.4 Monitoring Indicators/Impact indications

The social component often has the danger of being termed as a process and hence becoming difficult to monitor or measure. At NAPO, the need to build accountability was strongly felt and this got translated into framing indicators.

The concept though not new was not put into practice by the NGOs. It was during the review and monitoring workshop that the need to recapitulate preparing the indicators was floated and the NGOs were asked to identify project specific indicators.

Once the NGOs sent in the list of indicators the same was taken back to the NGO and in a staff meeting finalised. Each NGO was requested to specify 15-20 indicators which would help them visualise the results expected. The indicators in turn were broken down into actions, tasks and person responsible. The indicators translated into the vernacular were used in the training programmes organised for VACs / WATSAN committees.

It has been encouraging to observe that these indicators are being used regularly by the NGOs to monitor their activities.

5.5 Formats for reporting

Reporting is rather a weak area for the NGOs. At the NGO level each NGO has its own internal system of reporting. The reporting is by the cluster organisers and the coordinators which ultimately gets incorporated into the main report of the chief Project functionary.

Often in finalising the report a number of issues get either missed out or side tracked. However, to help the NGO monitor the progress of activities internally and to keep a track of targets and achievements NAPO introduced a quarterly progress monitoring format. The format was discussed with each NGO and finalised. The same was translated by the NGO into the vernacular and used.

This is the first quarter of the format being introduced and the results / outcome are yet to be assessed.

5.6 NAPOs Support Services

NAPO continues to reach out to the NGOs as and when requested by them. The major areas of support to the NGOs have been in assisting them in the preparation of action plans and setting of realistic targets, preparation of training modules, staff trainings, preparation of formats both monitoring and impact, staff issues and other related issues.

NAPO and the NGOs have a positive working relationship and the NGOs make use of the opportunity to contact NAPO and clarify issues as required.

5.7 Gender

Gender equity issues are addressed during all the visits / meetings and interactions with the NGOs. These are specific interventions to push the gender issues.

Care is taken to ensure that the idea gets translated into having equal number of women if not more on the water committees, ensuring that these women are allowed to hold responsible positions and get the cooperation from all sectors.

However, it is easier said than done as culturally built up diffidence still creates constraints in the arena for women to take the lead. Interesting though, is the factor that the same women who are vocal and take initiative in their own women's groups do hesitate in a combined group. Appreciating the sensitivity of the issue NAPO is making all efforts to a balanced approach.

(The Matrix and graph are enclosed for reference)

5.8 Strategies for withdrawal and sustainability

The need for addressing sustainability has been emphasised at all possible avenues with the NGOs. Sustainability, not as an after thought, but as part of everyday activity to build the confidence, capacity and capability of the community is being emphasised. Sustainability is being defined as the community being able to take care of the maintenance and upkeep of the water systems. Some of the efforts in this direction are allowing the water committees to conduct and record meetings by themselves with a minimum or no involvement of the NGO staff, collecting contributions and accounting for the contributions collected, community members taking responsibility by themselves and immediately attending to the problems of abuse of water, disruption in water supply or leakages and breakages (minor repairs and breakages).

It is encouraging to note that the people have started realising the importance of piped water and the need to economise on its use and maintenance.

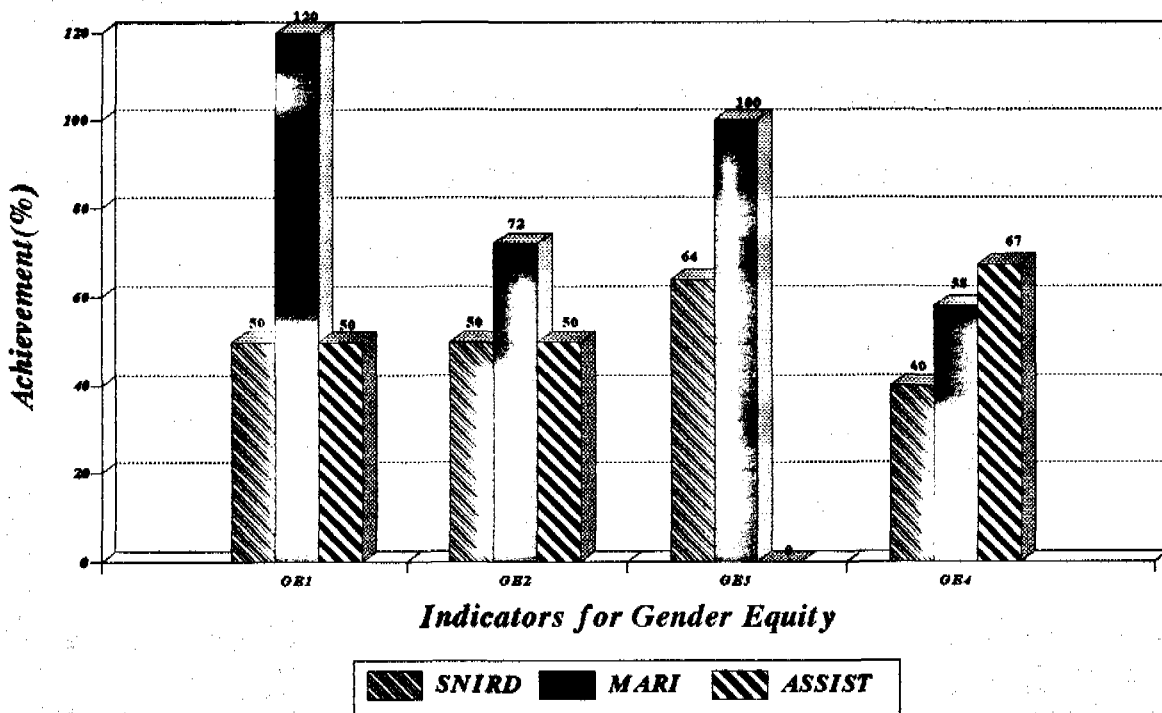
The Water Monitoring Formats are being used regularly and people have realised the importance of these formats. In fact it is interesting to note that these formats are often being used for redressal.

GENDER EQUITY

CODE	INDICATOR	ACHIEVEMENT (%)		
		SNIRD	MARI	ASSIST
GE1	Avg. Women attendance at Awareness Campaigns	50	120	50
GE2	Avg. women attendance at VAC meetings	50	72	50
GE3	Avg. women attendance at VAC training	64	100	0
GE4	Avg. women membership in VAC	40	58	67

Note: Information is based on Quarterly Project Monitoring Framework

GENDER EQUITY
September 1996



5.9 Expansion and Extension of NGOs

In relation to the need to extend the technical programme for AP II, because of delays in completion, it has been elaborately discussed between NAPO, PRED and RNE to extend the community participation inputs likewise.

In view of the discrepancy between the level of physical completion and the level of operation of the technical components, i.e. actually delivering drinking water, it was felt that the involvement of the community monitoring of RWS would be helpful in efforts to step up the attention for the need to deliver sufficient amounts of water.

Plans to expand the involvement of community participation, with the assistance of NGO's, to a fuller level of coverage of the villages in the AP II projects, were conceptualized and were in principle agreed upon by PRED and RNE.

Due to constraints related to administrative changes in the Netherlands Development Assistance programme, such expansions will be postponed till they can be incorporated in the next PRED proposal, for the phase out of AP II / phase in AP III.

Meanwhile the extension of NGO's programmes will be covered through existing balances in the the budget and / or re-appropriations within the NAP Office Budget, until March 1997.

Herself had expressed the desire to work in all the 64 villages under the Kurnool scheme to form the water committees. NAPO had undertaken an internal assessment to see the administrative and organisational capabilities of the organisation for the task. The results of the study were positive and NAPO recommended that Herself could take up activities in the year.

Based on the willingness of the organisation and the recommendations of NAPO the proposal was submitted to the Government of Andhra Pradesh for approval and forwarding to RNE. However, there has been undue delays.

The water committees are being kept alive by skeletal staff being supported by the organisation from their own finances.

The Water Monitoring Formats are being sent regularly to NAPO. A recent visit by NAPO to Herself villages got a first hand impression which is quite positive.

It was observed that in the majority of the villages, the village based organisations have been taking responsibility of the assets. This could be due to one or two village leaders who are taking a keen interest, added to the fact that Herself staff do visit and keep contact with the villagers.

Herself is apprehensive that they may not be able to continue to support the staff for long due to resource constraints. The other aspect is that since the staff are only being paid allowances, on getting better offers they are leaving the job. NAPO is apprehensive if the sanction of the next phase gets further delayed there may be need to go in for totally new staff which may be detrimental to the pace of achievement.

MARI agreement with the RNE will come to an end by October. Mari had problems of liquidity and that has resulted in backlog of activities. As there is a substantial balance in the budget and the need and interest of the organisation to continue activities in the area has promoted the NGO to approach the RNE to consider for extension of activities for one more quarter to match the phase out/phase in period.

The request is also supported by MARIs decision to conduct an internal evaluation and learn from the experiences. This evaluation is proposed to be taken up by December. MARIs proposal after scrutiny will be forwarded to the RNE for further action.

SNIRD proposal for expansion has been pending for the moment subject to the project completion period and the RNE decision to entertain expansion requests in line with the AP II phase out period. SNIRD has been consolidating experiences and strategies for the next phase.

5.10 Community Contribution:

Collecting community contributions to attend to minor repairs has become part of the VAC responsibilities. The leakages and breakages are identified and reported by the YG/MM to the VAC members. The upkeep and maintenance around the PSPs rests with the residents around the PSPs and at the GLSR level the whole village shares the responsibility. The contributions are more issue based and the quantity and quality of work is assessed either by the lineman who in turn is paid the amount to buy the necessary pipes or knobs. The NGOs have also mobilised the matching materials and finances when PRED has admitted lack of funds to attend to repairs.

Efforts are on at the NGO level to systematise the fund collection. However, the fact that there are other sources of drinking water which at times are more reliable hinders the contribution factor. Also the absence of a regularised established body to take responsibility for the funds has slowed the pace of forming a common fund. The idea that the GP can attend to and should attend to the systems which has been an age old practice seems to be having its effect. However, it is encouraging to note that when people are educated about the financial implications and problems of the Government there is a willingness to pay up. This can be further strengthened when the relationships between the PRED and the NGO/Community improve.

5.11 Upkeep and Maintenance

In all the NGOs efforts are on to ensure that the community takes full responsibility for the upkeep and maintenance of the systems. Responsibility sharing is done at the village level by either of the groups viz YG (Youth Group), MM (mahila group) or VAC. The NGOs have ensured that with the necessary trainings imparted, either of the groups immediately attends to the upkeep. Since the women are made responsible for the PSP the responsibility rests with them. The responsibility of the pipelines is with the YG and the storage points with the VAC.

In most of the villages, situation, the lineman and the works inspector are the people who are most powerful and important to make the RWS system run or not.

In fact there are incidences where, due to misunderstandings between the lineman and the community, water is stopped / diverted for weeks on end. No amount of representation has helped solve these situations. Some committees have ensured that these people are on the VACs and they get due attention and respect. The other interesting aspect observed is that when the lineman lives in the village there is better rapport with him.

(Matrix and the graph represents the different aspects of community participation). -



PSP at Govardhanagiri,
Mahbubnagar, can it be
improved?



Only one small tap on the
GLSR and villagers queuing
for water



Village woman bought pipe
and tap from her own
money after pipe broke
off the GLSR and made it
disfunctional. Operator
at Nagulapally refused to
cooperate. After discuss-
ion MARI, NAPO & PRED EE,
the pipe got installed
and the operator, who had
been notorious in that
area, was transferred.

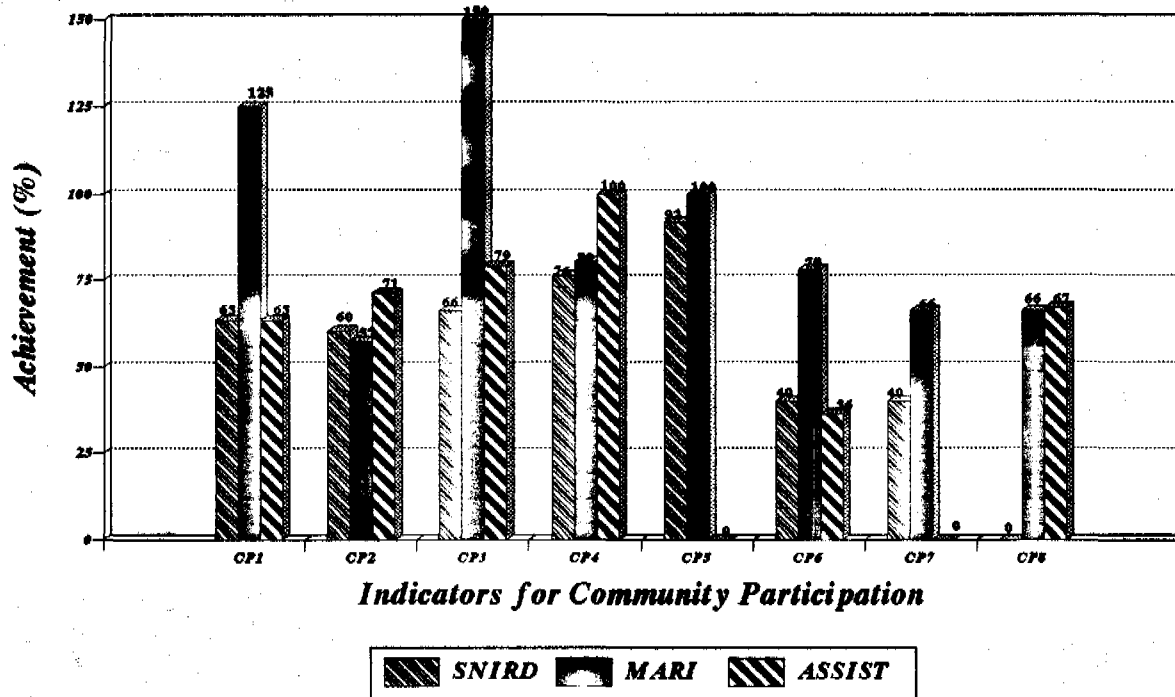
COMMUNITY PARTICIPATION

CODE	INDICATOR	ACHIEVEMENT (%)		
		SNIRD	MARI	ASSIST
CP	COMMUNITY PARTICIPATION			
CP1	Avg. attendance at Awareness Campaigns	63	125	63
CP2	Avg. attendance at VAC meetings	60	57	71
CP3	Avg. attendance at VAC trainings	66	150	79
CP4	Usage of WMF	76	80	100
CP5	Usage of Chloroscopes	92	100	0
CP6	Maintenance of records without support	40	78	36
CP7	Meeting without facilitator	40	66	0
CP8	Fund raising for O&M	0	66	67

Note: Information is based on Quarterly Project Monitoring Framework

COMMUNITY PARTICIPATION

September 1996



5.12 Health and Hygiene promotion

Health and hygiene promotion are the main issues which are addressed in every visit/meeting/training by the NGOs. With education / awareness levels being rather low, efforts to make it a habit formation is something the NGO has been working for.

Efforts in this direction have been : strengthening of the school health clubs, using children and women as health promoters. Speaking to women groups, addressing issues at the family level and the community level. Simple issues like collection, storage and use of water, personal hygiene, domestic hygiene and environmental hygiene are issues addressed. The NGOs have the multi purpose health workers and the PHC Doctors visiting the community members. The community is encouraged to participate in the different Government programmes.

5.13 Interaction with GP's and other Government Departments

In all the villages the NGOs have been making efforts to link up the VACs and the GPs. However, since the Sarpanch and the GPs are political institutions, it rather limits the scope for continuity and work of the NGOs and often problems of non cooperation from the opposition side crop-up.

The present situation in the majority of the villages however is that of transition and sharing of responsibility where the old Sarpanches who were also local leaders still held responsible for the incomplete works and at the same time are not prepared to give charge to the new Sarpanches. On the other hand the new Sarpanches still hold the old Sarpanches responsible for the incompleting works. The confusion as to who has to take responsibility for the schemes for maintenance is still often debated, as the debate between the GPs and the PRED continues unabated in the absence of the official handing over / willingness to take over the schemes.

5.14 Impact of NGO involvement

In the interaction with the community one could easily assess the increase in the knowledge and awareness levels related to RWS health and hygiene aspects. This increase in knowledge and awareness levels can be measured / observed in the people's behaviour and practices such as;

- the community members having resolved to drink the water from the piped scheme contradictory to the earlier beliefs and practices. Majority of the people have been covering the stored water and using ladles to draw water
- the rise in the awareness levels has resulted in the questioning of the inactive committee members in the water committees and asking for replacements
- increased initiatives to conduct the meetings, record meetings by themselves and also ensure follow up action
- use of Water Monitoring Format as a tool for redressal to the Government.
- collection of contributions from the community and maintenance of the assets.
- control / checking of the abuse of water
- formation of an APEX body at the scheme level to address issues related to the entire scheme.

- initiatives to have a water fund as part of the APEX body by mobilising a membership fee by the members themselves, from the GPs and from community contributions
- plans to give a legal status to the APEX body to take up other issues related to the communities

5.15 Progress per NGO:

ASSIST

ASSIST is now in the third contract year with the RNE. ASSIST has been working in the 11 villages predominantly focusing on the latrine construction component.

In this half year period ASSIST has changed its approach and has concentrated on mobilising the community support not only for the latrine component but also in RWS.

With a reappropriation of the budget the community awareness activities were stepped up. The NGO focused on mass awareness campaigns and rallies, intensive house visits, VDS meetings and group meetings.

The thematic trainings for both the staff and the masons involved in the programme further facilitated the momentum of activities.

Addressing specific issues related to the owning of a latrine and linking it up to the personal health and environmental hygiene through the use of cultural media was found to be very effective.

ASSIST also used the approach of addressing each non participant by way of a personalised letter followed by house visits.

These efforts resulted in the community paying the prefinance amount and enrolling their names (720 families were mobilised and 526 completed) for owning a latrine and also purchasing a smokeless chullah.

The water situation in the first quarter was rather bad. The VDS members however used the WMFs to request the PRED / concerned DE and get the systems rectified to a large extent. The VDS has also become aware of the need to monitor the RWS and also undertake chlorination. Efforts are on to further mobilise the community to take care of the assets. Though there are a few incidences of the villagers taking responsibility to mobilise finances and attend to minor repairs, the process is yet to take on an organised form. ASSIST feels that this can be taken up only when the VDS is strengthened as a full fledged body at the village level. ASSIST realises that work needs to be done in this direction.

ASSIST continues with its village level work related to health and hygiene promotion with special attention to the pre and anti natal care.

ASSIST has been making all efforts to mobilise support of the GPs to take up issues related to RWS and sanitation.

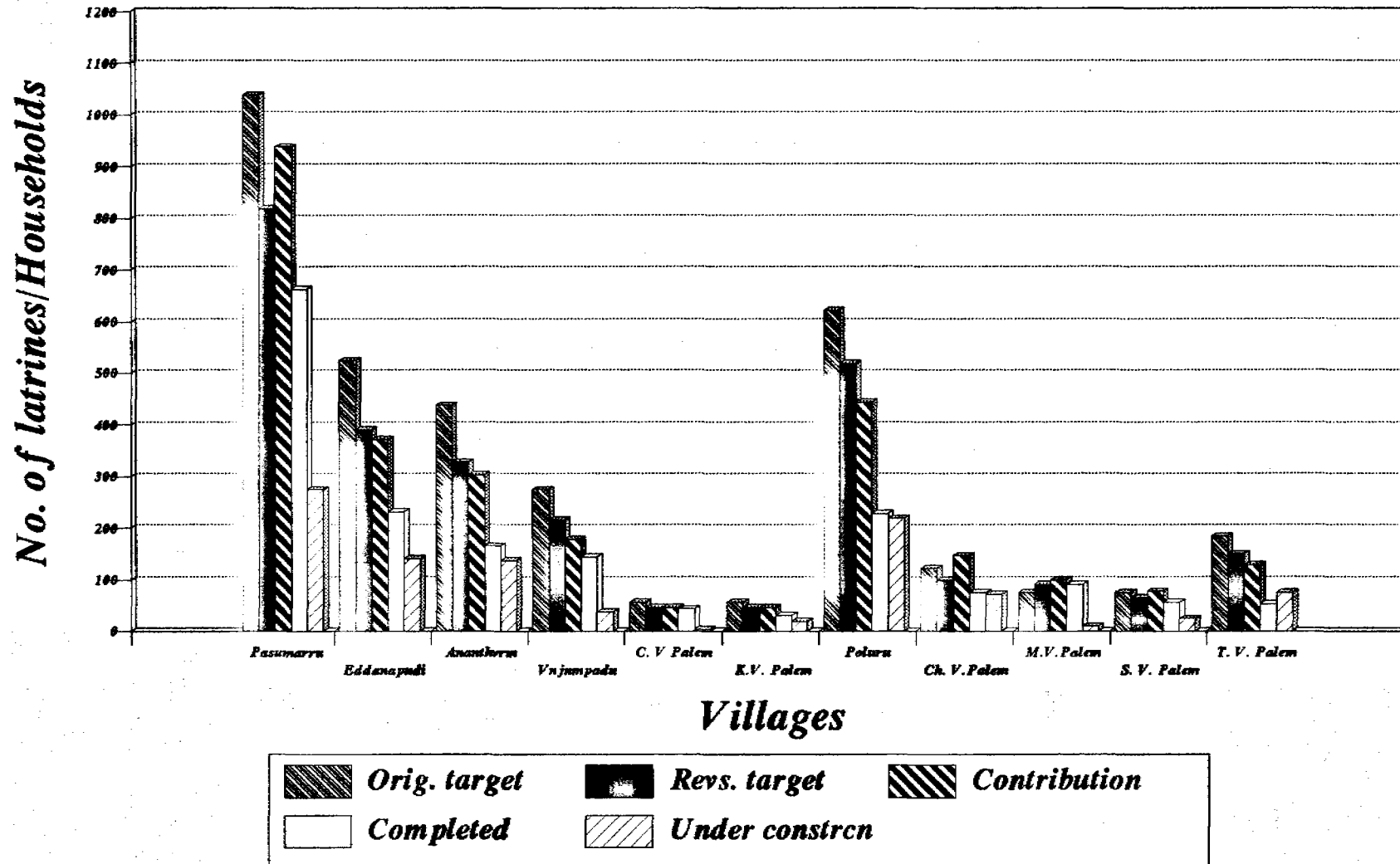
(Table on the status of activities of ASSIST enclosed)

ASSIST ACTIVITY CHART TILL SEPTEMBER 96

SN	Village	Membership in VDS			% of women	Awareness camps			Latrines planned for		Total HHs paid contri	% HHs paid contrib		Cum. Latri constd	% constructed		Prog.in plnd perd Ap-Sep96	Latrines Under constrn
		Men	Women	Total		Planned	Organised	%	3 yrs			Original	Revised		Original	Revised		
									Original	Revised								
1	Pasumarru	12	1	13	7.7	6	4	66.7	1035	816	935	90.3	114.6	662	64	81.1	248	273
2	Eddanapudi	7	2	9	22.2	6	5	83.3	525	390	369	70.3	94.6	230	43.6	59	148	139
3	Ananthavaram	9	2	11	10.2	6	4	66.7	435	326	301	69.2	95.1	165	37.9	50.6	82	136
4	Vinjanampadu	7	2	9	22.2	6	4	66.7	275	215	178	64.7	82.8	142	51.6	66	69	36
5	Chilukurivaripalem	5	2	7	28.6	6	4	66.7	54	45	46	85.2	100.2	43	79.6	95.6	4	3
6	Katarivaripalem	6	1	7	14.3	6	5	83.3	54	45	46	85.2	100.2	29	53.7	64.4	28	17
7	Poluru	9	2	11	18.2	6	5	83.3	620	516	443	71.4	85.8	226	36.5	43.8	124	217
8	Chimatavaripalem	8	1	9	11.1	6	5	83.3	120	100	146	121.7	146	75	62.5	75	56	71
9	Munnangivaripalem	6	1	7	14.3	3	3	100	75	89	97	129.3	108.9	88	117.3	98.9	25	9
10	Syamalavaripalem	6	1	7	14.3	6	5	83.3	75	63	78	104	123.8	56	74.7	88.9	32	22
11	Tanubodivaripalem	7	2	9	22.2	6	5	83.3	182	147	127	69.8	86.4	52	28.6	35.4	30	75
	Total	82	17	99	17.2	63	49	77.8	3450	2752	2766	80.2	100.5	1768	51.2	64.2	846	998

ASSIST ACTIVITY CHART

September 96



SNIRD

SNIRD has been working in the 26 villages under the AP I . The NGO is into its third year of mobilising communities under the RWS scheme.

SNIRD realised that there is the possibility of stagnation in approach. The NGO decided to change the approach and make the committees more effective and functional. In this direction the first step was to reorganise these committees .The next step was to form the APEX committee, with representations from the VACs from all the 26 villages.

SNIRD first undertook the responsibility of educating the communities and the VACs on the need and importance of such a body. After elaborate discussions and education work the APEX body was constituted in a democratic process by electing two representatives from each VAC. The members decided to call the APEX body as The Chandavaram Reservoir committee.

SNIRD reports that the VACs at the village level act as the planning and monitoring body guiding the youth and women groups to take up different activities. These VACs have become effective bodies and will be able to sustain themselves.

SNIRD is now in the process of training the APEX body members to take on increased responsibility and function as an effective body. At the village level the organisation keeps the people involved in their regular programmes like the awareness programmes, health and hygiene promotion activities, school health programmes and the social forestry programme. To sustain the interest of the village level groups, SNIRD encourages the women groups to take up thrift and credit activities, the youth groups to take up activities related to sports and cultural activities.

SNIRD has also been making all efforts to mobilise the GPs in the village activities and ensuring that the responsibility is taken up by them. It has been encouraging to note that the GPs have started taking additional responsibility and are spending the GP grants to attend to the maintenance of the scheme.

MARI

MARI has been working in 10 villages under the APII programme. MARI has a one year agreement with the RNE. This short agreement has helped to define the project intervention and the strategies to be adopted.

MARI as a first step had formed the WATSAN committees in all the villages. These committees were being given the required training to facilitate them to take some responsibility of the village RWS assets and also function as effective bodies. However MARI realised that the committee members were not being fully accepted by the community and also they failed to take responsibility in the village.

This was a constraint and MARI felt the best way to rectify the issue was reconstitute the committees. Further to effectively represent issues and to take responsibility for the scheme as such the need for the APEX body was floated. Though the process of identifying the members has begun MARI can not yet claim to have a effective body. Unseasonal rains, agricultural activities seem to have delayed the process.

MARI is in the last quarter and due to liquidity problems have had problems in completing the targets. MARI hopes to get the permission from the RNE to extend activities to one more quarter when it is more confident of achieving the envisaged/planned results.

MARI continues to keep the interest of the people alive by organising cultural programmes, village meetings, school health programmes and competitions and wall paintings. House visits and community meetings are part of the every day activity. MARI is also making all efforts to ensure the support of the GP in the upkeep and maintenance of the assets.

The organisation proposes to take a critical look at its functioning by way of an evaluation and plans to make the necessary amendments in the extension phase.

5.16 AP III

- Study of reports on the approach and feasibility of small schemes
- Preparation of TORs for SMs
- Identifying agencies/organisations for PRA
- Identifying possibilities for intermediary groups
- The need to undertake the study on the PRFS villages
- Listing out steps for the preparation of the AP-III document

6 LIFT IRRIGATION SCHEME (MAHBUBNAGAR)

In the QPR of LIS ending 09/96 a figure of Rs.1192.32 lakhs is quoted as RE (RRE) which was Rs.1187 till the QPR June 96 of LIS. The latest figure is higher by 5.32 lakhs. The difference in figures is presented below :

RRE (June 96)	Rs.1187.00 lakhs
RRE (Sept 96)	Rs.1192.00
Expenditure	Rs.1006.111
Balance	Rs.186.21
% Expenditure	85%
Expenditure during the reporting period	Rs.1006.11 - Rs.953.50 = Rs.52.61 lakhs
Irrigation Potential created	9000 acres
Target irrigation potential	10000
% Achieved	90%

12 out of the 14 major components are completed. Commissioning of two pumps and completion of D-5 field channel is pending.

COMPARATIVE STATEMENT OF FINANCIAL EXPENDITURE ON LIS - NAGARKURNOOL

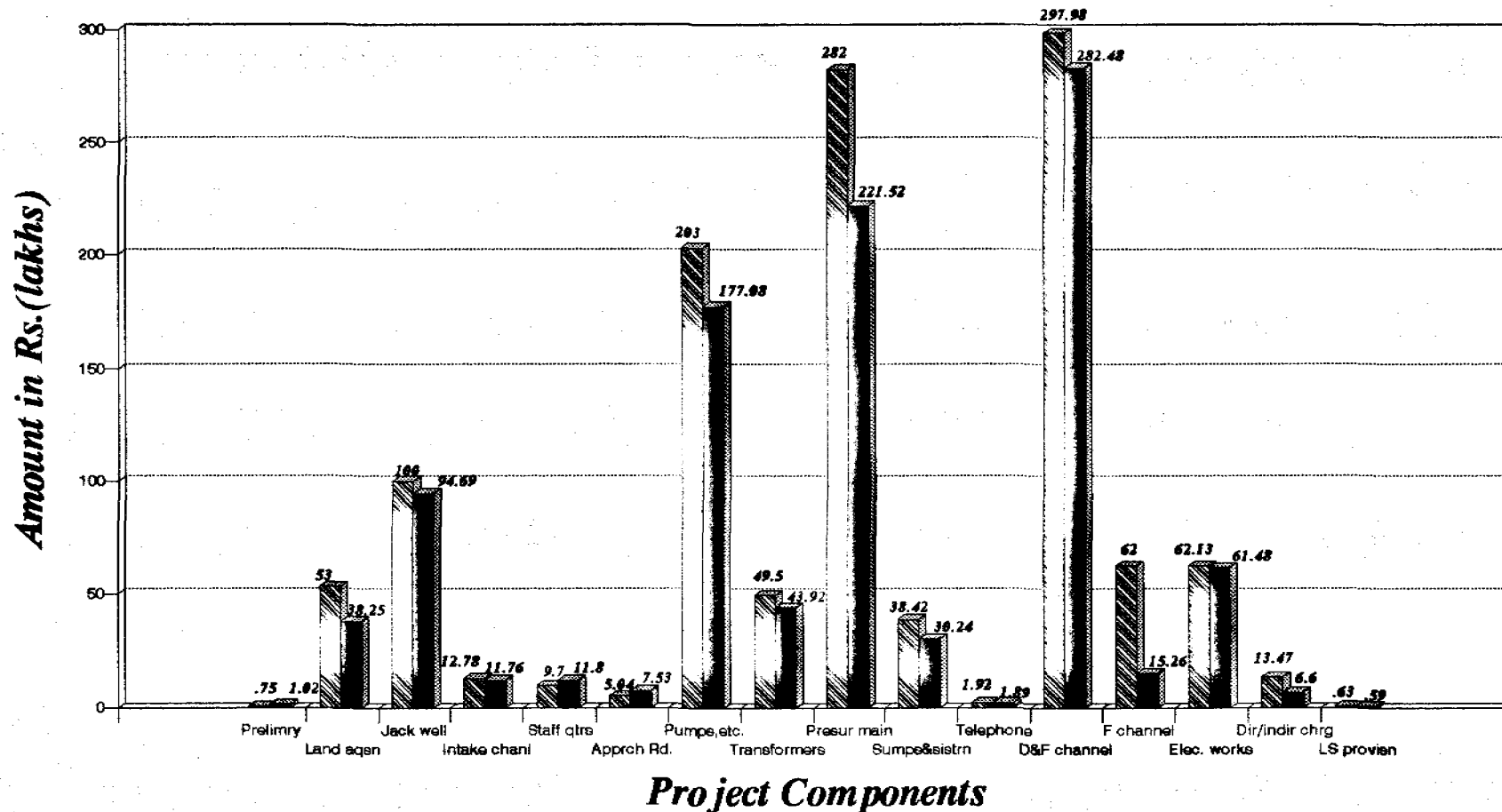
(Rupees in lakhs)

Sl. No.	Name of Work	FRE 1994	Tot Exps upto 3/96	Tot Exps upto 6/96	Tot Exps upto 9/96	Balance as on 9/9
1	2	3	4	5	6	(3-6) 7
1	Preliminary	0.75	1.02	1.02	1.02	-0.27
2	Land acquisition	53.00	38.25	38.25	38.25	14.75
3	Jack well	100.00	90.75	94.69	94.69	5.31
4	Intake channel	12.78	11.76	11.76	11.76	1.02
5	Staff quarters	9.70	11.8	11.80	11.80	-2.10
6	Approach road	5.04	7.53	7.53	7.53	-2.49
7	Pumps, manifold, valves & cranes	203.00	176.76	177.08	177.08	25.92
8	Transformers & transformer yard	49.50	43.92	43.92	43.92	5.58
9	Pressure main	282.00	221.33	221.52	221.52	60.48
10	Sump and cisterns	38.42	25.8	30.24	30.24	8.18
11	Telephone	1.92	1.89	1.89	1.89	0.03
12	Distributerries & field channels	297.98	256.41	276.18	282.48	15.50
	Field channels	62			15.26	46.74
13	Electrical works	62.13	59.08	61.07	61.48	0.65
14	Direct & Indirect charges	13.47	6.54	6.60	6.6	6.87
15	LS provision & unforeseen	0.63	0.59	0.59	0.59	0.04
	TOTAL	1192.32	953.43	984.14	1006.11	186.21

Note: There is a change in the FRE figures submitted by PRED in MPR for 9/96

Lift Irrigation Scheme - Nagarkurnool

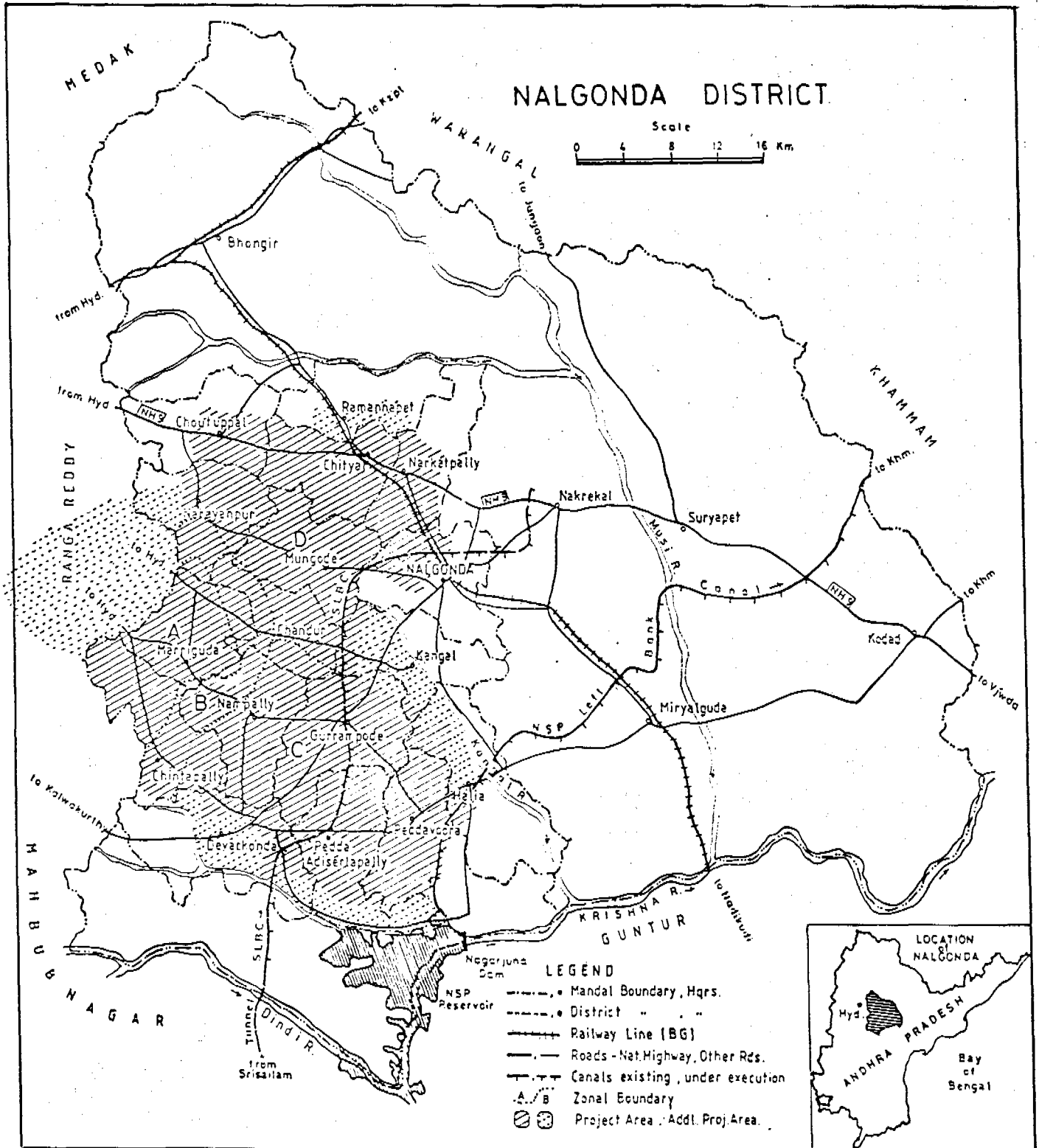
Financial Expenditure (September 96)



 **Finl Revised Estmte**
 **Total Expens 9/96**

7 AP III NALGONDA

Map 9 - Nalgonda



NALGONDA PROJECT

Introduction

With the AP II projects finally nearing completion, more attention was given to the possibilities of the follow up programme AP III, Nalgonda.

In the course of 1996 a number of aspects related to a possible AP III Nalgonda programme were reviewed by the Netherlands Government, Directorate General for International development cooperation.

Aspects such as, the actual plans and designs for the HMWSSB pipeline from Nagarjuna Sagar to Hyderabad, traversing the AP III project area, the problems foreseen in the construction of such a mega project as presented in an earlier proposal, the problems foreseen in the operation and maintenance of a system of such magnitude and complexity, and the lack of encouraging experiences with the painstaking progress of the AP II programmes, were reviewed and resulted in a reorientation for the possibilities towards a follow up programme in Nalgonda.

By August NAPO was requested to assist the PRED in conceptualizing an alternative approach to the RWS problems in the Nalgonda project area.

Such approach would start with a ground water based methodology for zones A, B and D of the project area, initially covering a limited number of villages (approx. 20), in a first year project proposal.

Such proposal would include the phasing in, or start of a follow up project in Nalgonda, as well as the phasing out of the AP II projects in Prakasam, Mahbubnagar, Medak and Kurnool.

PRED has since then been working on the conceptualization of such proposal, with technical assistance from NAPO.

Planning

PRED has been invited to present a proposal for the start up year of AP III, Nalgonda, by March 1997.

NAPO has scheduled two support mission, one in November 1996 and one in February 1997, in order to provide the technical support, requested for the preparation of the next phase. (for details please refer to : workplan NAPO August 1996 - March 1997).

7.1 PRED's Preparations AP III and technical support NAPO.

7.1.1. Developing the methodology and planning for a ground water based village approach in Nalgonda, AP III.

(to be applied to some 20- habitations in the first year).

The alternative approach to RWS in Nalgonda, based on ground water as a source, implies a number of changes in perceptions and attitudes to possibilities for several of the aspects of the programme. A decentralized system of village based water systems, also calls for a different approach to planning of the RWS set up.

Contrary to the complexity and time frames for the construction of CPWS systems, with elaborate headworks, big transmission systems and finally distribution systems, the planning and construction of the smaller village based systems is less complex, independent of a bigger system and other villages, can be executed in a limited span of time, and can allow much more involvement of the local community, consisting of users and their institutionalised representation.

Likewise, village based systems also offer different options for Operation and Maintenance, to be financed, managed and controlled locally.

These different options are presently being reviewed within the PRED and worked out with assistance of NAPO.

As the first year, start up proposal will have obvious "pilot or experimental" characteristics. The focus in the starting period is on the approach or methodology, rather than on the production of RWS systems in actual villages.

Concentration on working out, experimenting, fine tuning and finalizing an approach for groundwater based RWS facilities, during the starting period, is expected to result in a "blue print" or manual- type of methodology, which can be replicated efficiently and can facilitate the scaling up of the RWS programme for Nalgonda in the succeeding years.

Planning at village level

The activity / conceptualization of such methodology is presently focusing on the village level planning for RWS, identifying all steps in the approach in order to come to a planning model for that level.

These steps cover the subjects of :

- pre-selection criteria, involving an assessment of available RWS and the village needs
- section criteria, based on pre-selection, the interest and willingness of the village to participate and the feasibility of acceptable source
- hydrogeological requirements and activities
- thorough evaluation of existing RWS, social and technical mapping through PRA
- the design of the systems, including the use of existing facilities, and their distribution to exit points,
- arrangements for execution of the works, either through local contractors or through involving the village population in the construction
- the arrangements for O&M, budget, cost recovery and management of the village systems
- arrangements for monitoring and reporting on the systems
- the participation of the local community and their institutionalized representation
- Institutional / administrative steps, requirements, approvals, Government orders and legal aspects at village level

With each subject worked out in operational terms and actual steps, the logical sequence of these steps and the linkage between the various components, e.g. community participation and technical activities, will be synchronized in the planning, by pointing out the predecessor to the activity listed, and listing the milestones.

The items /steps listed will be translated in to time requirements, financial requirements and manpower requirements.

With this methodology/ approach, a specific village plan will be made per village.

This planning will be worked out in MS Project software and will lay the foundation for the monitoring of progress per village.

Planning of the programme

The next step in the planning will be to translate the planning per village, into the over all planning of the project, to begin with a one year period.

Where the village plan should result in an estimate of the time frame needed from start to finish, PRED can determine how the activities in a number of villages can be scheduled, based on the manpower and the teams needed for the various stages of the methodology.

E.G., while construction is going on in one village, the hydrogeological works may executed in another, while the preparatory activities for a village plan are being made in a third village, etc.

It is targeted that the approach leads to a "roll on programme", where it moves through the project area producing RWS systems per village, within a limited span of time, rather than, commencing works in 20 villages at the same time, with a more open ended completion time frame.

While the proposal, expected to be presented in March will focus on the methodology and approach: it is suggested that this will be applied to a number of village, and critically reviewed and adapted wherever necessary, to result in a well tested and finalized methodology to RWS provision.

Based on the experience with the methodology and the volume and speed of providing these village based systems, during the first year, the workplans for the succeeding phase can be filled in, in a follow up proposal.

7.1.2. Hydrogeological activities for the provisions in 25 habitations in zone D, A and B.

The Hydro-geology unit of PRED will provide services to the 25 villages targeted in the first year, as these village plans are developed along the way and the unit's services are requested for.

In addition to the services for the first 25 villages, the Hydrogeology unit will explore the feasibility of acceptable qualities and quantities in the remainder of the project area, so that at the end of the starting up year, the scope for a groundwater based approach in these areas is well researched and clarified.

To assist the Hydrogeological unit, NAPO has requested the services of an expert hydro-Geologist, who is expected to strengthen the unit in terms of latest technologies, and advise on the management and operation of the unit, for both research as wells as application in the field. (for details please refer to the NAPO workplan AUG 1996 - March 1997).

NAPO has held discussions with the Hydrogeology expert in the A.P. Well project, regarding the data that have been gathered and researched in this project on Nalgonda District.

It has been agreed that all relevant data will be made available to NAPO/PRED in digital form.

7.1.3 scheduled activities for the preparation of the proposal for the phase out AP II / Phase in AP III year.

8. AP II.

PRED, as represented by 13 Dy EE's from all the concerned Districts, has identified the level of completion for all Districts of AP II, in a three day workshop with assistance of NAPO and the Support Mission. The Incompletions have been listed and translated into a realistic planning for finalization of the AP II programme. (please refer to description of AP II completion in the earlier section of the progress report).

The planning was finalized by the Engineer-in-Chief, with further instructions to the concerned PRED staff that after 31 December, 1996, no further financial bookings will be made on the NAP AP II projects, while the PRED internal completion reports for the four Districts are expected by March 1997.

NAPO welcomes these much awaited measures and hopes these will put the pressure on in the Districts to speed up and finalize the works.

Incompletions existing after 31 December will of course have to be completed still, but have to be booked on the regular PRED programmes. This will put further pressure to speed up the completion of AP II.

PREPARATIONS FOR DRAFTING ALTERNATIVE PROPOSAL

In preparation of an alternative proposal for AP III, Nalgonda, PRED is presently working on the following issues,

- assessment of the ready for use parts of previous documents,
- information on an over all water plan for Nalgonda, if available,
- criteria for village selection,
- Operational planning for ground water based village approach,
- inventory of existing water supply systems in zones D and A and B,
- documentation on de-fluoridation,
- documentation of rain water harvesting and rain fall data,
- composition of PRED staff for AP III and the institutional position of such staff,
- over all Operational plan for all activities, (technical, social, hydrogeological, O&M, monitoring etc).

In cooperation with the PRED, NAPO has meanwhile conducted a research in 9 PRFS villages. The findings have been laid down in an internal working document, called " study on water supply systems , in PRFS villages , Nalgonda, NAPO 9 December 1996".

The findings and conclusions are considered interesting inputs for the ground water based village approach targeted for AP III.

The study indicates good potential for acceptable quantity and quality of RWS, through village based RWS systems with ground water as a source, and indicates interesting options for local management, finance and cost recovery in these systems.

The document has been shared with PRED, Principal Secretary PR & RD and the Netherlands Embassy, and ETC / IWACO.

The study also indicates that these 9 villages could be taken up for improvements on the existing systems, in either the immediate relief fund or as a starter in the AP III proposal.

In any case these villages seem to constitute an interesting point of departure for study and further conceptualization of the approach for the alternative proposal.

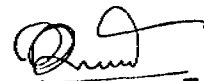
ANNEXURES

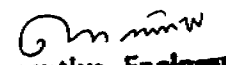
ANNEXURE I

ABSTRACT STATEMENTS ON QPRs

ABSTRACT PROGRESS REPORT FOR QUARTER ENDING SEPTEMBER, 1996 NAF KOLLAPUR

Sr. No.	Name of the work	Estt. cost in Lakhs	Revised estimate cost	Upto last year 3/96	Expenditure		Total	Cumulative Expenditure in Lakhs.
					Upto end of previous quarter	During the quarter		
1.	Head works	75.15	90.75	85.28	3.41	2.51	5.92	91.20
2.	Transmission line including CI Spl. and pump sets	277.98	317.70	296.03	0.96	1.47	2.43	298.46
3.	Link Channel	--	55.00	59.00	1.07	--	1.07	60.07
4.	Balancing Reservoirs	43.83	13.09	7.59	0.48	0.56	1.04	8.63
5.	Servicing Reservoirs (GLSRs and OHSRs)	--	55.00	39.19	1.21	0.37	1.58	40.77
6.	Village Distribution	60.85	60.65	51.22	4.46	5.02	9.48	60.70
7.	Buildings	36.28	2.512	20.08	--	--	--	20.08
8.	KM and HM stones	1.01	--	0.60	--	--	--	0.60
9.	Steel	--	--	17.40	--	--	--	17.40
10.	Establishment 12.5 on 506.27	68.28	70.23	77.28	--	0.79	--	77.28
11.	Cement	--	--	22.31	--	0.79	0.79	23.10
12.	D.P.A.P.	12.44	77.28	77.37	--	--	--	77.37
13.	C.Es.office Building vide Lr.No.DB/1173/91-92	--	--	3.00	--	--	--	3.00
14.	L.S.Fluctuation of rates	--	64.00	--	--	--	--	--
15.	L.S.for Telecommunication	--	5.18	--	--	--	--	--
Total:		744.16	780.00	756.35	11.59	10.72	22.31	778.66


Deputy Executive Engineer,
P.R. Operation & Maintenance,
Sub-Division, GUEM.


Executive Engineer
(P.R.) Divn) Wanaparthi.
ep

QUARTERLY PROGRESS REPORT FOR THE QUARTER ENDING SEPTEMBER 1996

N.A.P. - A.P. II NEDAK DISTRICT PROJECT, N.A.P. DIVISION SADASHIVPET.

Sl. No. Name of Sub-Head, Provision in P.R.E of Rs. 1088 Lakhs Exp upto June 95. Exp from 7/96 to 9/96. Exp upto September 96.

Sl. No.	Name of Sub-Head	Provision in P.R.E of Rs. 1088 Lakhs	Exp upto June 95.	Exp from 7/96 to 9/96.	Exp upto September 96.
1.	CPWSS Ibrahimpur and 24 other Problem Villages.	356.470	342.265	1.280	343.485
2.	CPWSS Boranaha and 20 other problem villages	216.260	191.983	3.353	195.336
3.	CPWSS Karasguthy and 17 other problem villages.	193.920	168.565	2.319	170.884
4.	Buildings incl. PS & T AP.	31.620	31.187	-	31.187
5.	Cost of materials procured but not allocated to works such as CI Valves, Spis and CILA pipes etc.	-	16.516 (-)	0.674	15.842
6.	Cost of Cement and Steel procured but not allocated to works.	-	15.429 (-)	1.773	13.655
7.	Subsidy paid to APSSB incl Constn. of D.P Structures.	15.50	14.727	-	14.727
8.	CPWSS Ibrahimpur 21 Enroute Villages.	66.39	41.980	0.165	42.045
9.	CPWSS Boranaha 11 Enroute Villages.	35.26	30.732	0.558	31.290
10.	CPWSS Karasguthy 11 Enroute Villages	41.95	36.491	0.180	36.671
11.	Major Estt.Charges	70.72	-	-	70.72
a.	S.T.O Payment	-	96.039	3.033	99.072
b.	On Furniture, Telephones Xerox, M/C, Computers, Vehicles.	-	24.936	0.676	25.612
c.	Exp. of O/o S.E.N.A.P.	-	31.721	-	31.721
12.	P.S.Charges	37.71	26.736	0.420	27.156
13.	Tools and Plants and Storage.	12.43	8.971	-	8.971
14.	Telephone Connections	5.00	-	-	-
15.	Other Unforeseen Items	2.75	0.717	-	0.717
16.	Amount transferred to E.E(SR) Miryalguda.	-	15.000	-	15.000

GRAND TOTAL 1088.00 1093.735 9.537 1103.272

EXPENDITURE INCURRED ON OPERATION & MAINTENANCE (1996-97) 11.125 11.703 12.304 24.007 (upto 9/96)

NOTE: All Figures are in Lakhs.

V. N. Srinivasulu
Executive Engineer (SR)
N.A.P. DIVISION, SADASHIVPET.

5/10/96

A.P. II N.A.P. PROJECT : PARCHUR.


Quarterly Progress Report for the Quarter September 196.

		Expenditure				
Sl No.	Group	RRC	FRE	Upto last quarter	During Quarter	Cumulative
1	2	3	4	5	6	7
1.	Group- I	291.60	295.53	284.65	1.14	285.79
2.	Group- II	127.63	125.79	120.76	1.81	122.57
3.	Group-III	70.93	64.26	61.76	0.91	62.67
4.	Group-IV	358.90	322.52	288.02	4.27	292.29
5.	Buildings	24.30	23.95	23.18	-	23.18
6.	Mopup activities	00.00	80.85	25.19	8.08	33.27
7.	Central stores/ stock A/c	00.00	00.00	21.29	(-)0.80	20.49
8.	Cement & Steel	0.00	0.00	3.79	3.81	7.60
9.	PSC ,MSC, T& P un forseen items	116.64	167.10	157.91	-	157.91
Total		990.00	1080.00	986.55	19.22	1005.77

Executive Engineer
Panchayat Raj Maintenance Division
DARSI,

23/09/96

Name of the work	Estt. cost in Lakhs	Revised estimate cost.	Up to last year 3/96	Expenditure		Total	Cumulative expenditure in Lakhs.
				Upto end of previous quarter	during the quarter		
Head works	75.15	90.75	85.37	--	3.39	3.39	89.76
Transmission line including							
1) CI Spl. and pump sets.	277.98	317.70	295.30	--	1.22	1.22	297.52
2) Link Channel	--	55.00	59.00	--	1.07	1.07	60.07
3) Balancing Reservoirs	43.83	13.09	7.59	--	0.48	0.48	8.07
4) Servicing Reservoirs (SGLSRS and QHSRS)	--	55.00	39.24	--	1.13	1.13	40.37
5) Village Distribution	60.85	60.65	51.22	--	4.46	4.46	55.68
6) Buildings	36.28	25.12	20.09	--	--	--	20.09
7) XM and HM stones	1.01	--	0.60	--	--	--	0.60
8) Steel	--	--	17.40	--	--	--	17.40
9) Establishment 12.5 on 506.27	63.28	70.23	77.28	--	--	--	77.28
10) Cement	--	--	22.37	--	--	--	22.31
11) D.P.A.P.	12.44	77.28	77.37	--	--	--	77.37
12) CE's office Building vide Lr.No.ED/1173/91-92	--	--	3.00	--	--	--	3.00
13) L.S. Fluctuation of rates	--	64.00	--	--	--	--	--
14) L.S. for Telecommunication	--	5.18	--	--	--	--	--
Total:	744.16	780.00	757.77	--	11.75	11.75	769.52
16) Establishment charges G and M	--	--	17.33	--	3.84	3.84	21.17
Total:	744.16	780.00	775.10	--	15.59	15.59	790.69


 Deputy Executive Engineer,
 P.R. Operation & Maintenance, Executive
 Sub-Division, GUDEM, (P.R.) Divn;
 e/2

PANCHAYAT RAJ ENGINEERING DEPARTMENT,
NETHERLANDS ASSISTED PROJECTS: YENCHIGANUR: KURNUL DT.
ABSTRACT OF QUARTERLY PROGRESS REPORT FOR THE QUARTER JUNE 2006

S.No.	Cri- gin al Est. cost	Revi sed Est cost	ABS	Final revi- sed Est. cost.	TARGETS		Expendi- ture		Efficient		Plea for next quarter.
					This qtr	Cumu- lative	This qtr.	Cumu lative	This Atr.	Cumu- lative.	
1. CPWS to Halvi & 25 other vgs.	166.19	254.19	232.18	236.52	0.00	236.52	4.19	233.35	0.00	98.93	233.52
2. CPWS to Mantral & 25 other villages & 2 PWS	86.52	144.67	167.63	175.63	0.00	175.63	7.77	139.76	0.00	79.72	175.63
3. CPWS to Sathanur & 15 other villages	180.38	232.57	246.63	232.05	0.00	232.05	6.15	225.15	0.00	97.07	232.05
4. CPWS to Manchala & 5 other villages	49.28	77.19	35.31	103.29	0.00	103.29	0.26	93.31	0.00	21.23	103.29
5. CPWS to Chinnakothiliki & other villages	42.77	77.53	86.15	36.77	0.00	36.77	0.50	34.35	0.00	90.42	36.77
6. Administrative Complex @ Yenchiganur	15.40	21.26	21.25	24.27	0.00	24.27	0.04	21.55	0.00	89.70	24.27
7. Steel & Cement procured.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.26	0.00	0.00	0.00
8. Steel & Cement booked on works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	91.19	0.00	0.00	0.00
9. P.S. Charges & Contingent Charges	21.64	32.30	35.59	72.50	0.00	72.50	2.31	71.09	0.00	121.12	72.50
10. P.S. Charges	40.50	60.55	66.73	130.04	0.00	130.04	0.17	141.24	0.00	117.00	130.04
11. T & F Charges	3.41	3.07	3.30	11.00	0.00	11.00	0.00	11.71	0.00	106.45	11.00
12. P.S. Provisions	130.46	39.54	36.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13. Others	2.07	2.07	2.07	1.93	0.00	1.93	0.00	0.31	0.00	41.37	1.93

741.20/250.00/1040.57/125.65 0.00/128.00/17.5/106.23/0.00/100.00											
1128.00											

Superintending Engineer Executive Engineer
Panchayat Raj, Circle (P)R Division,
Kurnool Adoni.

QUARTERLY PROGRESS REPORT FOR THE QUARTER ENDING JUNE 1996

N.A.P. A.P.II. - MEDAK DISTRICT PROJECT N.A.P. DIVISION SADASIVPET

Sl. No.	Name of Sub-Head	Provision in R.R.E. of Rs. 1088.Lakhs.	Exp. upto March '96	Exp. from 4/96 to 6/96	Exp. upto June '96
1.	2.	3.	4.	5.	6.
1.	CPWSS Ibrahimpur and 24 other Problem Villages.	356.470	341.685	0.520	342.205
2.	CPWSS Borancha and 20 other Problem Villages	216.260	191.983	-	191.983
3.	CPWSS Karasguthy and 17 other Problem villages.	193.920	167.095	1.470	168.565
4.	Buildings incl. PS. and T&P	31.620	31.187	-	31.187
5.	Cost of materials procured but not allocated to works such as CI Valves, spls, and CILA pipes etc.,	-	17.626	(-) 1.110	16.516
6.	Cost of Cement and Steel procured but not allocated works	-	14.018	1.411	15.429
7.	Subsidy paid to APSEB incl. constn. of D.P. Structures.	15.50	14.334	0.393	14.727
8.	CPWSS Ibrahimpur 21 Enroute Villages	66.39	41.574	0.306	41.880
9.	CPWSS Borancha 11 Enroute Villages.	36.26	30.710	0.022	30.732
10.	CPWSS Karasguthy 11 Enroute Villages	41.96	35.946	0.545	36.491
11.	Major Estt. Charges	70.72	-	-	-
a.	S.T.O. Payment	-	93.237	2.802	96.039
b.	On Furniture, Telephones Xerox M/S. Computers Vehicles.	-	24.557	0.379	24.936
c.	Exp. of S.E. N.A.P.	-	31.721	-	31.721
12.	P.S. Charges.	37.71	25.970	0.766	26.736
13.	Tools and Plants and Storage	12.43	8.871	-	8.871
14.	Telephone connections	6.00	-	-	-
15.	Other Unforeseen items	2.76	0.717	-	0.717
16.	Amount transferred to EE. (PR) Miryalguda.	-	15.00	-	15.00
GRAND TOTAL: Rs.		1088.00	1086.231	7.504	1093.735

EXPENDITURE INCURRED ON OPERATION AND MAINTENANCE (1996-97)

NIL

~~11.703~~

11.703

11.703

NOTE: ALL FIGURES ARE LAKHS.

V. Hanumanth Rao
Executive Engineer, (PR)
N.A.P. DIVISION SADASIVPET

A.P.II N.A.P. PROJECT: DARCHOOR.

QUARTERLY PROGRESS REPORT FOR THE QUARTER: JUNE, '96.

S.No.	Group.	R.R.E.	F.R.E.	Expenditure		
				Upto last Quarter.	During Quarter.	Cumula- tive.
1.	2.	3.	4.	5.	6.	7.
1.	Group.I	291.60	295.53	284.65	--	284.65
2.	Group.II	127.63	128.79	120.09	0.67	120.76
3.	Group.III	70.93	64.26	61.70	0.06	61.76
4.	Group.IV	358.90	322.52	287.08	0.94	288.02
5.	Buildings.	24.30	23.95	23.18	--	23-18
6.	Mop-up Activities.	00.00	80.85	22.26	2.93	25.19
7.	Central Stores/Stock A/c.	00.00	00.00	20.49	0.80	21.29
8.	Cement & Steel.	0.00	0.00	2.38	1.41	3.79
9.	PSC, MSC, T&P, Unfore- seen Items.	116.64	167.10	157.91	--	157.91
Total:		990.00	1080.00	979.74	6.81	986.55

Executive Engineer, P.R.,
Maintenance Division: Darsi.

ANNEXURE II

CUMULATIVE STATEMENT ON PHYSICAL PROGRESS

MAJOR COMPONENTS OF RWS AP II

Cumulative Physical Progress AP II (9/96)

Items	Total Works	Works Deleted	Compleat	Balance
Filters	38	1	37	0
S.S. Tanks	43	13	30	0
S. Tanks	7	0	7	0
Raw water wells	63	7	56	0
Clear water sumps	43	0	43	0
Pump houses	76	5	71	0
Pumping units	191	0	166+*	*
OHSR	77	0	75	2
BR	17	0	17	0
GLSR	146	0	145	1
Cisterns	47	0	*	*
Buildings	50	0	40+*	*
R/w trans. lines (km)	77.02	0	*	*
C/w trans. lines (km)	650.29	0	*	*
Dist. from village (km)	145.5	0	*	*

ANNEXURE III

***LPCD DETAILS AND CAPACITY UTILISATION
FOR CPWSS OF AP II***

**A note on the model for monitoring operation of
water supply schemes**

NAPO is on the threshold of developing a computerised model for monitoring the functioning of rural water supply schemes.

Model gives comparative analysis as given below

Constructed Capacity Vs Pumped quantities Vs Water received

The functioning of a scheme can be best judged in terms of what it has delivered to the people in the villages, comparing the delivery at village level to what has been pumped at scheme level gives an idea about leakages and wastage (which is a case more often than not). Similarly comparing these two factors with the built up capacity would give a picture about the capacity utilisation and the leakages and wastage there in.

Sources of information for the model

- i. Inventory of the schemes : Comprehensive information including as built details of all NAP schemes provided by PRED
- ii. Aggregate pumping data : Details of pumping for a month for a village, cluster and scheme maintained and supplied by the Panchayati Raj Engineering Department (PRED)
- iii. Village level water monitoring formats : Details of daily water supply at village level which are recorded by the community

In this note various parameters of this model as well as how to arrive at these parameters is explained.

Infrastructure Capacity for Pumping : The actual built up capacity of a scheme for pumping the both raw water and clear water is given by this parameter.

The capacity for pumping is a factor of discharge capacity of the motor expressed in cu.m per hour and no of hours motor is designed to operate.

Design capacity : $\text{Discharge (cum/hr)} * \text{no. of hrs (designed)}$
for a day

Design capacity : $\text{Discharge (cum/hr)} * \text{no. of hrs (designed)} * \text{no of days}$
for the month

Illustration (capacity for pumping) :

Discharge capacity of the pump : 54 cum/hr
No. of hours of operation (design) : 16
No of days in a month : 31

Infrastructure capacity for pumping : $54 * 16 * 31$ cum
for the month
: 26784 cum

In this manner infrastructure capacity for pumping the raw water and clear water can be arrived at.

As built capacity for discharge and designed no of hours would be available in the inventory of the schemes (to be) furnished by PRED.

Actual volume of water pumped : A scheme need not necessarily function up to its capacity and it would be interesting to know how much water is actually pumped vis-a-vis it's capacity.

Actually pumped volume : Discharge(cum/hr)*no.of hrs (actual) per day

actual volume : Discharge(cum/hr)*no.of hrs(actual)*no of days per month (pumping)

Illustration (actual volume of water pumped):

Discharge capacity of the pump	: 54 cum/hr
No. of hours of operation (actual)	: 12
No of days of supply in the month	: 30
Actual pumping for the month	: 54*12*30 cum
	: 19440 cum

In this manner actual volume of pumping (both raw water and clear water) can be arrived at.

Actual figures of discharge, no of hours(operated) and pumping days would be available in the aggregate pumping data furnished by the PRED.

Water received at village level :

Actually the interface between the village and water supply scheme is either a GLSR or OHSR through which a village receives the water. A scheme may pump water up to its full capacity or part of it but what is of paramount importance is how much water is received at the village level.

The quantity of water a village received in a month can be calculated from the capacity of the reservoir multiplied by no of times the reservoir is filled per day again multiplied by no of days/month the reservoir is filled.

Volume of water received at the village per month :

Reservoir capacity (cum) * no of fillings/day * no of days filled * 1.25

1.25 is a factor taken considering that 25% of reservoir capacity is consumed while filling the reservoir.

Illustration (water received at village):

Reservoir capacity : 60 cum
No of fillings/day : 1
No of days filled : 31
per month

Total volume of water received in the village per month :
 $60 \times 1 \times 31 \times 1.25 = 2325 \text{ cum}$

Total of volumes received at different villages of the scheme can be compared with the pumping information and as built capacity.

The required information such as reservoir capacity, no of fillings per day and no of days filled would be available from the water monitoring formats submitted by the NGOs.

Water supply index : It would be useful to compare various parameters like built up capacity , pumped details, delivery of water and express each parameter as a fraction of capacity and similarly what is received as a fraction of the capacity and pumped. It would be very confusing to give fraction of one factor which it self is a fraction of another factor.

Hence an index which gives comparison of various stages would be very helpful to understand the operation of the scheme. The following factors give an understanding of water supply at various stages

- i. ratio of r/w pumped to the capacity of r/w pumping
- ii. ratio of c/w pumped to the capacity of r/w pumping
- iii. ratio of water received at villages to capacity of r/w pumping

Illustration :

- i. Raw water pumped capacity : 100 litres
- ii. raw water pumped : 80 litres
- iii. clear water pumped : 60 litres
- iv. water received at village : 40 litres

Raw water capacity (c) : $100/100 = 1.0 \text{ c}$
raw water pumped : $80/100 = 0.8 \text{ c}$
clear water pumped : $60/100 = 0.6 \text{ c}$
water supply index (at village) : $40/100 = 0.4 \text{ c}$

Analysis Capacity Vs Pumping of water

Annexure 3.2

Scheme : Chinnamaroor

District : Mahabubnagar

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/			Actually Pumped Details PRED (r/w)						
Pum	Avg.	Vol	Pump	Avg.	Days	Vol		Cap	Act
Capa	Hour	Cu.m	Capa	Hrs/day	pum	Cu.m	Popul	LPCD	LPCD
Cum			Cu.m						
330	16	2E 05	330	8.5	30	84150	72259		
Total		2E 05				84150	72259	73.1	38.8

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/			Actually Pumped Details PRED						
Pum	Avg.	Vol	Pump	Avg.	Days	Vol		Cap	Act
Capa	Hour	Cu.m	Capa	Hours/d	pum	Cu.m	Popul	LPCD	LPCD
Cum			Cu.m						
314	16	2E 05	314.4	6.7	30	63194	72259	69.6	29.2
Total		2E 05				63194	72259	69.6	29.2

At a Glance comparison

Details	Capaci	Pumpe
R/w Vol C	2E 05	84150
C/w Vol C	2E 05	63194
R/w LPCD	73.1	38.8
C/w LPCD	69.6	29.2

Comparison in percentages

Details	Capaci	Pumpe	c/w/cap
R/w Vol C	100%	53%	
C/w Vol C	100%	42%	40%
R/w LPCD	100%	53%	
C/w LPCD	100%	42%	

Analysis Capacity Vs Pumping of water

Scheme : Chinnamaroor

District : Mahabubnagar

Month : May,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m			
330	16	163680	330	6	20	39600	72259		
Total		163680				39600	72259	73.1 17.7	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m			
314.4	16	155942	314.4	5	20	31440	72259	69.6 14.5	
Total		155942				31440	72259	69.6 14.5	

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	163680	39600
C/w Vol Cum	155942	31440
R/w LPCD	73.1	17.7
C/w LPCD	69.6	14.5

Comparison in percentages

Details	Capacit	Pumpe
R/w Vol Cum	100%	24%
C/w Vol Cum	100%	20%
R/w LPCD	100%	24%
C/w LPCD	100%	21%

Analysis Capacity Vs Pumping of water

Scheme : Chinnamaroor

District :

Mahabubnagar

Month :

June 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
397.5	16	190800	397.5	11	30	131175	72259		
Total		190800				131175	72259	88.0	60.5

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
158.4	16	76032	158.4	8	30	38016			
156	16	74880	156	8	30	37440			
22.74	16	10915.2	22.74	6	30	4093.2			
Total		161827.				79549.2	72259	74.7	36.7

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	190800	131175
C/w Vol Cum	161827.	79549.2
R/w LPCD	88.0	60.5
C/w LPCD	74.7	36.7

Comparison in percentages

Details	Capacit	Pumpe	
R/w Vol Cum	100%	69%	
C/w Vol Cum	100%	49%	42%
R/w LPCD	100%	69%	
C/w LPCD	100%	49%	

Analysis Capacity Vs Pumping of water

Scheme : Chinnamaroor

District :

Mahabubnagar

Month :

July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
397.5	16	197160	397.5	10	31	123225	72259		
Total		197160				123225	72259	88.0	55.0

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
158.4	16	78566.4	158.4	7	31	34372.8			
156	16	77376	156	7	31	33852			
22.74	16	11279.0	22.74	6	31	4229.64			
Total		167221.				72454.4	72259	74.7	32.3

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	197160	123225
C/w Vol Cum	167221.	72454.4
R/w LPCD	88.0	55.0
C/w LPCD	74.7	32.3

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	63%	
C/w Vol Cum	100%	43%	37%
R/w LPCD	100%	63%	
C/w LPCD	100%	43%	

Analysis Capacity Vs Pumping of water

Scheme : Chinnamaroor

District :

Mahabubnagar

Month :

Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
397.5	16	197160	397.5	11	20	87450	72259		
Total		197160				87450	72259	88.0	39.0

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
158.4	16	78566.4	158.4	9	20	28512			
156	16	77376	156	8	20	24960			
22.74	16	11279.0	22.74	5	18	2046.6			
Total		167221.				55518.6	72259	74.7	24.8

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	197160	87450
C/w Vol Cum	167221.	55518.6
R/w LPCD	88.0	39.0
C/w LPCD	74.7	24.8

Comparison in percentages

Details	Capacit	Pumpe	
R/w Vol Cum	100%	44%	
C/w Vol Cum	100%	33%	28%
R/w LPCD	100%	44%	
C/w LPCD	100%	33%	

Analysis Capacity Vs Pumping of water

Scheme : Chinnamaroor

District :

Mahabubnagar

Month :

Sep,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
397.5	16	190800	397.5	16	27	171720	72259		
Total		190800				171720	72259	88.0	79.2

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
158.4	16	76032	158.4	10	27	42768			
156	16	74880	156	11	27	46332			
22.74	16	10915.2	22.74	6	26	3547.44			
Total		161827				92647.4	72259	74.7	42.7

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	190800	171720
C/w Vol Cum	161827	92647.4
R/w LPCD	88.0	79.2
C/w LPCD	74.7	42.7

Comparison in percentages

Details	Capacit	Pumpe	
R/w Vol Cum	100%	90%	
C/w Vol Cum	100%	57%	49%
R/w LPCD	100%	90%	
C/w LPCD	100%	57%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki District : Kurnool
 NGO : HERSELF Month : Apr,96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)									
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m					
54	16	25920	54	14.5	30	23490	Ckothili	60	1	30	2250					
							Sajeewa	5	1	30	187.5					
							Pkthili	60	1	30	2250					
							Johara	15	1	24	450					
							Gvarm	15	1	26	487.5					
							155				5625					
							Pchinta	35	1	29	1268.8					
							Soganu	60	1	28	2100					
							Tskalur	60	1	0	0					
												155				3368.8
Total		25920				23490		310			8993.8					

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)								
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m				
22.38	16	10742	22.38	13.5	30	9063.9	Ckothili	60	1	30	2250				
							Sajeewa	5	1	30	187.5				
							Pkthili	60	1	30	2250				
							Johara	15	1	24	450				
							Gvarm	15	1	26	487.5				
												155			5625
21.3	16	10565	21.3	14	30	8946	Pchinta	35	1	29	1268.8				
							Soganu	60	1	28	2100				
							Tskalur	60	1	0	0				
												155			3368.8
Total		21307				18010		310			8993.8				

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	34.9
2	Sajeevapuram	200	31.3
3	Peddakothiliki	1687	44.5
4	Joharapuram	615	24.4
5	Gangavaram	524	31.0
Zone I	Sub Total	5177	35.0
6	Poolachinta	1409	30.0
7	Soganur	1660	42.2
	Sub Total	8246	36.4
8	Tskalur	2159	0.0
Zone II	Sub Total	5228	21.5
Schem	G.Total	10405	28.8

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	25920	23490	8994
C/w Vol Cum	21307	18010	8994
R/w LPCD	83.0	75.3	36.4
C/w LPCD	68.3	57.7	36.4

Comparison in percentages

Details	Capacit	Pumpe	Delivery	c/w/cap
R/w Vol Cum	100%	91%	35%	
C/w Vol Cum	100%	85%	42%	69%
R/w LPCD	100%	91%	44%	
C/w LPCD	100%	85%	53%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki District : Kurnool
 NGO : HERSELF Month : May,96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
54	16	26784	54	14	31	23436	Ckothili	60	1	31	2325
							Sajeewa	5	1	31	193.75
							Pkthili	60	1	31	2325
							Johara	15	1	27	506.25
							Gvarm	15	1	28	525
	155				5875						
							Pchinta	35	1	30	1312.5
							Soganu	60	1	21	1575
							Tskalur	60	1	0	0
							155				2887.5
Total		26784				23436		310			8762.5

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
22.38	16	11100	22.38	14	31	9713	Ckothili	60	1	31	2325
							Sajeewa	5	1	31	193.75
							Pkthili	60	1	31	2325
							Johara	15	1	27	506.25
							Gvarm	15	1	28	525
							155				5875
21.3	16	10565	21.3	15	31	9905	Pchinta	35	1	30	1312.5
							Soganu	60	1	21	1575
							Tskalur	60	1	0	0
							155				2887.5
Total		21665				19617		310			8762.5

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	35
2	Sajeevapuram	200	31
3	Peddakothiliki	1687	44
4	Joharapuram	615	27
5	Gangavaram	524	32
Zone I Sub Total		5177	36.6
6	Poolachinta	1409	30
Sub Total		6586	43
7	Soganur	1660	31
Sub Total		6246	34.3
8	Tskalur	2159	0
Zone II Sub Total		5228	17.8
Schem G.Total		10405	27

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	26784	23436	8763
C/w Vol Cum	21665	19617	8763
R/w LPCD	83.0	72.7	34.3
C/w LPCD	67.2	60.8	34.3

Comparison in percentages

Details	Capacit	Pumpe	Delivery	c/w/cap
R/w Vol Cum	100%	88%	33%	
C/w Vol Cum	100%	91%	40%	73%
R/w LPCD	100%	88%	41%	
C/w LPCD	100%	91%	51%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki
NGO : HERSELF

District : Kurnool
Month : June 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
54	16	25920	54	12	30	19440	Ckothili	60	1	30	2250
							Sajeewa	5	1	30	187.5
							Pkthili	60	1	27	2025
							Johara	15	1	21	393.75
							Gvarm	15	1	22	412.5
						155				5268.8	
							Pchinta	35	1	27	1181.3
							Soganu	60	1	19	1425
							Tskalur	60	1	0	0
							155				2606.3
Total		25920				19440		310			7875

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
22.38	16	10742.4	22.38	12	30	8056.8	Ckothili	60	1	30	2250
							Sajeewa	5	1	30	187.5
							Pkthili	60	1	27	2025
							Johara	15	1	21	393.75
							Gvarm	15	1	22	412.5
						155				5268.8	
21.3	16	10564.8	21.3	13	30	8307	Pchinta	35	1	27	1181.3
							Soganu	60	1	19	1425
							Tskalur	60	1	0	0
							155				2606.3
Total		21307.2				16364		310			7875

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	34.9
2	Sajeevapuram	200	31.3
3	Peddakothiliki	1687	40.0
4	Joharapuram	615	21.3
5	Gangavaram	524	26.2
Zone I	Sub Total	5177	32.8
6	Poolachinta	1409	27.9
7	Soganur	1660	28.6
	Sub Total	8246	31.8
8	Tskalur	2159	0.0
Zone II	Sub Total	5228	16.6
Schem	G.Total	10405	25.2

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	25920	19440	7875
C/w Vol Cum	21307	16364	7875
R/w LPCD	83.0	62.3	31.8
C/w LPCD	68.3	52.4	31.8

Comparison in percentages

Details	Capacit	Pumpe	Delivery	%capac
R/w Vol Cum	100%	75%	30%	
C/w Vol Cum	100%	77%	37%	63%
R/w LPCD	100%	75%	38%	
C/w LPCD	100%	77%	47%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki District : Kurnool
 NGO : HERSELF Month : July,96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)					
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m	
54	16	26784	.54	10	31	16740	Ckothili	60	1	31	2325	
							Sajeeva	5	1	27	168.75	
							Pkthili	60	1	27	2025	
							Joharapu	15	1	21	393.75	
							Gvarm	15	1	18	337.5	
							155				5250	
							Pchinta	35	1	31	1356.3	
							Soganur	60	1	21	1575	
							Tskalur	60	1	0	0	
												2931.3
Total		26784				16740		310			8181.3	

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)					
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m	
22.38	16	11100	22.38	13	31	9019	Ckothili	60	1	31	2325	
							Sajeeva	5	1	27	168.75	
							Pkthili	60	1	27	2025	
							Joharapu	15	1	21	393.75	
							Gvarm	15	1	18	337.5	
							155				5250	
21.3	16	10565	21.3	9	31	5943	Pchinta	35	1	31	1356.3	
							Soganur	60	1	21	1575	
							Tskalur	60	1	0	0	
												2931.3
Total		21665				14962		310			8181.3	

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	35
2	Sajeevapuram	200	27
3	Peddakothiliki	1687	39
4	Joharapuram	615	21
5	Gangavaram	524	21
Zone I	Sub Total	5177	32.7
6	Poolachinta	1409	31
7	Soganur	1660	31
	Sub total	8246	32.0
8	Tskalur	2159	0
Zone II	Sub Total	5228	18.1
Schem	G.Total	10405	25

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	26784	16740	8181
C/w Vol Cum	21665	14962	8181
R/w LPCD	83.0	51.9	32.0
C/w LPCD	67.2	46.4	32.0

Comparison in percentages

Details	Capacit	Pumpe	Delivery	c/w/cap
R/w Vol Cum	100%	63%	31%	
C/w Vol Cum	100%	69%	38%	56%
R/w LPCD	100%	63%	39%	
C/w LPCD	100%	69%	48%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki
NGO : HERSELF

District : Kurnool
Month : Aug 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	26784	54	9.5	31	15903	Ckothili	60	1	30	2250
							Sajeeva	5	1	30	187.5
							Pkthili	60	1	25	1875
							Johara	15	1	22	412.5
							Gvarm	15	1	16	300
							155				5025
							Pchinta	35	1	31	1356.3
							Soganu	60	1	8	600
							Tskalur	60	1	0	0
							155				1956.3
Total		26784				15903		310			6981.3

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
22.38	16	11100	22.38	9	31	6244	Ckothili	60	1	30	2250
							Sajeeva	5	1	30	187.5
							Pkthili	60	1	25	1875
							Johara	15	1	22	412.5
							Gvarm	15	1	16	300
							155				5025
21.3	16	10565	21.3	10.5	31	6933	Pchinta	35	1	31	1356.3
							Soganu	60	1	8	480
							Tskalur	60	1	0	0
							155				1836.3
Total		21665				13177		310			6861.3

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	34
2	Sajeevapuram	200	30
3	Peddakothiliki	1687	36
4	Joharapuram	615	22
5	Gangavaram	524	18
Zone I Sub Total		5177	31.3
6	Poolachinta	1409	31
Sub Total		6586	34
7	Soganur	1660	9
Total		8246	27
8	Tskalur	2159	0
Zone II Sub Total		5228	11.3
Schem G.Total		10405	21

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	26784	15903	6981
C/w Vol Cum	21665	13177	6861
R/w LPCD	83.0	49.3	26.8
C/w LPCD	67.2	40.9	26.8

Comparison in percentages

Details	Capacit	Pumpe	Delivery	cw/cap
R/w Vol Cum	100%	59%	26%	
C/w Vol Cum	100%	61%	32%	49%
R/w LPCD	100%	59%	32%	
C/w LPCD	100%	61%	40%	

Trial run on Chinnakothiliki Scheme

Scheme : Chinnakothiliki
NGO : HERSELF

District : Kurnool
Month : Sep 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	25920	54	10	30	16200	Ckothili	60	1	30	2250
							Sajeeva	5	1	30	187.5
							Pkthili	60	1	30	2250
							Johara	15	1	26	487.5
							Gvarm	15	1	30	562.5
	155				5737.5						
							Pchinta	35	1	27	1181.3
							Soganu	60	1	15	1125
							Tskalur	60	1	0	0
	155				2306.3						
Total		25920				16200		310			8043.8

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
22.38	16	10742	22.38	10.26	30	6888.6	Ckothili	60	1	30	2250
							Sajeeva	5	1	30	187.5
							Pkthili	60	1	30	2250
							Johara	15	1	26	487.5
							Gvarm	15	1	30	562.5
	155				5737.5						
21.3	16	10565	21.3	10	30	6390	Pchinta	35	1	27	1181.3
							Soganu	60	1	15	1125
							Tskalur	60	1	0	0
	155				2306.3						
Total		21307				13279		310			8043.8

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Chinnakothiliki	2151	34.9
2	Sajeevapuram	200	31.3
3	Peddakothiliki	1687	44.5
4	Joharapuram	615	26.4
5	Gangavaram	524	35.8
Zone I Sub Total I		5177	35.8
6	Poolachinta	1409	27.9
7	Soganur	1660	22.6
Sub Total II		8246	32.5
8	Tskalur	2159	0.0
Zone II Sub Total III		5228	14.7
Schem G.Total		10405	25.8

At a Glance comparison

Details	Capacit	Pumpe	Delivery
R/w Vol Cum	25920	16200	8044
C/w Vol Cum	21307	13279	8044
R/w LPCD	83.0	51.9	32.5
C/w LPCD	68.3	42.5	32.5

Comparison in percentages

Details	Capacit	Pumpe	Delivery	c/w/cap
R/w Vol	100%	63%	31%	
C/w Vol	100%	62%	38%	51.2%
R/w LP	100%	63%	39%	
C/w LPCD	100%	62%	48%	

Trial run on Manchala Scheme

Annexure 3.4

Scheme : Manchala
 NGO : HERSELF
 Population (96) : 18630

District : Kurnool
 Month : Apr, 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	25920	54	10.75	30	17415	Mantralayam	60	1	26	1950
							Chetnahelli	45	1	29	1631.25
							Nadikirawadi	30	1	23	862.5
								135			4443.75
							Ibrahimpur	90	1	0	0
							Kalludevakunta	20	1	30	750
							Machapuram	35	1	13	568.75
							Chilakaladona	90	1	29	3262.5
								235			4581.25
Total		25920				17415		370			9025

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
31.5	16	15120	31.5	9.25	30	8741.25	Mantralayam	120	1	26	3900
							Chetnahelli	45	1	29	1631.25
							Nadikirawadi	30	1	23	862.5
								195			6393.75
42	16	20160	42	6.25	30	7875	Ibrahimpur	90	1	0	0
							Kalludevakunta	20	1	30	750
							Machapuram	35	1	13	568.75
							Chilakaladona	90	1	29	3262.5
								235			4581.25
		35280				16616.3		430			10975

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	20.1
2	Chetnahelli	1784	30.5
3	Nadikirawadi	1368	21.0
Zone I		9631	22.1
4	Kalludevakunta	1410	17.7
5	Machapuram	1770	10.7
6	Chilakaladona	3227	33.7
Zone II		6406	23.8
		16037	22.8
7	Ibrahimpur	2593	0.0
		18630	19.6

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	25920	17415	9025
C/w Vol Cum	35280	16616.3	10975
R/w LPCD	46	31	23
C/w LPCD	63	30	23

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol Cum	100%	67%	35%	
C/w Vol Cum	100%	47%	31%	64%
R/w LPCD	100%	67%	49%	
C/w LPCD	100%	47%	36%	

Village level reservoir capacities to be verified ?

Trial run on Manchala Scheme

Scheme : Manchala
 NGO : HERSELF
 Population (96) : 18630

District : Kurnool
 Month : May, 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	26784	54	15	31	25110	Mantralay	120	1	28	4200
							Chetnahel	45	1	29	1631.25
							Nadikiraw	30	1	31	1162.5
								195			6993.75
							Ibrahimpu	90	1	0	0
							Kalludeva	20	1	29	725
							Machapur	35	1	0	0
Chilakala	90	1	2	225							
						235				950	
Total		26784				25110		430			7943.75

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
31.5	16	15624	31.5	9.75	31	9520.88	Mantralay	120	1	28	4200
							Chetnahel	45	1	29	1631.25
							Nadikiraw	30	1	31	1162.5
								195			6993.75
42	16	20832	42	6.75	31	8788.5	Ibrahimpu	90	1	0	0
							Kalludeva	20	1	29	725
							Machapur	35	1	0	0
							Chilakala	90	1	2	225
						235				950	
		36456				18309.4		430			7943.75

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	20.9
2	Chetnahelli	1784	29.5
3	Nadikirawadi	1368	27.4
Zone I		9630	23.4
4	Kalludevakunta	1410	16.6
5	Machapuram	1770	0.0
6	Chilakaladona	3227	2.2
Zone II		6407	4.8
Zone I+II		16037	16.0
7	Ibrahimpur	2593	0.0
Scheme		18630	13.8

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	26784	25110	7943.75
C/w Vol Cum	36456	18309.4	7943.75
R/w LPCD	46.4	43.5	16.0
C/w LPCD	63.1	31.7	16.0

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol Cum	100%	94%	30%	
C/w Vol Cum	100%	50%	22%	68%
R/w LPCD	100%	94%	34%	
C/w LPCD	100%	50%	25%	

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Trial run on Manchala Scheme

Scheme : Manchala
 NGO : HERSELF
 Population (96) : 18630

District : Kurnool
 Month : Jun 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	25920	54	12	30	19440	Mantralay	120	1	25	3750
							Chetnahel	45	1	27	1518.75
							Nadikiraw	30	1	16	600
								195			5868.75
							Ibrahimpu	90	1	0	0
							Kalludeva	20	1	25	625
							Machapur	35	1	9	393.75
							Chilakala	90	1	24	2700
								235			3718.75
Total		25920				19440		430			9587.5

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
31.5	16	15120	31.5	8.5	30	8032.5	Mantralay	120	1	25	3750
							Chetnahel	45	1	27	1518.75
							Nadikiraw	30	1	16	600
								195			5868.75
42	16	20160	42	6.5	30	8190	Ibrahimpu	90	1	0	0
							Kalludeva	20	1	25	625
							Machapur	35	1	9	393.75
							Chilakala	90	1	24	2700
								235			3718.75
		35280				16222.5		430			9587.5

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	19.3
2	Chetnahelli	1784	28.4
3	Nadikirawadi	1368	14.6
Zone I		9630	20.3
4	Kalludevakunta	1410	14.8
5	Machapuram	1770	7.4
6	Chilakaladona	3227	27.9
Zone II		6407	19.3
		16037	19.9
7	Ibrahimpur	2593	0.0
		18630	17.2

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	25920	19440	9587.5
C/w Vol Cum	35280	16222.5	9587.5
R/w LPCD	46	35	20
C/w LPCD	63	29	20

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol C	100%	75%	37%	
C/w Vol C	100%	46%	27%	63%
R/w LPCD	100%	75%	43%	
C/w LPCD	100%	46%	32%	

Trial run on Manchala Scheme

Scheme : Manchala
 NGO : HERSELF
 Population (96) : 18630

District : Kurnool
 Month : Jul.96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	26784	54	12.5	31	20925	Mantralayam	120	1	24	3600
							Chetnahelli	45	1	31	1743.75
							Nadikirawadi	30	1	31	1162.5
								195			6506.25
							Ibrahimpur	90	1	0	0
							Kalludevakunta	20	1	30	750
							Machapuram	35	1	9	393.75
							Chilakaladona	90	1	28	3150
	235			4293.75							
Total		26784				20925	430				10800

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
31.5	16	15624	31.5	9.75	31	9520.88	Mantralayam	120	1	24	3600
							Chetnahelli	45	1	31	1743.75
							Nadikirawadi	30	1	31	1162.5
							195			6506.25	
42	16	20832	42	8	31	10416	Ibrahimpur	90	1	0	0
							Kalludevakunta	20	1	30	750
							Machapuram	35	1	9	393.75
							Chilakaladona	90	1	28	3150
								235			4293.75
		36456				19936.9	430			10800	

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	17.9
2	Chetnahelli	1784	31.5
3	Nadikirawadi	1368	27.4
Zone I		9631	21.8
4	Kalludevakunta	1410	17.2
5	Machapuram	1770	7.2
6	Chilakaladona	3227	31.5
Zone II		6406	21.6
Zone I+II		16037	21.7
7	Ibrahimpur	2593	0.0
Scheme		18630	18.7

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	26784	20925	10800
C/w Vol Cum	36456	19936.9	10800
R/w LPCD	46.4	36.2	21.7
C/w LPCD	63.1	34.5	21.7

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol Cum	100%	78%	40%	
C/w Vol Cum	100%	55%	30%	74.4%
R/w LPCD	100%	78%	47%	
C/w LPCD	100%	55%	34%	

Trial run on Manchala Scheme

Scheme : Manchala District : Kurnool
 NGO : HERSELF Month : Aug 96
 Population (96) : 18630

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
54	16	26784	54	13.5	31	22599	Mantralay	120	1	27	4050
							Chetnahel	45	1	26	1462.5
							Nadikiraw	30	1	16	600
								195			6112.5
							Ibrahimpu	90	1	0	0
							Kalludeva	20	1	26	650
							Machapur	35	1	19	831.25
							Chilakala	90	1	25	2812.5
					235				4293.75		
Total		26784				22599					10406.3

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/ Day	Days filled	Vol Cu.m
31.5	16	15624	31.5	10	31	9765	Mantralay	120	1	27	4050
							Chetnahel	45	1	26	1462.5
							Nadikiraw	30	1	16	600
								195			6112.5
42	16	20832	42	8	31	10416	Ibrahimpu	90	1	0	0
							Kalludeva	20	1	26	650
							Machapur	35	1	19	831.25
							Chilakala	90	1	25	2812.5
								235			4293.75
		36456				20181					10406.3

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	20.2
2	Chetnahelli	1784	26.4
3	Nadikirawadi	1368	14.1
Zone I		9630	20.5
4	Kalludevakunta	1410	14.9
5	Machapuram	1770	15.1
6	Chilakaladona	3227	28.1
Zone II		6407	21.6
Zone I+II		16037	20.9
7	Ibrahimpur	2593	0.0
Scheme		18630	18.0

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	26784	22599	10406.3
C/w Vol Cum	36456	20181	10406.3
R/w LPCD	46.4	39.1	20.9
C/w LPCD	63.1	34.9	20.9

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol C	100%	84%	39%	
C/w Vol C	100%	55%	29%	75%
R/w LPCD	100%	84%	45%	
C/w LPCD	100%	55%	33%	

Trial run on Manchala Scheme

Scheme : Manchala
 NGO : HERSELF
 Population (96) : 18630

District : Kurnool
 Month : Sep 96

Pumping capacity Vs Pumped Volume Vs Delivery at the village (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
54	16	25920	54	10	30	16200	Mantralay	120	1	28	4200
							Chetnahel	45	1	27	1518.75
							Nadikiraw	30	1	19	712.5
								195			6431.25
							Ibrahimpur	90	1	0	0
							Kalludeva	20	1	27	675
							Machapur	35	1	27	1181.25
Chilakala	90	1	8	900							
	235			2756.25							
Total		25920				16200	430			9187.5	

Pumping capacity Vs Pumped Volume Vs Delivery at the village (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Actually delivered at Village (NGO)				
Pump Capa Cum/hr	Avg. Hours/day	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/day	Days pump	Vol Cu.m	Village name	r/v cap Cu.m	No Fillings/Day	Days filled	Vol Cu.m
31.5	16	15120	31.5	10.2	30	9639	Mantralay	120	1	28	4200
							Chetnahel	45	1	27	1518.75
							Nadikiraw	30	1	19	712.5
								195			6431.25
42	16	20160	42	7.86	30	9903.6	Ibrahimpur	90	1	0	0
							Kalludeva	20	1	27	675
							Machapur	35	1	27	1181.25
							Chilakala	90	1	8	900
								235			2756.25
		35280				19542.6	430			9187.5	

Village wise LPCD delivery

S.No	Village name	Populat	LPCD
1	Mantralayam	6478	21.6
2	Chetnahelli	1784	28.4
3	Nadikirawadi	1368	17.4
Zone I		9630	22.3
4	Kalludevakunta	1410	16.0
5	Machapuram	1770	22.2
6	Chilakaladona	3227	9.3
Zone II		6407	14.3
	Sub Total	16037	19.1
7	Ibrahimpur	2593	0.0
		18630	16.4

At a Glance comparison

Details	Capacity	Pumped	Delivery
R/w Vol Cum	25920	16200	9187.5
C/w Vol Cum	35280	19542.6	9187.5
R/w LPCD	46	29	19
C/w LPCD	63	35	19

Comparison in percentages

Details	Capacity	Pumped	Delivery	c/w/cap
R/w Vol C	100%	63%	35%	
C/w Vol C	100%	55%	26%	75%
R/w LPCD	100%	63%	41%	
C/w LPCD	100%	55%	30%	

Trial run on Hanawal Scheme

Scheme : Hanawal

District : Kurnool

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/			Actually Pumped Details PRED (r/w)				LPCD details		
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
66	16	31766	66.18		30		7694		
							5469		
Total		31766					13163	80.44	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/			Actually Pumped Details PRED				LPCD details		
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
13	16	6221	12.96	2.5	30	972	7694	26.95	4.21
33	16	15898	33.12	3.5	30	3478	5469	96.90	21.20
Total		22118				4450	13163	56.01	11.27

At a Glance comparison

Details	Capaci	Pumpe
R/w Vol Cu	31766	NA
C/w Vol C	22118	4449.6
R/w LPCD	80.4	
C/w LPCD	56.0	11.3

Comparison in percentages

Details	Capaci	Pumpe	cw/cap
R/w Vol Cu	100%		
C/w Vol C	100%	20%	14%
R/w LPCD	100%		
C/w LPCD	100%	20%	

Trial run on Hanawal Scheme

Scheme : Hanawal

District : Kurnool

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m			
66.18	16	32825	66.18		31		7694		
							5469		
Total		32825					13163	80.44	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m			
12.96	16	6428.2	12.96	4.5	31	1807.9	7694	26.95	7.58
33.12	16	16428	33.12	4	31	4106.9	5469	96.90	24.22
Total		22856				5914.8	13163	56.01	14.50

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	32825	
C/w Vol Cum	22856	5914.8
R/w LPCD	80.4	
C/w LPCD	56.0	14.5

Comparison in percentages

Details	Capacit	Pumpe
R/w Vol Cum	100%	
C/w Vol Cum	100%	26% 18%
R/w LPCD	100%	
C/w LPCD	100%	26%

Trial run on Hanawal Scheme

Scheme : Hanawal

District : Kurnool

Month : Jun,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m			
66.18	16	31766	66.18		30		7694		
							5469		
Total		31766					13163	80.44	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m			
12.96	16	6220.8	12.96	2.5	30	972	7694	26.95	
33.12	16	15898	33.12	3	30	2980.8	5469	96.90	
Total		22118				3952.8	13163	56.01	

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	31766	NA
C/w Vol Cum	22118	3952.8
R/w LPCD	80.4	
C/w LPCD	56.0	10.0

Comparison in percentages

Details	Capacit	Pumpe
R/w Vol Cum	100%	
C/w Vol Cum	100%	18% 12%
R/w LPCD	100%	
C/w LPCD	100%	18%

Trial run on Hanawal Scheme

Scheme : Hanawal

District : Kurnool

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				LPCD details		
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
66.18	16	32825	66.18		31		7694		
							5469		
Total		32825					13163	83.13	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				LPCD details		
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
12.96	16	6428.2	12.96	6.5	10	842.4	7694	27.85	3.55
33.12	16	16428	33.12	7	10	2318.4	5469	100.13	14.13
Total		22856				3160.8	13163	57.88	8.00

At a Glance comparison

Details	Capacit	Pumped
R/w Vol Cum	32825	NA
C/w Vol Cum	22856	3160.8
R/w LPCD	83.1	
C/w LPCD	57.9	8.0

Comparison in percentages

Details	Capacit	Pumped	cw/cap
R/w Vol Cum	100%		
C/w Vol Cum	100%	14%	10%
R/w LPCD	100%		
C/w LPCD	100%	14%	

Trial run on Hanawal Scheme

Scheme : Hanawal

District : Kurnool

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
66.18	16	32825	66.18		31		7694		
							5469		
Total		32825					13163	60.44	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
12.96	16	6428.2	12.96	8.75	31	3515.4	7694	26.95	14.74
33.12	16	16428	33.12	9.75	31	10011	5469	96.90	59.05
Total		22856				13526	13163	56.01	33.15

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	32825	
C/w Vol Cum	22856	13526
R/w LPCD	80.4	
C/w LPCD	56.0	33.1

Comparison in percentages

Details	Capacit	Pumpe
R/w Vol Cum	100%	
C/w Vol Cum	100%	59% 41%
R/w LPCD	100%	
C/w LPCD	100%	59%

Trial run on Hanawal Scheme

Scheme : Hanawal District : Kurnool
 Month : Sep,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
66.18	16	31766	66.18		30		7694		
							5469		
Total		31766					13163	80.44	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
12.96	16	6220.8	12.96	4.33	30	1683.5	7694	28.95	7.28
33.12	16	15898	33.12	1.33	30	1321.5	5469	96.90	8.05
Total		22118				3005	13163	56.01	7.61

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	31766	NA
C/w Vol Cum	22118	3005
R/w LPCD	80.4	
C/w LPCD	56.0	7.6

Comparison in percentages

Details	Capacit	Pumpe
R/w Vol Cum	100%	
C/w Vol Cum	100%	14% 9%
R/w LPCD	100%	
C/w LPCD	100%	14%

Analysis Capacity Vs Pumping of water

Scheme : Ibrahimpur

District : Medak

Month : June 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
275.28	16	132134.	275.28	10	23	63314.4	4449		
Total		132134.				63314.4	4449	99.0	47.4

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
192	16	92160	192	9.94	23	43895.0			
37.8	16	18144	37.8	10.21	23	8876.57			
Total		110304				52771.6	4449	82.6	39.5

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	132134.	63314.4
C/w Vol Cum	110304	52771.6
R/w LPCD	99.0	47.4
C/w LPCD	82.6	39.5

Comparison in percentages

Details	Capacit	Pumpe	
R/w Vol Cum	100%	48%	
C/w Vol Cum	100%	48%	40%
R/w LPCD	100%	48%	
C/w LPCD	100%	48%	

Analysis Capacity Vs Pumping of water

Scheme : Ibrahimpur

District : Medak

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m			
275.28	16	132134.	275.28	13.4	29	106973.	4449		
Total		132134.				106973.	4449	99.0 80.1	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m			
192	16	92160	192	12.7	29	70713.6			
37.8	16	18144	37.8	10.37	28	10975.6			
Total		110304				81689.2	4449	82.6 61.2	

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	132134.	106973.
C/w Vol Cum	110304	81689.2
R/w LPCD	99.0	80.1
C/w LPCD	82.6	61.2

Comparison in percentages

Details	Capacit	Pumpe	
R/w Vol Cum	100%	81%	
C/w Vol Cum	100%	74%	62%
R/w LPCD	100%	81%	
C/w LPCD	100%	74%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Day pum	Vol Cu.m			
148.	16	71280	148.5	10.21	30	45485.	3367		
Total		71280				45485.	3367	70.6 45.0	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Day pum	Vol Cu.m			
123.	16	59356.	123.66	13.28	30	49266.	3367	58.8 48.8	
Total		59356.				49266.	3367	58.8 48.8	

At a Glance comparison

Details	Capac	Pumpe
R/w Vol C	71280	45485.
C/w Vol C	59356.	49266.
R/w LPCD	70.6	45.0
C/w LPCD	58.8	48.8

Comparison in percentages

Details	Capac	Pumpe	c/w/cap
R/w Vol C	100%	64%	
C/w Vol C	100%	83%	69%
R/w LPCD	100%	64%	
C/w LPCD	100%	83%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
148.5	16	73656	148.5	11.76	31	54137.	3367		
Total		73656				54137.	3367	72.9	53.6

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
123.66	16	59356.	123.66	14.6	31	55968.	3367	58.8	55.4
Total		59356.				55968.	3367	58.8	55.4

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	73656	54137.
C/w Vol Cum	59356.	55968.
R/w LPCD	72.9	53.6
C/w LPCD	58.8	55.4

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	74%	
C/w Vol Cum	100%	94%	76%
R/w LPCD	100%	74%	
C/w LPCD	100%	94%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : June 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
148.5	16	71280	148.5	11.05	28	45945.	3367		
Total		71280				45945.	3367	70.6	45.5

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
123.66	16	59356.	123.66	13.9	28	48128.	3367	58.8	47.6
Total		59356.				48128.	3367	58.8	47.6

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	71280	45945.
C/w Vol Cum	59356.	48128.
R/w LPCD	70.6	45.5
C/w LPCD	58.8	47.6

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	64%	
C/w Vol Cum	100%	81%	68%
R/w LPCD	100%	64%	
C/w LPCD	100%	81%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
148.5	16	73656	148.5	5.09	26	19652.	3367		
Total		73656				19652.	3367	72.9	19.5

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
123.66	16	59356.	123.66	6.71	26	21573.	3367	58.8	21.4
Total		59356.				21573.	3367	58.8	21.4

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	73656	19652.
C/w Vol Cum	59356.	21573.
R/w LPCD	72.9	19.5
C/w LPCD	58.8	21.4

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	27%	
C/w Vol Cum	100%	36%	29%
R/w LPCD	100%	27%	
C/w LPCD	100%	36%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m			
148.5	16	73656	148.5	3.45	20	10246.	3367		
Total		73656				10246.	3367	72.9 10.1	

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED				Popul	Cap LPCD	Act LPCD
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m			
123.66	16	59356.	123.66	3.85	20	9521.8	3367	58.8 9.4	
Total		59356.				9521.8	3367	58.8 9.4	

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	73656	10246.
C/w Vol Cum	59356.	9521.8
R/w LPCD	72.9	10.1
C/w LPCD	58.8	9.4

Comparison in percentages

Details	Capacit	Pumpe	c/w ca
R/w Vol Cum	100%	14%	
C/w Vol Cum	100%	16%	13%
R/w LPCD	100%	14%	
C/w LPCD	100%	16%	

Analysis Capacity Vs Pumping of water

Scheme : CPWSS Karasguthy

District : Medak

Month : Sep 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
148.5	16	71280	148.5	9.27	30	41297.	3367		
Total		71280				41297.	3367	70.6	40.9

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
123.66	16	59356.	123.66	13.13	30	48709.	3367	58.8	48.2
Total		59356.				48709.	3367	58.8	48.2

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	71280	41297.
C/w Vol Cum	59356.	48709.
R/w LPCD	70.6	40.9
C/w LPCD	58.8	48.2

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	58%	
C/w Vol Cum	100%	82%	68%
R/w LPCD	100%	58%	
C/w LPCD	100%	82%	

Analysis Capacity Vs Pumping of water

Annexure 3.8

Scheme : Borancha

District : Medak

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r)			Actually Pumped Details PRED (r/w)						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Day pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
189.	16	91123.	189.84	13.6	30	77454.	4788		
Total		91123.				77454.	4788	63.437	53.921

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (Actually Pumped Details PRED						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Day pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
107.	16	51408	107.1	14.23	30	45721			
39.2	16	18835.	39.24	15	30	17658			
7.98	16	3830.4	7.98	10	30	2394			
6	16	2880	6	9	25	1350			
4.14	16	1987.2	4.14	3.25	21	282.56			
Total		78940.				67405.	4788	54.956	46.925

At a Glance comparison

Details	Capac	Pumpe
R/w Vol C	91123.	77454.
C/w Vol C	78940.	67405.
R/w LPCD	63.4	53.9
C/w LPCD	55.0	46.9

Comparison in percentages

Details	Capac	Pumpe	c/w/cap
R/w Vol C	100%	85%	
C/w Vol C	100%	85%	74%
R/w LPCD	100%	85%	
C/w LPCD	100%	85%	

Analysis Capacity Vs Pumping of water

Scheme : Borancha

District : Medak

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
189.84	16	94160.	189.84	14.24	31	83802.	47880.		
Total		94160.				83802.	47880.	65.552	58.341

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
107.1	16	53121.	107.1	14.31	31	47510.			
39.24	16	19463.	39.24	14.15	31	17212.			
7.98	16	3958.0	7.98	12.6	31	3116.9			
6	16	2976	6	9.9	30	1782			
4.14	16	2053.44	4.14	2.4	30	298.08			
Total		81572.				69920.	47880.	56.788	48.676

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	94160.	83802.
C/w Vol Cum	81572.	69920.
R/w LPCD	65.6	58.3
C/w LPCD	56.8	48.7

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	89%	
C/w Vol Cum	100%	86%	74%
R/w LPCD	100%	89%	
C/w LPCD	100%	86%	

Analysis Capacity Vs Pumping of water

Scheme : Borancha

District : Medak

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
189.84	16	94160.	189.84	13.23	29	72835.	47880.		
Total		94160.				72835.	47880.	65.552	50.706

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
107.1	16	53121.	107.1	12.914	29	40109.			
39.24	16	19463.	39.24	12.84	29	14611.			
7.98	16	3958.0	7.98	12	31	2968.5			
6	16	2976	6	7.86	27	1273.32			
4.14	16	2053.44	4.14	1.194	17	84.0337			
Total		81572.				59046.	47880.	56.788	41.106

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	94160.	72835.
C/w Vol Cum	81572.	59046.
R/w LPCD	65.6	50.7
C/w LPCD	56.8	41.1

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	77%	
C/w Vol Cum	100%	72%	63%
R/w LPCD	100%	77%	
C/w LPCD	100%	72%	

Analysis Water Monitoring Formats

PROJECT : Medak AP II (Borancha CPWSS)

DATA SOURCE : VILLAGE COMMITTEES VIA NGO MARI

MONITORED BY : NAPO

S.No	Village	Apr 96		May 96		Jun 96		Jul 96		Aug 96		Sep 96	
		Days	ALPCD	Days	ALPCD	Days	ALPCD	Days	ALPCD	Days	ALPCD	Days	ALPCD
1	Dosapally-a	26	18.1	16	10.8	10	6.9	13	8.7	2	1.3	11	7.6
	Dosapally-b	24	16.7	16	10.8	9	6.3	13	8.7	2	1.3	11	7.6
2	Gajwada	5	?	16	?	5	?	15	?	3	?	15	?
3	Usirikapally	26	?	15	?	12	?	4	?	4	?	9	?
4	Islampur	29	?	28	?	21	?	19	?	4	?	15	?
5	Dhanwar-a	16	6.1	12	4.4	7	2.7	12	4.4	4	1.5	14	5.3
	Dhanwar-b	16	6.1	12	4.4	6	2.3	12	4.4	3	1.1	14	5.3
6	Watpally-a	?	?	0	0.0	1	0.7	5	3.2	0	0.0	12	8.0
	Watpally-b	?	?	0	0.0	2	1.3	1	0.6	0	0.0	14	9.3
7	Ghatpally-a	16	26.7	18	29.0	10	16.7	10	16.1	6	9.7	12	20.0
	Ghatpally-b	16	26.7	18	29.0	11	18.3	10	16.1	6	9.7	13	21.7
8	Gorrekal-a	?	?	7	11.3	6	10.0	9	14.5	1	1.6	8	13.3
	Gorrekal-b	?	?	7	11.3	6	10.0	7	11.3	2	3.2	16	26.7
9	Nagulapally-a	6	5.0	4	3.2	4	3.3	4	3.2	0	0.0	0	0.0
	Nagulapally-b	5	4.2	4	3.2	2	1.7	1	0.8	0	0.0	0	0.0
10	Palvatla-a	3	3.0	8	7.7	0	0.0	1	1.0	0	0.0	0	0.0
	Palvatla-b	4	4.0	7	6.8	0	0.0	1	1.0	0	0.0	0	0.0
11	Pothulaboguda-a	11	16.3	3	4.3	5	7.4	6	8.6	?	?	13	19.3
	Pothulaboguda-a	11	16.3	4	5.7	5	7.4	6	8.6	?	?	15	22.2

Mari project area Volume (Cu.m) water delivered/month/village

S.No	Village	Apr 96		May 96		Jun 96		Jul 96		Aug 96		Sep 96	
		Days	Popula	Days	Popula	Days	Popula	Days	Popula	Days	Popula	Days	Popula
	Dosapally-a	390	720	240	720	150	720	195	720	30	720	165	720
	Dosapally-b	240	480	160	480	90	480	130	480	20	480	110	480
	Gajwada	?		?		?		?		?		?	
	Usirikapally	?		?		?		?		?		?	
	Islampur	?		?		?		?		?		?	
	Dhanwar-a	240	1320	180	1320	105	1320	180	1320	60	1320	210	1320
	Dhanwar-b	160	880	120	880	60	880	120	880	30	880	140	880
	Watpally-a	?	250	0		5	250	25	250	0		60	250
	Watpally-b	?	750	0		30	750	15	750	0		210	750
	Ghatpally-a	160	200	180	200	100	200	100	200	60	200	120	200
	Ghatpally-b	240	300	270	300	165	300	150	300	90	300	195	300
	Gorrekal-a	?	200	70	200	60	200	90	200	10	200	80	200
	Gorrekal-b	?	800	280	800	240	800	280	800	80	800	640	800
	Nagulapally-a	60	400	40	400	40	400	40	400	0		0	
	Nagulapally-b	100	800	80	800	40	800	20	800	0		0	
	Palvatla-a	30	333	80	333	0		10	333	0		0	
	Palvatla-b	80	666	140	666	0		20	666	0		0	
	Pothulaboguda-a	110	225	30	225	50	225	60	225	0		130	225
	Pothulaboguda-a	440	900	160	900	200	900	240	900	0		600	900
	Total Vol(cu.m)	2250		2030		1335		1675		380		2660	
	Pop served	7224		8224		8225		9224		4900		7224	7025
	LPCD	13.0		10.3		6.8		7.3		3.1		15.8	

Analysis Capacity Vs Pumping of water

Annexure 3.9

Scheme : ABPalem

District : Prakasam

Month : Apr 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/			Actually Pumped Details PRED (r/w)						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
44.8	16	21513.6	44.82	6.05	30	8134.8	19558		
Total		21513.6				8134.8	19558	36.67	13.86

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/			Actually Pumped Details PRED						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
23.1	16	11088	23.1	4.16	30	2882.8	3636	101.65	26.43
30.6	16	14688	30.6	4	30	3672	7918	61.8338	15.46
28.3	16	13622.4	28.38	3.05	30	2596.7	8004	56.73163	10.81
Total		39398.4				9151.6	19558	67.15	15.60

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol C	21513.6	8134.83
C/w Vol C	39398.4	9151.65
R/w LPCD	36.7	13.9
C/w LPCD	67.1	15.6

Comparison in percentages

Details	Capacit	Pumpe	cw/cap
R/w Vol C	100%	38%	
C/w Vol C	100%	23%	43%
R/w LPCD	100%	38%	
C/w LPCD	100%	23%	

Analysis Capacity Vs Pumping of water

Scheme : ABPalem

District : Prakasam

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
44.82	16	22230.7	44.82	7.85	29	10203.2	19558		
Total		22230.7				10203.2	19558	37.89	17.39

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
23.1	16	11457.6	23.1	3.76	31	2692.53	3636	105.04	24.68
30.6	16	15177.6	30.6	5	26	3978	7918	63.89492	16.75
28.38	16	14076.4	28.38	5.14	26	3792.70	8004	58.62269	15.80
Total		40711.6				10463.2	19558	69.39	17.83

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	22230.7	10203.2
C/w Vol Cum	40711.6	10463.2
R/w LPCD	37.9	17.4
C/w LPCD	69.4	17.8

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	46%	
C/w Vol Cum	100%	26%	47%
R/w LPCD	100%	46%	
C/w LPCD	100%	26%	

Analysis Capacity Vs Pumping of water

Scheme : ABPalem

District : Prakasam

Month : June 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
44.82	16	21513.6	44.82	7.83	29	10177.2	19558		
Total		21513.6				10177.2	19558	36.67	17.35

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
23.1	16	11088	23.1	3.7	30	2564.1	3636	101.65	23.51
30.6	16	14688	30.6	4.2	20	2570.4	7918	61.8338	10.82
28.38	16	13622.4	28.38	5.86	18	2993.52	8004	56.73163	12.47
Total		39398.4				8128.02	19558	67.15	13.85

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	21513.6	10177.2
C/w Vol Cum	39398.4	8128.02
R/w LPCD	36.7	17.3
C/w LPCD	67.1	13.9

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	47%	
C/w Vol Cum	100%	21%	38%
R/w LPCD	100%	47%	
C/w LPCD	100%	21%	

Analysis Capacity Vs Pumping of water

Scheme : ABPalem

District : Prakasam

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
44.82	16	22230.7	44.82	6	31	8336.52	19558		
Total		22230.7				8336.52	19558	37.89	14.21

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
23.1	16	11457.6	23.1	2.03	31	1453.68	3636	105.04	13.33
30.6	16	15177.6	30.6	0	0	0	7918	63.89492	0.00
28.38	16	14076.4	28.38	0	0	0	8004	58.62269	0.00
Total		40711.6				1453.68	19558	69.39	2.48

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	22230.7	8336.52
C/w Vol Cum	40711.6	1453.68
R/w LPCD	37.9	14.2
C/w LPCD	69.4	2.5

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	38%	
C/w Vol Cum	100%	4%	7%
R/w LPCD	100%	38%	
C/w LPCD	100%	4%	

Analysis Capacity Vs Pumping of water

Scheme : ABPalem

District :

Prakasam

Month :

Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
44.82	16	21513.6	44.82	6.21	28	7793.30	19558		
Total		21513.6				7793.30	19558	36.67	13.28

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
23.1	16	11088	23.1	3.28	30	2273.04	3636	101.65	20.84
30.6	16	14688	30.6	3.15	21	2024.19	7918	61.8338	8.52
28.38	16	13622.4	28.38	6.33	23	4131.84	8004	56.73163	17.21
Total		39398.4				8429.07	19558	67.15	14.37

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	21513.6	7793.30
C/w Vol Cum	39398.4	8429.07
R/w LPCD	36.7	13.3
C/w LPCD	67.1	14.4

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	36%	
C/w Vol Cum	100%	21%	39%
R/w LPCD	100%	36%	
C/w LPCD	100%	21%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	8870.4	18.48	6	30	3326.4	4474		
Total		8870.4				3326.4	4474	66.1	24.8

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/			Actually Pumped Details PRED						
Pump Capa Cum/	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
21.84	16	10483.	21.84	5	30	3276	4474	78.1	24.4
Total		10483.				3276	4474	78.1	24.4

2174.

At a Glance comparison

Details	Capaci	Pumpe
R/w Vol Cu	8870.4	3326.4
C/w Vol Cu	10483.	3276
R/w LPCD	66.1	24.8
C/w LPCD	78.1	24.4

Comparison in percentages

Details	Capaci	Pumpe	c/w/cap
R/w Vol Cu	100%	38%	
C/w Vol Cu	100%	31%	37%
R/w LPCD	100%	38%	
C/w LPCD	100%	31%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	6.43	31	3683.61	4474		
Total		9166.08				3683.61	4474	68.3	27.4

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	5.5	31	3069	4474	66.5	22.9
Total		8928				3069	4474	66.5	22.9

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	3683.61
C/w Vol Cum	8928	3069
R/w LPCD	68.3	27.4
C/w LPCD	66.5	22.9

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	40%	
C/w Vol Cum	100%	34%	33%
R/w LPCD	100%	40%	
C/w LPCD	100%	34%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : June 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	8870.4	18.48	6.61	30	3664.58	4474		
Total		8870.4				3664.58	4474	66.1	27.3

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.24	16	8755.2	18.24	5.41	30	2960.35	4474	65.2	22.1
Total		8755.2				2960.35	4474	65.2	22.1

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	8870.4	3664.58
C/w Vol Cum	8755.2	2960.35
R/w LPCD	66.1	27.3
C/w LPCD	65.2	22.1

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	41%	
C/w Vol Cum	100%	34%	33%
R/w LPCD	100%	41%	
C/w LPCD	100%	34%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	6.13	31	3511.75	4474		
Total		9166.08				3511.75	4474	68.3	26.2

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	5	31	2790	4474	66.5	20.8
Total		8928				2790	4474	66.5	20.8

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	3511.75
C/w Vol Cum	8928	2790
R/w LPCD	68.3	26.2
C/w LPCD	66.5	20.8

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	38%	
C/w Vol Cum	100%	31%	30%
R/w LPCD	100%	38%	
C/w LPCD	100%	31%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	4.87	31	2789.92	4474		
Total		9166.08				2789.92	4474	68.3	20.8

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	4.5	31	2511	4474	66.5	18.7
Total		8928				2511	4474	66.5	18.7

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	2789.92
C/w Vol Cum	8928	2511
R/w LPCD	68.3	20.8
C/w LPCD	66.5	18.7

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	30%	
C/w Vol Cum	100%	28%	27%
R/w LPCD	100%	30%	
C/w LPCD	100%	28%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : Sep 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	8870.4	18.48	5.48	30	3038.11	4474		
Total		8870.4				3038.11	4474	66.1	22.6

0.483333

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.24	16	8755.2	18.24	4.48	30	2451.45	4474	65.2	18.3
Total		8755.2				2451.45	4474	65.2	18.3

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	8870.4	3038.11
C/w Vol Cum	8755.2	2451.45
R/w LPCD	66.1	22.6
C/w LPCD	65.2	18.3

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	34%	
C/w Vol Cum	100%	28%	28%
R/w LPCD	100%	34%	
C/w LPCD	100%	28%	

ANALYSIS WATER SUPPLY FORMATS

NGO : ASSIST

PROJECT : PARACHUR AP II

MONITORED BY : NAPO

DATA SOURCE : VILLAGE COMMITTEES THROUGH NGO

No	VILLAGE	SCHEME	4/96 DAYS	4/96 ALPC	5/96 DAYS	5/96 ALPC	6/96 DAYS	6/96 ALPC	7/96 DAYS	7/96 ALPC	8/96 Days	8/96 LPCD	9/96 DAYS	9/96 ALPC
1	SHYAMALAVPALEM	ABPALE	6	?	7	?	4	?	0	0	0	0	5	?
2	PASUMARRU	ABP(RWA)	26	5	0	0	0	0	0	0	0	0	24	5
3	MVPALEM	MVPALE	30	49	31	49	30	49	31	49	31	49	30	49
4	CHILUKURIVPALEM	ABP(RWA)	30	24	31	24	28	22	31	24	14	11	23	18
5	KATARIVARIPALEM	MVPALE	30	49	31	49	30	49	26	41	0	0	30	49
6	TANUBODDIVPALE	MVPALE	30	49	30	47	30	49	31	49	31	49	30	49
7	VINJANAMPADU	ABP(RWA)	26	24	30	26	25	23	28	25	21	18	27	24
8	YADDANAPUDI	ABP(RWA)	30	29	31	29	20	20	0	0	17	16	30	29
9	POLUR	ABP(RWA)	30	17	31	17	30	17	31	17	28	15	30	17
10	ANANTAVARAM	ABP(RWA)	30	26	30	25	30	26	0	0	0	0	30	26
11	CHIMATAVARIPALE	MVPALE	30	49	30	47	30	49	31	49	31	49	30	49
Scheme wise		ABPalem		12.0		18.0		15.9		15.1		24.7		10.1
		MVPalem		49		48		49		47		49		49

ALPCD is average LPCD for month based on no. of days supplied

In Shyamalavaripalem water supply is not reliable. No of days supply is maximum of 7 days/month.

In Shyamalavaripalem there was no water supply as SST was dry during those months in ABPalem scheme.

In Pasumarru there was no water supply between May 96 to Aug 96 as there is no water in the SST.

In Anantavaram there is no supply as SST was empty in July and SST is being cleaned up in Aug 96.

In Katarivaripalem pipe line breakage caused disruption in supply in Aug 96

For Shyamalavaripalem ALPCD is not calculated as it does not contain service reservoir.

Analysis Capacity Vs Pumping of water

Annexure 3.11

Scheme : MVPalem

District : Prakasam

Month : Apr,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	8870.4	18.48	6	30	3326.4	4474		
Total		8870.4				3326.4	2474	119.5	44.8

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/)			Actually Pumped Details PRED						
Pump Capa Cum/	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
21.84	16	10483.	21.84	5	30	3276	4474	78.1	24.4
Total		10483.				3276	2478	141.0	44.1

At a Glance comparison

Details	Capaci	Pumpe
R/w Vol Cu	8870.4	3326.4
C/w Vol Cu	10483.	3276
R/w LPCD	119.5	44.8
C/w LPCD	141.0	44.1

Comparison in percentages

Details	Capaci	Pumpe	c/w/cap
R/w Vol Cu	100%	38%	
C/w Vol Cu	100%	31%	37%
R/w LPCD	100%	38%	
C/w LPCD	100%	31%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : May 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	6.43	31	3683.61	2474		
Total		9166.08				3683.61	2474	123.5	49.6

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	5.5	31	3069	4474	66.5	22.9
Total		8928				3069	2474	120.3	41.4

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	3683.61
C/w Vol Cum	8928	3069
R/w LPCD	123.5	49.6
C/w LPCD	120.3	41.4

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	40%	
C/w Vol Cum	100%	34%	33%
R/w LPCD	100%	40%	
C/w LPCD	100%	34%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : July 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	6.13	31	3511.75	2474		
Total		9166.08				3511.75	2474	123.5	47.3

0.133333

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	5	31	2790	2474	120.3	37.6
Total		8928				2790	2474	120.3	37.6

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	3511.75
C/w Vol Cum	8928	2790
R/w LPCD	123.5	47.3
C/w LPCD	120.3	37.6

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	38%	
C/w Vol Cum	100%	31%	30%
R/w LPCD	100%	38%	
C/w LPCD	100%	31%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	9166.08	18.48	4.87	31	2789.92	2474		
Total		9166.08				2789.92	2474	123.5	37.6

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18	16	8928	18	4.5	31	2511	2474	120.3	33.8
Total		8928				2511	2474	120.3	33.8

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	9166.08	2789.92
C/w Vol Cum	8928	2511
R/w LPCD	123.5	37.6
C/w LPCD	120.3	33.8

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	30%	
C/w Vol Cum	100%	28%	27%
R/w LPCD	100%	30%	
C/w LPCD	100%	28%	

Analysis Capacity Vs Pumping of water

Scheme : MVPalem

District : Prakasam

Month : Sep 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.48	16	8870.4	18.48	5.48	30	3038.11	2474		
Total		8870.4				3038.11	2474	119.5	40.9

0.483333

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/d	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
18.24	16	8755.2	18.24	4.48	30	2451.45	2474	118.0	33.0
Total		8755.2				2451.45	2474	118.0	33.0

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	8870.4	3038.11
C/w Vol Cum	8755.2	2451.45
R/w LPCD	119.5	40.9
C/w LPCD	118.0	33.0

Comparison in percentages

Details	Capacit	Pumpe	c/w/cap
R/w Vol Cum	100%	34%	
C/w Vol Cum	100%	28%	28%
R/w LPCD	100%	34%	
C/w LPCD	100%	28%	

Analysis Capacity Vs Pumping of water

Scheme : Cherukuru

District : Prakasam

Month : Apr 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r)			Actually Pumped Details PRED (r/w)						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/day	Day pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
45.5	16	21859.	45.54	5.66	30	7732.6	1477		
Total		21859.				7732.6	1477	49.30	17.4

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (Actually Pumped Details PRED						
Pum Cap Cum	Avg. Hour	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/d	Day pum	Vol Cu.m	Popul	Cap LPCD	Act LPCD
15.6	16	7516.8	15.66	5.67	30	2663.7	4222	59.3	21.0
43.3	16	20793.	43.32	6.45	30	8382.4	1055	65.7	26.5
Total		28310.				11046.	1477	63.9	24.9

At a Glance comparison

Details	Capac	Pumpe
R/w Vol C	21859.	7732.7
C/w Vol C	28310.	11046.
R/w LPCD	49.3	17.4
C/w LPCD	63.9	24.9

Comparison in percentages

Details	Capac	Pumpe	c/w/cap
R/w Vol C	100%	35%	
C/w Vol C	100%	39%	51%
R/w LPCD	100%	35%	
C/w LPCD	100%	39%	

Analysis Capacity Vs Pumping of water

Scheme : Cherukuru

District : Prakasam

Month : May,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
45.54	16	22587.	45.54	7.33	10	3338.0	14777		
Total		22587.				3338.0	14777	50.952	7.5299

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
15.66	16	7767.3	15.66	4.45	30	2090.6	4222	61.3	16.5
43.32	16	21486.	43.32	6.44	31	8648.4	10555	67.9	27.3
Total		29254.				10739.	14777	66.0	24.2

At a Glance comparison

Details	Capacit	Pumpe
R/w Vol Cum	22587.	3338.0
C/w Vol Cum	29254.	10739.
R/w LPCD	51.0	7.5
C/w LPCD	66.0	24.2

Comparison in percentages

Details	Capacit	Pumpe	c/w/ca
R/w Vol Cum	100%	15%	
C/w Vol Cum	100%	37%	48%
R/w LPCD	100%	15%	
C/w LPCD	100%	37%	

Analysis Capacity Vs Pumping of water

Scheme : Cherukuru

District : Prakasam

Month : July,96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
45.54	16	22587.	45.54	5.73	31	8089.2	1477		
Total		22587.				8089.2	1477	51.0	18.2

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
15.66	16	7767.3	15.66	5.75	31	2791.4	4222	61.3	22.0
43.32	16	21486.	43.32	4.7	30	6108.1	1055	67.9	19.3
Total		29254.				8899.5	1477	66.0	20.1

At a Glance comparison

Details	Capacity	Pumped
R/w Vol Cum	22587.	8089.3
C/w Vol Cum	29254.	8899.5
R/w LPCD	51.0	18.2
C/w LPCD	66.0	20.1

Comparison in percentages

Details	Capacity	Pumped	c/w/ca
R/w Vol Cum	100%	36%	
C/w Vol Cum	100%	30%	39%
R/w LPCD	100%	36%	
C/w LPCD	100%	30%	

Analysis Capacity Vs Pumping of water

Scheme : Cherukuru

District : Prakasam

Month : Aug 96

Pumping capacity Vs Pumped Volume (R/W)

Infrastructure Capacity PRED (r/w)			Actually Pumped Details PRED (r/w)						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hrs/da	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
45.54	16	22587.	45.54	8.65	30	11817.	14777		
Total		22587.				11817.	14777	51.0	26.7

Pumping capacity Vs Pumped Volume (C/W)

Infrastructure Capacity PRED (c/w)			Actually Pumped Details PRED						
Pump Capa Cum/hr	Avg. Hours/	Vol Cu.m	Pump Capa Cu.m	Avg. Hours/	Days pump	Vol Cu.m	Popul	Cap LPCD	Act LPCD
15.66	16	7767.3	15.66	6.16	29	2797.5	4222	61.3	22.1
43.32	16	21486.	43.32	6	30	7797.6	10555	67.9	24.6
Total		29254.				10595.	14777	66.0	23.9

At a Glance comparison

Details	Capacity	Pumped
R/w Vol Cum	22587.	11817.
C/w Vol Cum	29254.	10595.
R/w LPCD	51.0	26.7
C/w LPCD	66.0	23.9

Comparison in percentages

Details	Capacity	Pumped	c/w/ca
R/w Vol Cum	100%	52%	
C/w Vol Cum	100%	36%	47%
R/w LPCD	100%	52%	
C/w LPCD	100%	36%	

ANNEXURE IV

*REPORT ON WORKSHOP
ON
COMMUNICATION METHODS*

REPORT ON
THE WORKSHOP ON
"COMMUNICATION METHODS"

17 July 1996

NAPO, HYDERABAD

REPORT ON THE WORKSHOP ON " COMMUNICATION METHODS "
17 JULY 1996, NAPO, HYDERABAD

Introduction:

The NGOs involved in the RWS and Sanitation programme are basically involved in education, motivation and awareness building exercises as part of their on going activity. Different strategies are adopted by them to ensure participation of the beneficiaries. Over a period there is a possibility of the methodology becoming stereotyped and obsolete which may result in the community interest dwindling unless immediate stringent measures are taken by the groups involved to explore possibilities of adopting and practising other possible methods of communication.

NAPO as a monitoring office has the responsibility of capacity building of the project staff. The workshop was organised as an answer to this need.

Objectives of the workshop:

- i. To review and assess the validity of the methods being used hitherto by the NGOs.
- ii. Expose the participants to other participatory methods of communication.

Participants Details:

The projects were represented by the Project Directors/Project Holders, Project Coordinators and the NAP desk in charge.

Three students from New Castle University England participated in the second half.

(List of Participants enclosed - Annexure I).

Resource Persons:

Mr. Venkat Ramanayya YFA, Hyderabad
Dr. Rayanna RCUES, Hyderabad

The Team Leader delivered the inaugural address. The SPC and the SPOs were the co resource persons.

Methodology:

Participatory methodology
Open group and small group discussions.
Hand outs were given for further reading.

Issues for discussion:

(Agenda Annexure II).

Session I:

Mr. Venkat Ramanayya handled session I. He briefly introduced the importance and relevance of communication in today's world. He stressed the need for one to have an open mind in order to imbibe knowledge. The role and definition of communication was explained to the group. After the introduction he engaged the group in a group exercise.

The group was divided into two smaller groups and was asked to discuss for fifteen minutes the following two issues;

- i. Definition of communication
- ii. Definition of Development communication

The group findings are as below;

On communication:

Group I:- a process of information exchange (orally or actions/Tools)

- a way of expression.

Group II:- a process to disseminate information to the communities and listen back from them to initiate the action

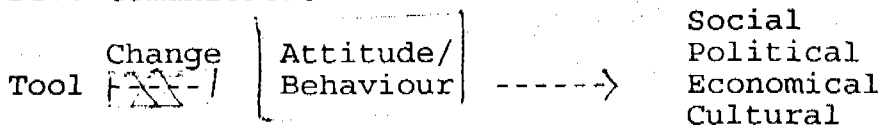
- is a process of exchanging information and tools used for the same
- is a process of exchanging ideas feelings and

me
ss
ag
es

On Development communication:

Group I: - tool /catalyst to bring change/ accelerate the process of change (attitude/behaviour)

Dev. Communication



Individual

Community

Group II: - is a process in which we learn from the people, which can be spread among them - the meaning of development in their languages at their level of understanding

- is a purposeful and direction oriented process of exchange of information to initiate changes in the status of communities.

The group presentations were summarised. The importance of the messages was highlighted. The fact that the messages are prepared by the project personnel with a particular perception in mind and perceived by the community from a different frame of mind was

stressed. The need to keep in mind the level of perception of the giver and the receiver was discussed. The usage of words like provider, equality and the kind of reference in the minds of the people based on the philosophy and understanding of the donor and perculating down to the project holder was emphasised.

The exercise was summed up by reiterating that all development communication aims at bringing about change among the women, landless, farmers and at the higher levels among the Donors and the Government.

The other points covered included;

- communication for capacity building
- the different levels of communication
- constraints in communication
- conditions for effective communication
- multiple pathways of communication
- locations and sources for information dissemination and the communication needs in water supply and sanitation.

Session II:

The second session dealt with the different ways in which communication takes place in the projects.

The group was again divided into two and asked to discuss on the following;

- i. People to people
- ii. People to NGO (vice versa)
- iii. People + NGO to Donor/ decision maker

The group presentations are as below:

Group I	Group II
People to people:	
* People Institutions	Identification of the communicator /institution by the people
* Working places	Communicator/institution should be effective and unbiased Informal get togethers, regular meetings, cultural activities.
People to NGO:	
* Mass/group meetings	Peoples observation/ representation
* House visits	Accessibility, availability, informative
* Campaigns/Rallies	
* Cultural programs	

* Networking

* PRA

People + NGO to Donor:

* Correspondence

Togetherness of NGO and people to bring attitudinal change in the policy makers

* Meetings

* Trainings

* Networking

* Evaluation of reviews

* Pre funding meetings

The session was summed up by giving the group handouts on the session. The need for adopting participatory methods was reiterated. The effectiveness of PRA was briefly touched upon and the need for intensive training in the methodology before it is practised was stressed.

Handouts 1 - Annexure II

Session III:

The forenoon session was handled by the SPC. The main points discussed during the session were;

- the different type of communication tools available and useful for the projects,
- the five Ws that need to be kept in mind while planning for development communication
- the need to keep the goal/ purpose of the exercise in mind
- whether the communication media aims at bringing about behavioural change, change in the practices of people or change in attitude (introspection). Based on this theme the methodology to be adopted can be decided on.
- the other two factors to be kept in mind are the Agent factor and the Target group factor.
- the Agent or the worker is the one who is in direct contact with the community. It is essential that the agent has the right attitude and orientation and the required commitment to the cause.
- the worker who is not convinced and does not feel for the cause can not convince the community nor even evince interest.
- the target group factor comprises of the the target group for whom the programmes are planned. The awareness building exercises should start at the appropriate time. It is necessary that the target group be properly understood i.e. the attitudes, beliefs, existing practices, expectations,

willingness to participate and the ability to participate are some of the important aspects to be looked into before development communication is planned.

The different techniques to be followed while planning for development communication were discussed:

- all techniques need to be simple and direct
- there is need to involve the participation of the target group
- it should be need based
- the programmes should have a personal touch
- they should be of high communication value
- suitable for each specific target group.

Session IV:

The post lunch session was handled by Dr. Rayanna. He started the session by inviting the participants to list out the problems faced in the field in communicating with different groups.

The main issues discussed were:

- experimental learning
- communication barriers
- different training methods
- cultural programmes
- group discussions
- model for demonstrations

The participants were asked to reflect and present the effective and non effective methods of communication as perceived by them. The presentation was as follows:

Topic	Effective method
Ill effect of fluoride	Demonstration
Water borne diseases	Slides/charts
Village sanitation	Models
Ecology and Environment	Rallies
Health and Hygeine	Videos
Group formation	House visits and mass meetings
Self help groups	Songs
Water and Sanitation	Slogans
Personal Hygeine	Examples
Raising contributions	Group discussions
About NAPscheme	Exposure visits
Judicious use of water	Slogans/group discussions / roleplay

The group came to a concensus that it was not a hard and fast rule that the same hold good for all times. Depending on the group their interest and the availability of time these methods would be interchanged.

The probable use of the other methods was also discussed and the group was asked to try and prepare the other methods. As an example the making and use of the flannel boards and making simple hand puppets was briefly explained.

In the concluding session the methods to be followed in communication was highlighted. With simple examples and demonstrations the dos and donts of communication was discussed.

Session V:

The handouts were briefly explained and the participants requested to update their knowledge and information by regular contacts with other agencies and referring to relevant material.

Handouts 2 - Annexure III

The workshop concluded with the participants being asked to give an oral feedback on the deliberations of the day.

The main points that emerged:

- morning session was general, interesting and informative.
- noon session specific and informative though at times tended towards being generic
- **helped to know about other communication methods**
- a better understanding of the dos and donts of effective communication.

The participants were also of the opinion that the background material be sent to them in advance.

Outcome:

* Efforts would be made by the partner NGOs to incorporate the various communication methods in their programme.

* To the maximum extent possible the approaches would be participatory ensuring the involvement of the target community members.

* Possibilities for using cost effective methods would be explored.

ANNEXURE I

List of participants

Herself	Dr. Rajasekhar-Honorary Director
	Mr. Anil Babu- Project Coordinator
SNIRD	Mr. Jawahar - Executive Secretary
	Mr. Jayant - NAP Desk in charge
	Mr. Tajuddin - Project Coordinator
	Mr.Rama Rao - Accountant
ASSIST	Mr.Koteswara Rao -Technical Coordinator
MARI	Mr. Jayarama Rao - Project Director
	Mr. Pawan Kumar - Project Coordinator
Students from New Castle University	Ms. Katie Walker
	Ms. Emma Miller
	Mr. Danial Tustain

**WORKSHOP ON "COMMUNICATION METHODS"
17 July 1996, NAPO, Hyderabad**

PROGRAM

- 0930 - 0945 : Registration
- 0945 - 1000 : Tea Break
- 1000 - 1015 : Introduction
- 1015 - 1215 : Session - I
Communication Methods - Emphasis on Participatory
Methods - Sri Venkat Ramanaiah
- 1215 - 1300 : Session - II
Open group discussion -
Relevance of methods and adapting to present situation
- 1300 - 1400 : Lunch Break
- 1400 - 1500 : Session - III
Communication methods - continued
- 1500 - 1515 : Tea Break
- 1515 - 1615 : Awareness Building - adapting communication methods
Sharing of experiences and reflection
- 1615 - 1645 : Preparation and presentation of Action Plans
- 1645 - 1700 : Concluding session

ROLE OF COMMUNICATION:

"Communication can play a major role in empowering the disadvantaged communities, providing a voice to the voiceless and enabling communities to voice their concerns to decision makers."

COMMUNICATION FOR CAPACITY BUILDING

- ==> Related to implementation of action plans, mostly physical work.
- ==> Implementation of communication process for awareness generation and capacity building of NGOs as well as local level institutions.

6r

DIFFERENT LEVELS OF COMMUNICATION

- > Namashkaram, and asking welfare of one or two individuals.
- > Small key informants discussion.
- > General about welfare, the existing situation
- > More specifically family wise informations
- > Togetherness, "we" feeling and working together

CONSTRAINTS

- > Due to technical barriers
- > Reluctant to share the information.
- > Lack of communication culture
- > Ignorance
- > Lack of experience in communication
- > Lack of awareness concerning to value of information
- > Lack of editorial skills
- > No efforts are made to share the information
- > Attitudinal and ideological problems etc.,

CONDITIONS

- > Gender perspective
- > Must be open
- > Pluralistic
- > Respectful to diversity
- > Freedom of expression and thoughts

MULTIPLE PATHWAYS OF COMMUNICATION

- > Social differentiation
- > Gender
- > Kinship
- > Age, Religion and Others

Pathways in exchanging agricultural information and materials

	<u>Men groups</u>	<u>Women groups</u>
Formal institutions 1	10	3
Kinship (family & elders)	13	10
Group members (men:extension groups, women:work groups)	1	7
Friends/neighbours	6	1
People in market/merchants	5	1
Marabout	2	-
Others	3	-

1. Includes: Extension service, Farming systems Research Programme, other GOs and NGOs.

Extension needs

SEASON	CROP	EXTENSION NEEDS (PEST MANAGEMENT)		
		Pest & Disease	Present applications	Source of communication
January	-> Groundnut	Tikka diseases (Early & late) Leaf spot, leaf webber	D-M-45 Quinolphos	Shops, VDO's farmer to farmer
	-> Paddy	Tungro virus	Monocrotophos, phosphomidon	
February	-> Paddy	Dead hearts, (Stem Borer) Blast	Monocrotophos, Pherate-G Bavistin	Farmer to farmer
March	-> Groundnut	Leaf minor	Quinophos	Farmer to farmer
	-> Paddy	Gall fly	Monocrotophos	
June	-> Paddy	Blast	Bavistin	- shops - farmer to farmer
	-> Groundnut	Leaf minor root grub	Quinophos Pherate-G	- Karshak parished
July to August	-> Groundnut	Root grub, Leaf minor, Red Hairy Catterpillar	Pherate Quinolphos, B.H.C 10% B.H.C.	- Shops - farmers - Karshak parished
	-> Castor	Red Hairy Catterpillar Semilooper	10% B.H.C. Fenvaltrate-20 EC	
	-> Paddy	Leaf hoppers, Stem Borer, Tungro virus, Gall fly	Monocrotophos Phosphomiden " "	
November to December	-> Groundnut	Tikka Disease (early & late leaf spot) Leaf minor	D-M-45 Quinolphos	- shops - VDO's - Sub.Asst's (Karshak Parished - farmers
	-> Paddy	Leaf hoppers Blast Tungro virus	Monocrotophos Phosphomidon Phosphomidon	

SEVERAL LOCATIONS AND SEVERAL SOURCES

Women Groups (Communication and exchange of information)

- > Group meetings
 - > Shandy
 - > During transplantation and harvesting
 - > During water collection and washing of clothes
 - > During functions
 - > Enroute to fields and during founding of grains.
-

Communication Needs in water supply and sanitation

- > Social process
- > Responsibility sharing for maintenance
- > Training
- > Selection of points for water source
- > Follow-up activities
- > Self-assessment and evaluation
- > Linkage building

COMMUNICATION NEEDS FOR DIFFERENT ACTORS IN DEVELOPMENT

AT NGO TO NGO LEVEL:

- > NGO to NGO networks
- > Electronic communications
- > News-letter
- > Trainings and workshops
- > Get-togethers
- > Issue based movements
- > Correspondence
- > Field based case experiences and exposure visits
- > Documentation of traditional technologies etc.,
- > PRA

PEOPLE AND NGO'S

a) Training

- > Experience Sharing
- > Raising awareness about political, social, economic and environmental issues

Role plays (Dynamics of issues and society)

- > Dramas
- > Flip charts

Physical demonstrations (Water, milk and kichidy)

- > Songs
- > Puppetry
- > Science stories
- > Radio and video
- > Karyakarthas meetings
- > Cluster meetings
- > Networking of rural organisations
- > PRA

PEOPLE, NGOs AND POLICY MAKERS

- > Participatory workshops
- > Publication of case experiences
- > Advocacy for people oriented solutions
- > Networks and pressure groups
- > Print, electronic and other media.

IMPORTANT CONSIDERATIONS FOR OVERALL COURSE PLANNING

A. Planning to be done before the training course begins:

1. FIRST CONSIDERATIONS— PURPOSES AND QUESTIONS

- Whose needs will the training program be primarily designed to meet?
- Will it only extend the existing health system, or will it help to change it?
- How much will it prepare the health worker to understand and deal with the social (economic, cultural, political) causes of ill health?
- Will it make the poor more dependent, or help them to be more self-reliant? Will it promote or resist social change?
- What are the general goals and objectives of the program? (To express goals in terms of numbers and dates is probably unwise at this stage. Why?)
- Who is (or should be) involved in all these decisions?



2. OBSERVATION OF NEEDS AND RESOURCES

(Talking with a few observant persons from the area can often provide more useful information than a census or elaborate 'community diagnosis', at far lower cost, more quickly, and with less abuse.)

Information worth considering:

- Common health problems: how frequent and how serious?
- Causes of main problems: physical and social, coming from inside and outside the community.
- People's attitudes, traditions, and concerns.
- Resources: human, physical, economic, from inside and outside the area.
- Characteristics of possible health workers: age, experience, education, interest, etc.
- Possible choices of instructors and training organizers.
- Possible sources of funding and assistance. (Which are more appropriate?)
- Reports and experiences of other programs.
- Obstacles: certain, likely, and possible.

3. EARLY DECISIONS—

Who? Where? How many? When?

- Selection of health workers: by the community, by the health program, or by both? (How can selection of a health worker be a learning experience for the community?)

• Selection of instructors and advisers:

- How much understanding and respect do they have for village people? Do they treat them as equals?
- How committed are they to working toward social change?
- Do they have the necessary knowledge and skills (public health, education, group dynamics, community organization, medicine, etc.) or are they willing to learn?



• Location:

- Where will the training take place? Near or far? Village or city? Why?
- Where will everyone eat and sleep? In hotels? In special facilities? With village families? (How can these decisions influence what they will learn?)
- Numbers: How many students will take part in the training course? (Beyond 12 or 15, quality of training usually decreases. This must be weighed against the need to train more health workers.)

• Timing:

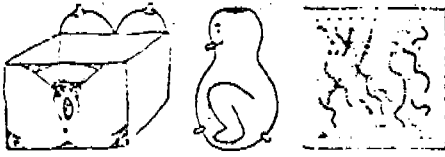
- How long will the training course last?
- What time of year is best? (Consider how these decisions may affect who can take part in the course.)
- Will the training be done in one continuous stretch, or be divided into short blocks so that students can return home (and practice what they have learned) between sessions? (Whose needs and opinions should be considered in answering these questions?)

• Funding:

- From where? How much money should come from outside the local area?
- What are the interests of possible funding groups?
- What are the advantages and disadvantages of asking communities to pay part of the cost of training their health worker?
- How can costs be kept low? How much is needed?

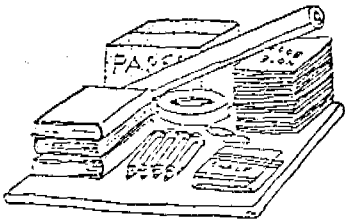
• Follow-up and support:

- What opportunities may there be for continued learning or training after the course is over?
- What kind of support or supervision will the health workers receive? (Why is it important to consider follow-up before the training program begins?)



9. PLANNING APPROPRIATE TEACHING METHODS AND AIDS

- What teaching approach is best suited to persons who are more used to learning from experience than from lectures and books?
- What approaches to learning will help the health worker be an effective teacher in his community?
- What attitudes on the part of the teacher will encourage the health worker to share knowledge gladly and treat others as equals?
- What teaching methods might aid the health worker in helping community people to become more confident and self-reliant?
- What teaching aids can be used that will lead the health worker to make and invent teaching aids after returning to his village?
- What approach to learning will best prepare the health worker to help his people understand and work together to solve their biggest problems?
- What approach to health problems will enable the health worker to learn how to approach the solving of other community problems?
- What can be done to ensure that all learning is related to important needs?
- How can classwork be made more friendly and fun?
- How can tests and exams be presented so that students use them to help each other rather than to compete? How can tests and exams be used to judge the instructor as well as the students?



10. GETTING READY AND OBTAINING SUPPLIES

- What preparations are needed before the course begins? (transportation, eating and sleeping arrangements, study area, wash area, etc.)
- What furnishings and teaching materials are needed to begin? (benches, blackboard, etc.)
- What can be done if some of these are not ready on time?

11. DETAILED PLANNING OF ACTIVITIES AND CLASSES FOR THE BEGINNING OF THE COURSE

- How many days of classes and activities should be planned in detail before the course begins?
- Why is it important that the details of all the classes and activities *not* be planned in advance?

B. Continued planning after the training course begins:

12. INVOLVING STUDENTS IN PLANNING THE COURSE CONTENT (based on their experience and the needs in their communities)

- Why is it important that the students take part in planning the course?
- How can the students' participation in planning help them to learn about . . .
 - examining and analyzing the needs in their communities?
 - recognizing both the strengths and the weaknesses of their people's customs?
 - ways to plan and organize a learning group?
 - the value of learning by doing, and of respecting and building on their own experiences?
 - shared decision making?

13. REVISING THE PLAN OF STUDIES (COURSE CONTENT) ACCORDING TO STUDENT SUGGESTIONS

- To what extent do the priorities determined by the students, according to problems and needs in their own villages, correspond to those already considered by the instructors and planners? (How do you explain the similarities and differences?)
- How important is it to revise the course plans in order to better meet the concerns and expressed needs of the student group?

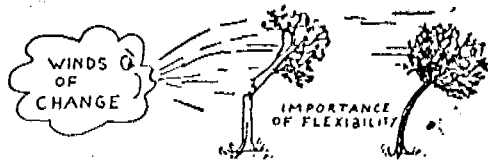


14. PREPARING INDIVIDUAL CLASSES AND ACTIVITIES

- How detailed should class plans be?
- How far in advance should a class or activity be planned? Why?
- Is it helpful to use a particular outline or formula for preparing a class? If so, what should it include?
- Can each class or activity be planned to include . . .
 - all of the basic points to be learned or considered?
 - active student participation and interaction?
 - use of appropriate learning aids?
 - opportunities for the students to explore questions and discover answers for themselves?
 - practice in solving problems similar to those health workers will meet in their work?
 - a chance for students to summarize what they have learned and to ask questions?
- To what extent can students take part in the preparation of classes and of teaching aids? (Is this important? Why?)

15. CONTINUED REVISION OF THE SCHEDULE—to make room for new ideas, learning opportunities, needs, and problems as they arise

- What are the advantages and disadvantages to keeping the program open and flexible? (How might this influence a health worker's ability to work toward, or tolerate, change in his or her community?)



16. EVALUATION DURING THE TRAINING PROGRAM—to consider how it might be improved (see Chapter 9)

- In what ways can this be done?
- Who should be involved?
- What is the value of
 - round-table discussions in which all students and staff have a chance to express their feelings about the program and each other?
 - similar discussions with members of the community where the training program takes place?
 - tests and exams?
 - setting specific goals and seeing if they are met?
- If evaluation studies (informal or formal, ongoing or final) are made, what can be done to help assure that results are useful and will be used?

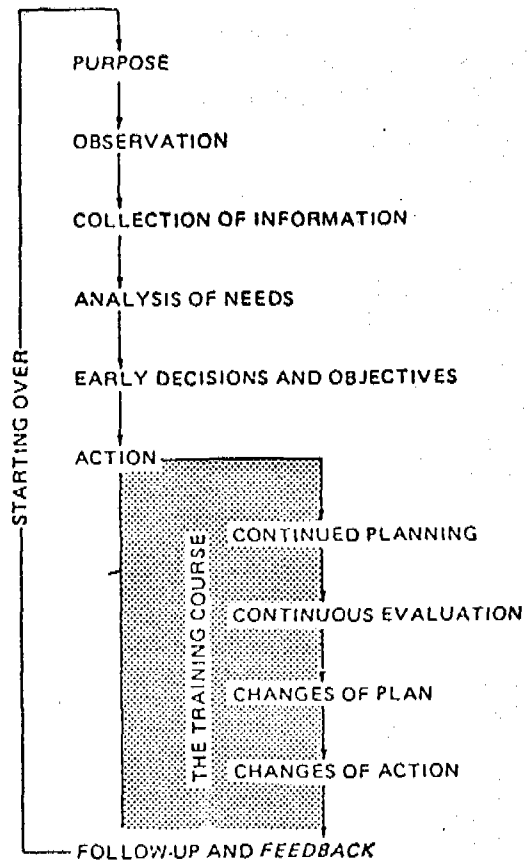
C. Planning and programming after the course is completed:

17. FOLLOW-UP AND FEEDBACK* (see Chapter 10)

- How can a supportive learning situation be continued between instructors and students, and among the students themselves, once the training course is completed?
- How can the following be involved in supporting the health worker:
 - members of the community (a health committee)?
 - other health workers?
 - program instructors, leaders, and advisers?
 - other support groups and referral centers?
- How can the experiences, successes, and difficulties of the health workers in their communities be recorded and used to make the next training course better than the last? (Can this be done so that health workers know they are contributing, rather than being judged?)

18. STARTING OVER

The whole process is repeated:



***FEEDBACK:** helpful ideas and suggestions sent back to planners or instructors by health workers.

Source: Helping Health Workers Learn - David Werner & Bill Brax

The SARAR Process

Five Characteristics

SELF-ESTEEM

The self-esteem of groups and individuals is acknowledged and enhanced by recognising that they have the creative and analytic capacity to identify and solve their own problems.

ASSOCIATIVE STRENGTHS

The methodology recognises that when people form groups, they become stronger and develop the capacity to act together.

RESOURCEFULNESS

Each individual is a potential resource to the community. The method seeks to develop the resourcefulness and creativity of groups and individuals in seeking solutions to problems.

ACTION PLANNING

Planning for action to solve problems is central to the method. Change can be achieved only if groups plan and carry out appropriate actions.

RESPONSIBILITY

The responsibility for follow-through is taken over by the group. Actions that are planned must be carried out. Only through such responsible participation do results become meaningful.




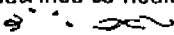




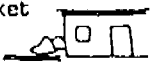




The adaptation of this approach to the PROWESS programme has been easy because the underlying aims are compatible. PROWESS, committed to the involvement of local communities, and particularly women, believes that human capacity development is the key and encourages group responsibility for decision-making and action planning. These are means of ensuring that sectoral improvements correspond to people's priorities and benefit from people's willingness to use them effectively and maintain them in good order.

Source: Tools for Community Participation - Cyra Srinivasan

Planning a community self-training activity

A useful tool for self-training activities is a simple planning guide which sets out the goals to be achieved, the knowledge and skills to be developed, and the actions needed to achieve the goals. The planning phase for self-training may include scholastic activities such as lectures, lessons and homework. It may also involve discussions with experienced people, group readings from books accompanied by discussions, talks about traditions and behaviour, even visits to the market to assess the availability of local materials. The aim should be to develop a structured training plan like the one below, which was part of a programme to introduce latrines into a community.



Stages of Task Actions (A) Decisions (D) Communications (C)	Knowledge and Skills needed ↓	Ways to Learn ↓
1. Find out community interest. (C) 	ability to explain and listen 	talk with experienced health workers; role plays; group dialogue
2. Decide if latrine project is possible at this time. (D)	understanding of people and customs 	community dynamics; discussions about traditions & behavior
3. Help people learn importance of latrines to health. (C) 	knowledge of how disease spreads; teaching skills 	from observation, books, and discussions; practice teaching 
4. Decide where latrines will be built. (D)	knowledge of safety factors 	books and discussions; thinking it through with local people
5. Get materials needed. (A) 	what local materials can be used; what else is needed; where to buy at low cost, etc.	talk with local mason; trip to market 
6. Help people build the latrines. (A) 	dimensions of pit and platform; how to mix, cast reinforce, and cure cement; how to build outhouse & lid	have students take part in actually making latrines 
7. Encourage people to use latrines and to keep them covered and clean. (C)	home visits; art of giving suggestions in a friendly way 	practice, role plays, and discussion 

Source GTZ (1990).

The tasks analysis provided the basic information needed to carry out the self-training activities, as follows:

- Objectives (left hand column), divided into actions, decisions, and communications;
- Knowledge and skills needed (central column);
- Learning activities (right hand column), including the techniques and resources needed.

Source: Action Learning - Building on experience
Occasional Paper Series - IRC

ADVANTAGES AND DISADVANTAGES OF DIFFERENTMEDIA, MATERIALS AND TECHNIQUES FOR COMMUNICATION SUPPORT

- A. People-based
- B. Mass media
- C. Other media, materials

A. PEOPLE-BASED	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
1. Public meetings and lectures.	Easy to arrange. Reach many people. Can have more than one speaker. Create public interest and awareness. Stimulate follow-up discussion.	Audience is usually passive. Speakers may not understand audience's needs. Difficult to assess success. Audience might not learn the main points.	Handouts should be used. Presentation should be clear. Use visual aids when possible. Audience should be encouraged to raise questions and to participate. Speaker should establish two-way communication.
2. Group discussion.	Builds group consciousness. Individual members of the group can understand where each member stands in regard to the discussed issue: provide chances for exchanging opinions and increase tolerance and understanding.	Some members may dominate. Sometimes difficult to control or to keep focusing on the main issue. Requires trained leaders.	Should be used with an interested audience to discuss a definite problem. Procedure should be flexible and informal. Summary of discussion should be presented at the end of discussion. Decision should be made by group members regarding its stand on the issue discussed. Requires the selection of good chairman.

Source: This table has been taken from "Using Communication Support in Projects: The World Bank's Experience", World Bank Working Paper No. 551, December 1982, by Heli Perrett.

This is largely based on Shawki M. Barghouti, Reaching Rural Families in East Africa, Nairobi: FAO Programme for Better Family Living in East Africa, 1973.

PEOPLE-BASED	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
3. Role playing.	Facts and opinions can be presented from different viewpoints especially on controversial issues. Can encourage people to reevaluate their stand on issues and can invite audience participation. Deepens group insight into personal relations.	Cannot be used in community meetings. Some role-players may feel upset by playing a role they do not agree with. Requires careful preparation for the selection of the issue and actors. Careful preparation is essential.	Can only be used in training courses. Follow-up discussion should focus on the issue rather than on actors' performances. Source material about the issue should be provided to the actors to prepare their arguments.
4. Drama.	Groups can be active "learning by doing". Can attract attention and stimulate thinking if situations are effectively dramatized.	Actors require attention in training and preparing script. Preparations might be too difficult for the field worker. Difficult to organize because it requires considerable skills and careful guidance by the field worker.	Should be restricted to one issue. Can only be used during training courses. Can be used as entertainment if well prepared before a public meeting.
5. Case study.	Can illustrate a situation where audience can provide suggestions. Can elicit local initiatives if the case corresponds to local problems.	Difficult to organize. Rewording of events and personalities might reduce the effectiveness of the case. Some audiences may not identify themselves with the case.	Should be clearly prepared. Can be used in training course. Questions and discussions should lead to recommendations for audience action. Audience should be encouraged to prepare case studies relevant to its experience.

PEOPLE-BASED	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
6. Home visit.	Establishes good personal relationships between field workers and families. Can provide information about rural families that cannot be collected otherwise. Encourages families to participate in public functions, demonstrations and group work.	Field worker cannot visit every family in the community. Only families in accessible localities can be visited.	Records should be kept for families visited. Schedule of home visits should be developed to assure allocation of time for field work activities. Handouts should be given to families visited.
7. Demonstration (with a small group).	Participants can be active and learn by doing. Convinces the audience that things can easily be done. Establishes confidence in field worker's ability.	Requires preparation and careful selection of demonstration topic and place. Outside factors can affect demonstration results and consequently might affect confidence in field worker.	Demonstration processes should be rehearsed in advance. Audience should participate in the actual process. Educational materials should be distributed to the participants at the end of the demonstration. Should be suitable for people to attend.

B. MASS MEDIA	MAIN AVANTAGES	MAIN DISADVANTAGES	COMMENTS
1. Radio.	<p>Radio technology available in all countries and can reach mass audience cheaply. Receivers are inexpensive and available in the remotest communities. Messages can be repeated at low cost. Easy to reach illiterate audience. Can be used to support other channels of communication. Efficient to announce events and development activities, and, if properly used, can mobilize audience to participate in public events and projects of value to the community. It is flexible, and style can include drama, lectures, folklore songs, interviews and variety shows. Excellent in regular teaching and out-of-school correspondence courses. Radio is effective in creating awareness and setting agenda of priorities for people's attention.</p>	<p>One-way channel. Complicated technical issues. Difficult to illustrate. Audience reaction, participation or interest in messages delivered, difficult to assess. Requires special skills and continuous training of radio personnel. Content may not be tailored to small communities and tends to be general in nature and is usually prepared for national audience, or special ethnic or language group thus reducing relevance to local problems. Difficult to use material broadcast as a reference without investment in radio documentation. Texts of radio programs are usually needed for effective follow-up. This is not always possible.</p>	<p>Radio messages should often be supported by personal follow-up. Radio effectiveness increases if messages used in group discussions (e.g., farm forums) or regular training courses. Desirable for radio to cover local events, assist in explaining and promoting local projects and development efforts. Programming should maintain balance between national and local coverage interviews and lectures, news and profile coverage of development issues.</p>

MASS MEDIA	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
2. Television.	<p>Its novelty attracts audience and can be the main captivator in rural communities. Can be used to explain complicated messages because of its combination of sound and picture. Programs can be repeated at cost. It is suitable for mixed presentation of issues. Suitable for motivation through utilization of folklore art and music, community events, and animated public speeches and debates. Efficient in bringing issues to public attention, and powerful in setting public agenda for action and participation in development effort. Successful in creating awareness. Suitable for illiterate audiences if they have access to receivers or to TV clubs.</p>	<p>Expensive to operate. Receivers not available in many rural areas and among poorest population groups. Has traditionally been used for entertainment and politics more than for development and educational purposes. Programming skills more likely to be available for entertainment. Educational programs may face severe competition from entertainment. No audience participation. Present state of technology in many developing countries does not allow immediate coverage or timely relay of local community actions and events. Requires more planning and preparation, and technical, creative, and communication skills than other media. Difficult to use material televised as a reference without investment in television documentation. Texts of television programs are needed for follow-up. This is not always possible.</p>	<p>Local television stations can play an important role in development. More educational training is required for staff. Easy to exchange information, and programs are scheduled in advance, well-documented, with heavy involvement of and focus on local problems. Very effective for activating group learning when used in viewing centers or as part of multi-media campaign for education-information and motivation.</p>

MASS MEDIA	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
3. Newspapers.	<p>Can provide detailed information. Easy to present technical data in clearly designed text. Important topics can be covered in a series of articles. Can influence the attention of audience by where they place information and on what page. Influential in creating awareness and mobilizing public opinion. Material published can be shared and used as reference. Can be used to support radio and television for education purposes and follow-up on lessons, issues and topics discussed by the other two media.</p>	<p>Can be used by literates only. Difficult to reach isolated communities. Can be expensive for poor families. Requires special writing and editing skills, which are not always available. Like all other mass media, it is one-way communication channel. Feedback is difficult because of audience reluctance or inability to contact the editor. Difficult to publish at regional level. Small communities can not afford to publish their own newspapers without continuous support from national government.</p>	<p>Best source of information if topics of development are covered on regular basis. Can be used to establish community local papers and bulletin boards. Can be circulated to community members to reduce cost per individual family. Could be used to support literacy classes: sectors could be prepared especially for poor readers and semi-literates.</p>
4. Cinema.	<p>Captures attention well. Reaches big audiences in selected countries and can be very cheap (particularly with semi-permanent and travelling cinemas). Can reach lowest strata in certain countries and even have large rural audience.</p>	<p>Is expensive in some countries and may only reach certain sub-groups in the target audience (such as the rich, youth, females). Distribution can be a problem. May be distracting setting for educational messages.</p>	<p>Great care must be taken in preparing the film clips.</p>

MASS MEDIA	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
5. Folk theatre.	Culturally relevant. In some countries is easily available and inexpensive. Often more credible to the traditional elements of society than the modern media.	Can lose control of the message. Format can distract from content.	Flexibility of the form can vary from country to country. One of the best uses is often a combination with a modern medium such as television, radio, or supported by loudspeakers.
6. Wall paintings. Billboards.	Potentially available to large audience. Low costs per person reached if well located.	Can be easily ignored. Limited to simple messages.	Message must be extremely well designed and pretested. Siting is critical to be able to reach the kinds of people intended.
7. Mass media group listening.	Combines mass media and personal channels. Can be prepared and used for many audiences over a period of time. Encourages group participation.	Requires preparation for recruiting groups, training group leaders, and preparation of educational material. Can be expensive. Drop-out can be a problem if special efforts are not made.	Should be regularly held. Participants should be provided with educational material. Can be effective in enforcing literacy and adult education. Programs selected should be about local problems. Tape recorders can be used. They are flexible. Can be used to tape role-playing, group discussion and interviews with local personalities.

C. OTHER MEDIA AND MATERIALS	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
1. Publications and loose leaflets.	Excellent for indepth presentation of issues and technical information. Can cover more than one topic. Easy reference and can be directed to specific audiences. Can be illustrated and made attractive. Can support other media for education purposes.	Expensive. Can only be effective if well designed and produced. Poorly printed publications may be expensive but not be read. Require special editing, design and production skills.	Should be used to support special campaigns, such as literacy and adult education. Most useful if topics are covered in series of publications. Could be used successfully in group discussions and as back up for public meetings. Can also be used for in-service training of field staff and to keep up morale, particularly if field staff are widely dispersed.

OTHER MEDIA AND MATERIALS	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
2. Video (Forum).	<p>Can be used to introduce new ideas to selected audiences. Excellent tool for micro-teaching. Can introduce complicated concepts and technical issues in a series of presentations; can record field operations and activities and use them on numerous occasions; can be used to teach skills and change attitudes. Feedback to the broadcaster can be immediate and relatively accurate. Can be handled by model farmers and community leaders; can build useful libraries for teaching in the case of literacy and adult education classes.</p>	<p>Is expensive. Forum members tend to drop out. Breakdown in hardware is common, and batteries are often exhausted. Forum requires highly skilled personnel and extensive hardware. Restricted to communities where trained field agents are available. Requires continuous servicing and maintenance and updating. Can become negative tool for development if it fails to attract different sub-groups in the community (such as the poorest, and religious or racial minorities). Sometimes, because of difficulty in finding needed materials or training manpower, many events in the community go by without being recorded or utilized.</p>	<p>Forums require continuing attention from professional organizers. Most successful in small group learning. Group discussion leaders must be carefully selected and trained. Training materials and programs must be carefully organized and kept in order. Its efficiency increases if used in combination with booklets and handouts at the end of the discussion. Should be used to teach special skills, for structured instruction and, where possible, as a tool to generate participation among a rural community or one that is for other reasons isolated from ongoing programs or slow to cooperate.</p>

OTHER MEDIA AND MATERIALS	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
3. Films.	Use of sight and sound can attract audience's attention. Can make great emotional appeal to large audiences.	Good films are rare. Equipment costly to buy and maintain. One-way communication unless properly used. Requires skill in running film projectors.	Best if combined with discussion groups. Much work to be done regarding getting good films made. Attention should be given when getting audience to evaluate the film. Films should be used for stimulating discussion rather than for teaching alone.
4. Filmstrips.	Much cheaper and easier to work than films. Easily made from local photographs. Encourages discussion.	Usually sight only. Not so dramatic as motion pictures. Could be expensive.	Can have recorded commentary. Strip can be cut up and individual pictures mounted as 2" slides; then can be selected and re-arranged.
5. Slides.	Have all the advantages of film strips plus more flexibility and can be more topical. They can be used in a series to illustrate a concept.	Could be expensive. Difficult to have them on all subjects of teaching.	They should be used after careful preparation of logical sequence and a good commentary.
6. Flannelboard.	Can be portable and mobile. Can be prepared by expert in advance. Little skill required in actual operation. Could be used to make presentation more dynamic.	Can only be used for what it is prepared. Cannot adapt to changing interest of group. More elaborate equipment than ordinary blackboard. Difficult to keep up-to-date.	Very useful but only for the prepared talks. Audience can participate. It should be used step-by-step. Flannel materials should be stored properly for future use. Flannelgraphs should be numbered according to their order in the presentation.

OTHER MEDIA AND MATERIALS	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
7. Bulletin Board.	Striking, graphic, informative, flexible, replaces local newspapers. Keeps community up-to-date with information.	Requires preparation and attention to community needs.	Should be combined with maps, talks and photographs. Very suitable for posting articles, announcements and news of development in the community.
8. Flip charts (turnover charts).	Cheap and simple. Can be stopped at will for analysis. Can be prepared locally. Ideas could be illustrated in sequence. Illustrations on flip chart could be used many times for different audiences in different sessions.	Soon torn. Can only be seen by a few at a time. Can be difficult to illustrate complicated ideas.	Should not be overlooked for illustration of simple sequences - especially with small groups. Lectures should be prepared in advance for use on several occasions.
9. Models, exhibitions and displays.	Appeal to several senses. Can be used in various occasions and situations. Can illustrate ideas in detail.	Not many workers can build them or use them properly.	Useful models and exhibitions could be built up locally. Should be used in familiar places - centers.
10. Maps, charts, diagrams.	Visual appeal. Should simplify details. Permit leisurely study. Can develop sequence on display boards.	May mislead by over-simplicity. Can create transport and storage problems.	Should be made especially for groups. May need careful explanation at first. Could be used as summary of information. Symbols and layout should be familiar to the audience.

OTHER MEDIA AND MATERIALS	MAIN ADVANTAGES	MAIN DISADVANTAGES	COMMENTS
11. Blackboard.	A flexible tool. Easy to make and to use. Can be very attractive if used properly. Use of colored chalks can add to its visual appeal. Can be portable.	Requires some manipulation skill (though quickly acquired). Requires teaching skills to make best use.	Should be essential in every group. Very useful for schematic summaries or talk or discussion. Audience can participate. Small blackboards can be portable. Writing should be clear and organized.

Source: Planning of Communication Support (Information, Motivation and Education) in Sanitation Programs and Projects.
— Heli Perrett (TAC) — United Nations Development Programme and World Bank.