# **Monitoring Report**

Visit Date	12-13 May 2016
<b>Report Submitted</b>	31-05-2016

1).	Name of Project:	Micro Hydro Power Projects under NJVCDP/AJKCDP		
		1. 20 KW Dowarian Micro Hydro Power Project (MHPP)		
		2.	2. <u>MHPPs Numberdar Pura Dudhnyal</u>	
		;	a. 20 KW MHPP (NJVCDP)	
			b. 20 KW MHPP (AJKCDP)	
		3.	(a) MHPP Khawaja Seri 25-30 KW-NJVCDP	
			(b) MHPP Malik Seri 20 KW	
		4.	MHPP Kel Seri 30 KW	
		5.	MHPP Arang Kel -15 KW	
		6.	MHPP Arang Kel – 15 KW	
2).	Sector:	Foreign Funded Projects		
3).	Sub-Sector:	AJK CDP/NJVCDP		
4).	Unique Ref. No:	<u>FFP-14</u>		
5).	Location:	<u>AJK</u>		
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6). Status:

On-0	Completed	
Original	Revised	Yes

7). Cost (Sub-Projects)

Amount	Actual	1st Revised	2 <sup>nd</sup> Revised	3 <sup>rd</sup> Revised	4 <sup>th</sup> Revised	5 <sup>th</sup> Revised	
innount	8933010						
Dunation	2002-03 (N	JVCDP)					
Duration	2010-11 (AJKCDP)						

### 8). Financial Progress:

S #	Sub-Projects as per PC-I	Approved Cost as per PC-I	Cumulative Exp. up to the last financial year	Expenditure During Current Financial Year		
				Allocation	Releases	Utilization
1	2	3	4	5	6	7
1	20 KW Dowarian Micro Hydro Power Project (MHPP)	361009	361009			
	MHPPs Numberdar Pura	821886	390193			
2	Dudhnyal 20 KW MHPP (NJVCDP) 20 KW MHPP (AJKCDP)		320995			
3	MHPP Khawaja Seri 25-30 KW-NJVCDP	Non-functional				
	MHPP Malik Seri 20 KW	2288077	2288077			
4	MHPP Kel Seri 30 KW	3526400	3367923			
5	MHPP Arang Kel - 15 KW	653649	573920			
6	MHPP Arang Kel - 15 KW	1281989	1281989			
	Total	8933010	8584106			

## 9). Supervision of Work:

	Mr. Muhammad Shamoon Hashmi		
	(Director General M&E)		
	Mr. Mushtaq Hussain Awan, Dr. Bashir Butt		
Name of PD /Responsible officer	(AJKCDP) Project Director		
	Ch. Niaz Ahmed, Muhammad Afzal Turk		
	(NJVCDP) Project Coordinator		
Designation	Project Director		
Full time/Additional Charge	Full time		
Contacts			
Office	05822-921535		
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#### 10). Findings:

### 1. <u>Micro Hydro Power Projects under NJVCDP/AJKCDP</u> 20 KW Dowarian Micro Hydro Power Project (MHPP)

- It was informed by the President Sawera Community Organization (CO) that the Micro Hydro Power Project (MHPP) was commissioned in 2008 and about 77 households are benefitted from the MHPP.
- ii. As per CO, 50% funds were provided by the AJKCDP for machinery, however, 370 feet long water channel was constructed by the CO itself.
- iii. It was observed that power connection was also provided to the SCO Exchange for which Rs.5,000/month were being charged.
- Rs.150/- per household were being charged on monthly basis in order to manage for O&M costs of the MHPP.
- v. The SCO and other seven shops were provided power at day time whereas households were being provided power in the evenings till 800 hrs. next day.
- vi. It was observed that in case of fault in machinery i.e. turbine or motor, CO was collecting funds additionally for fixing the problem.
- vii. The CO was often rectifying faults of machinery etc. in one day, however, it faced maximum five days power breakdown due to damage of channel at some vulnerable portions.
- viii. The Operator was being paid Rs.10,000/month whereas bills were collected through Volunteers.
- ix. Some parts of the channels were being repaired on regular basis and requiring PCC at vulnerable locations.
- x. It was informed that Televisions and irons could not be used due to low voltage or low capacity of the MHPP.
- xi. Presently, the CO has Community Credit Pool of Rs.200,000/- against which Co members were being provided loan ranging from Rs.10,000-30,000 for different purposes.

- xii. Since the motor and machines were being got repaired by taking it to Muzaffarabad and calling for mechanic from Muzaffarabad which was time consuming as well as costly proposition. The President CO requested that Motor Mechanic Training may be arranged by the Industries Department for 2-3 members of the CO so that these motors could be repaired at spot.
- xiii. Generally, the CO is active and doing its business as intended.



Detailed analysis of O&M mechanism, beneficiaries of power and other COs matter underway

#### 2. <u>MHPPs Numberdar Pura Dudhnyal</u>

#### Two MHPPs.

- a. 20 KW installed in 1998 under NJVCDP: Non Functional.
- b. 20 KW installed in 2008 under AJKCDP: Functional.

#### i. 20 KW MHPP (NJVCDP)

It was informed that MHPP installed under NJVCDP was handed over to the local Army in 2002 which has now become non-functional due to over utilization. Also, local/sub-standard machinery was used for this project which resulted in continuous repair and maintenance as a result permanent failure. Now its motor and turbine can be repaired with estimated cost of Rs.200,000/-

### ii. 20 KW MHPP (AJKCDP)

a) The CO informed that 25% share was provided by the community and the MHPP was made operational in 2008. It is providing power to about 250 households (HH) and each HH was being charged Rs.150/- per month.

- b) It was observed that 60-65% households were paying bills. However, in case of repair of machinery, funds were being collected at the time of failure of machinery. The Operator and Line Man were paid Rs.6,000/- and Rs.2,000/- per month respectively.
- c) As informed by the representatives of the CO, meetings of the CO are being arranged on monthly basis.
- d) No social mobilization activities by the AJKRSP in the CO.
- e) Local Army provided power connection and being charged Rs.3,000/month on lump-sum basis.
- f) Presently, unlined channel, needs PCC at some critical locations.

#### 3. i. MHPP Khawaja Seri 25-30 KW-NJVCDP

#### ii. MHPP Malik Seri 20 KW

- i. The MHHP at Khawaja Seri was established under the Project "Neelum & Jhelum Valleys Community Development Project". However, it is non-operational for the last about 10 years or so as its Power Station was washed away due heavy floods in the Khawaja Seri Nullah.
- ii. It was observed that two MHPP are installed at the similar location one under NJVCDP (to serve the populace of Khawaja Seri) and the other under AJKCDP (for inhabitants of Malik Seri). The MHPP installed under AJKCDP is still functional and providing services to the both communities i.e. Khawaja Seri and Malik Seri.
- iii. The Power House of the MHPP Khawaja Seri was located near Nullah Bed which was at all not feasible and during flood in the Nullah it was washed away. Penstock/pipes were still installed there but Power House site buried under debris. The representatives of CO Khawaja Seri informed that motor of the MHPP was completely damaged whereas the Turbine was recovered which needs overall repair and maintenance or may be replacement.
- iv. The area of Khawaja Seri/Malik Seri has been provided electricity from Surgan HPP (established under PDO). The CO of the area was asked about the justification for use of existing MHPP and demand for provision of funds for repair and maintenance for MHPP constructed under NJVCDP. The CO seemed committed to run these MHPPs. They were of the

view that although with MHPPs they cannot use iron and other equipment but it was sufficient for light and its bill is almost none.

- v. Since the MHPP constructed under NJVCDP is not functional for the last 10 years, therefore; possibility of shifting of the MHPP to other needy CO may be assessed by the AJKCDP.
- vi. In wake of provision of power from other HPPs of PDO to the area a viable proposition to shift them amicably to other needy population/COs may be worked out.
- vii. In future, a strategy may be adopted and such strategy/plan of provision of MHPPs to different COs must be shared with PDO to overcome duplication.
- viii. Each household was being charged Rs.100/month for the use of electricity. For repair and maintenance estimates are prepared and each household is charged the equal amount.



Discussing Issues of Non-Sustainability of MHPP installed under NJVCDP with the COs Khawaja Seri and Malik Seri Area.

### 4. MHPP Kel Seri 30 KW

- a. The MHPP was installed in 2008 under AJKCDP. It was providing electricity to about 100 households.
- b. It was informed by the CO that their motor got repaired thrice. An amount of Rs.100/month was being charged by each household as bill. Two persons one Chowkidar and one Operator was employed and being paid Rs.2,000/month and Rs.7,000/month respectively.

- c. The CO was demanding replacement of Turbine by the AJKCDP (which was creating trouble due to frequent repair and maintenance).
- d. The electricity is likely to be provided by a project of PDO in near future.
- e. The meetings of the CO were being convened regularly, however, saving of the COs was very little i.e. Rs.25,000/- only.
- f. The CO had created a Pool of Rs.10,000/- as saving separately for future repair and maintenance of the MHPP which indicates wisdom and commitment of the CO.

#### 5. MHPP Arang Kel -15 KW

- a) The MHPP was installed in 2012 under AJKCDP. A tree was fallen on tank/weir of the MHPP and it faced major damaged. It was repaired temporarily by erecting a plastic sheet inside the loose stones.
- b) It was observed that at some critical locations instead of loose stones PCC Channel was required to be constructed.
- c) CO was demanding for provision of funds for repair and maintenance of the weir.

#### 6. MHPP Arang Kel – 15 KW

- i. The MHPP was installed under NJVCDP in 2002. The channel and weir was requiring repair.
- ii. The community was demanding for provision of 120 feet long pipe 10 inch dia for safely crossing of the channel from nullah area which would lead to sustainability and ensure uninterrupted power supply in the area.
- iii. The conductors were improperly erected on green trees resulting in line losses extensively. The CO was asked to properly erect conductors properly to avoid line losses and to safeguard panels of the motors which was facing continuous defects.
- iv. Since the MHPPs were installed in an area which was located far away from the main road with no communication means, therefore, the CO demanded for imparting training for at least two persons for motor winding etc.



Both the MHPPs at Arang Kel

#### 11). Recommendations/ Required Actions to be taken by the Department/Concerned.

- AJK TEVTA may be approached by the AJKCDP for imparting on-site training for at least two CO members for each MHPP particularly, for the COs who lack communication means to reduce hassle, time and cost for repair and maintenance of Motors etc.
- 2. Social mobilization and credit related activities needs more attention by the AJKCDP/AJKRSP.
- 3. COs may be provided funds for major repair & maintenance of channels, repair of weirs, purchase of penstock/pipes and for other activities as highlighted above.
- 4. Since the MHPP Khawaja Seri constructed under NJVCDP is not functional for the last about ten (10) years, therefore; possibility of shifting of the MHPP to other needy CO may be assessed by the AJKCDP.
- 5. There is dire need to holistically review the use of all MHPPs installed under both the projects in wake of provision of power from other HPPs of PDO and come up with viable proposition to shift them amicably to other needy population/COs.
- 6. A future strategy may be devised and such strategy/plan for provision of MHPPs to different COs must be shared with PDO to ensure effective use of meagre development resources. Besides, MHPPs may be planned for COs where PDO is not going to provide electricity during the next 10 years or more.

## 12) Category: (Please mark one as per the findings/recommendations).

Activities as per PC-I	Very Good	Good	Satisfactory	Poor
MHPPs				

## 13). Reporting Team (P&D)

<b>S</b> #	Name	Designation	Signature	Date
1	Mr. M. Shamoon Hashmi	Director General (M&E)		31-05-2016
2	Raja Manzoor Hussain	Chief (M&E)		31-05-2016