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# USAID ENERGY POLICY PROGRAM

## SITE VISIT REPORT SATPARA MULTIPURPOSE DAM PROJECT



**June 2012**

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## SITE VISIT REPORT

### SATPARA MULTIPURPOSE DAM PROJECT

Contract No: AID-EPP-I-00-03-00004

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#### **DISCLAIMER**

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## **1. PURPOSE of VISIT**

A visit to Satpara multipurpose dam project was conducted from June 1- 5, 2012 by Engineer from AEAI and Environmental Specialist from Hagler Bailly to review the environmental implementation and to monitor progress of the ongoing works.

## **2. STATUS of WORKS COMPLETED**

For the purpose of monitoring of works in progress on the Satpara Multipurpose Dam Project, Engr. Asif Majeed and Mr. Noor Kamal from Hagler Bailly visited the dam, power houses and irrigation canals the completed and ongoing works as per Agreement. A separate report will be issued by Hagler Bailly regarding the implementation of EMMP at Satpara Multipurpose dam project.

On June 1, 2012 although Inflows were more than outflows but still the reservoir level was quiet low. Irrigation works were almost 99% completed and the remaining works include completion of stone masonry works on left bank canals and portion of DR-I. Project Director WAPDA was advised to complete it as early as possible.

Following is the brief summary of project works completed up to June 5, 2011;

- |  |               |
|--|---------------|
| 1. Civil Works for Dam and Powerhouse 1 & 2;         | 100% complete |
| 2. Irrigation System;                                | 99% complete  |
| 3. Civil, Electrical and Mechanical Works for 3 & 4; | 62% complete  |
| 4. Consulting Services for Satpara Project;          | 85% complete  |

Civil works on the main dam and powerhouse # 1 & 2 were completed on July 29, 2011 as per schedule specified in the Activity Agreement. Remaining works including construction of the roads, lighting arrangements and railings at the dam site were completed during the month of July. Construction activities on the irrigation system were 99% completed and the remaining works include completion of stone masonry works on left bank canals. WAPDA awarded civil works contract for unit # 3 & 4 to M/s Descon as a variation order to the existing contract and the excavation works started in early April, 2011. The contract for E & M works was awarded to M/s Andritz Technologies, China on June 9, 2011 with a completion period of 21 months. The overall completion of powerhouse 3 & 4 was 62%. Equipment's including Turbines, Valves, and other parts for powerhouse 3 & 4 is under manufacturing and scheduled to reach skardu in October 2012.

In accordance with the Activity Agreement for Satpara Project, WAPDA will enter into a Power Purchase Agreement with Gilgit-Baltistan PWD that would recover WAPDA's costs including O&M for a continued sustainable Satpara Project operation; however, WAPDA has not yet signed a Power Purchase Agreement with the local distribution company and delivering free power to PWD.

## **3. SEEPAGE CONDITION at the DAM**

On June 1, 2011 the total seepage recorded downstream of the dam by WAPDA was about 45 cusecs. For more accurate and precise measurements WAPDA installed improved instruments which are recording total seepage from the dam. WAPDA filled the sink holes and depressions in the reservoir area (developed last year) in accordance with the recommendations of the Dam Safety Experts.

#### **4. IMPLEMENTATION OF EMMP**

WAPDA Satpara has appointed EHS Officer and EHS Engineer to maintain day to day coordination and ensure that the EMMP is adequately implemented. They have also prepared Check List for the implementation of the Work Plan. Detailed report on this will be submitted by Hagler Bailly within a week.

Some photographs from the visit are appended below:



**Figure 1: Satpara Lake**



**Figure 2: Ongoing work on left bank canal**



**Figure 3: Ongoing work on Left bank canal**



**Figure 4: Power House 3 with Penstock**



**Figure 5: Power house 3 under construction**



**Figure 6: Power House 4 under construction**



**Figure 7: Closing meeting with Project Director Satpara Project**

**Engr. Asif Majeed**  
**Associate Engineer**  
**USAID Energy Policy Project, Islamabad**

