

Due Diligence Report

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Due Diligence Report of Remodeling of Muzaffargarh Flood Bund from RD 165+000 to RD 188+000

Reviewed by:

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Asian Development Bank

GOVERNMENT OF THE PUNJAB



Flood Emergency Reconstruction and Resilience Project (FERRP)



**Due Diligence Report
Remodelling of Muzaffargarh Flood Bund RD 165+000 to RD
188+000**

13 February 2017

Prepared by:

**Project Implementation Unit,
Punjab Irrigation Department (PID), Lahore**

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LIST OF ABBREVIATION

ADB	Asian Development Bank
FERRP	Flood Emergency Reconstruction and Resilience Project
FGD	Focus Group Discussions
GoP	Government of Punjab
IR	Involuntary Resettlement
IP	Indigenous People
NGO	Non-Governmental Organization
PIU	Project Implementation Unit
RoW	Right of Way
RD	Reduced Distance
SPS	Safeguard Policy Statement
ToR	Terms of Reference

INTRODUCTION

A. Background:

1. Millions of people have been affected, besides a large number of infrastructures either damaged or destroyed due to severe floods during the last few decades in Punjab Province. These floods not only adversely affected land and farmers but also badly devastated the on-farm sources of livelihoods and services affected by floods. Heavy monsoon rains in 2014 resulted in flash floods in catchment areas of eastern rivers (Chenab, Ravi, Sutlej and Jhelum). These rains affected various districts of the province and damaged community physical infrastructure as well as brought destruction to private housing and agriculture.
2. The causes of devastation can be classified into two categories in terms of their impact i.e. (a) Flood- affected and (b) Rain-affected. In Punjab, sixteen districts were affected by the floods emanating from eastern rivers (particularly Chenab River). Twelve additional districts also faced severe damages due to heavy rainfall lead to devastation in catchment areas causing flash floods and damaging physical public and private infrastructure and communication facilities in flood-hit areas.

B. Flood Emergency Reconstruction and Resilience Project (FERRP):

3. Keenly interested in safeguarding people of Punjab and protecting their properties the Government of Punjab (GoPb) is implementing Flood Emergency Reconstruction and Resilience Project (FERRP) with the financial assistance from Asian Development Bank (ADB). FERRP will provide support for the restoration of resilient flood protection infrastructure and strengthening of government capacity to manage disasters and climate variability. The project will ultimately contribute to the economic and social recovery of flood affected areas in Punjab Province. The objective of the Project is to reduce the human sufferings and socio-economic effects of floods in Punjab to improve social, economic, and ecological benefits of floods, and to foster safer human settlements near flood plains.
4. **The Irrigation Component:** The irrigation component in Punjab focuses on the reconstruction and upgrading of damaged irrigation, drainage and flood protection schemes, including upgrading of priority flood protection schemes in the flood affected districts of Punjab to multi-hazard resilience standards.
5. The list of irrigation and flood management schemes (Annex 1) include 79 subprojects of emergent rehabilitation works, 25 subprojects under critical rehabilitation/reconstruction works and another 25 subprojects of inescapable works involving remodeling of flood protection bunds in Punjab. Under the remodeling of flood bunds, Punjab Irrigation Department (Project Implementing Agency-PID) has prioritized 13 sub-projects (list given below) which will be constructed under FERRP.
6. Remodeling of Muzaffargarh Flood Bund (RD 165+000 – 188+000) is one of the sub-projects, which is being implemented under FERRP. List of priority flood protection schemes is given below in Table 1.

Table 1: Subprojects of Remodeling of Flood Protection Bunds.

No.	Category	Zone	Scheme
1	Inescapable	Sargodha	Protection of Jhelum City from the floods of River Jhelum
2	Inescapable	D.G Khan	Remodeling of Muzaffargarh Flood Bund RD.0-188
3	Inescapable	D.G Khan	Remodeling of Khangarh Flood Bund RD.0-30 to protect Muzaffargarh City
4	Inescapable	D.G Khan	Remodeling of LMB of Taunsa Barrage
5	Inescapable	Sargodha	Protection of Sarai Alamgeer Abadi from the floods of River Jhelum.
6	Inescapable	Lahore	Remodeling LMB of Marala Barrage.
7	Inescapable	Sargodha	Remodeling of Masson Flood Bund
8	Inescapable	Multan	Remodeling of Right Embankment of Shujabad Branch from RD: 231580 – 279000
9	Inescapable	Multan	Remodeling of Akbar & Nawabpur Flood Bund.
10	Inescapable	Multan	Remodeling of Sher Shah Railway Flood Bund RD. 0-15000
11	Inescapable	Multan	Remodeling of LMB of Trimmu Barrage
12	Inescapable	Faisalabad	Remodeling of Jhang flood protection bund and Thattha Mahla Bund
13	Inescapable	Faisalabad	Remodeling of left marginal bund of Qadirabad barrage in critical reaches.

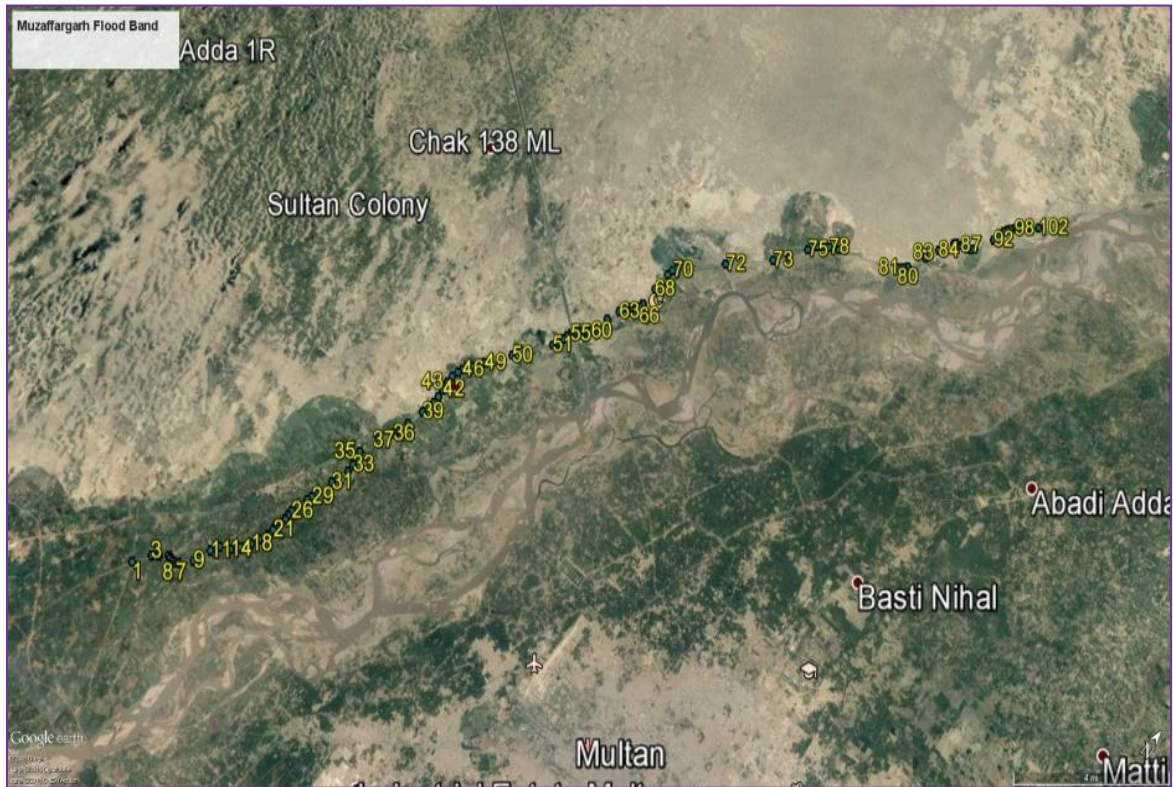
C. Location and Necessity of Remodeling Muzaffargarh Flood Bund

7. Muzaffargarh flood bund is tied with Doaba, Khangarh Flood Bund. This flood protection bund constructed combined with left bank of Main Rung Pur Canal, Muzaffargarh Branch Canal and Doaba flood bund tied-up with Muzaffargarh Flood Bund at RD 165+000. The Khangarh flood bund is also tied with Muzaffargarh Flood Bund at 188+000 on old Multan and Muzaffargarh road. The total length of the flood bund is 35.61 miles. The coordinates and RoW of the sub-projects provided in Annexures-2.

8. Muzaffargarh Flood Protection is old and long flood bund and tied up with Doaba, Khangarh Flood Bund. It protects the canal network of Rang Pur Canal and important towns like Muzaffargarh, khangarh, Rohillan wali and many other abadies from the spills of River Chenab on right bank. An abnormal seepage phenomenon between RD 120+000 to 165+000 was noticed in 2014 flood and sloughing started in the Rangpur and Muzaffargarh Canal. The flood protection bund breached at different locations from RD 148+000 to 158+000 and water entered into Muzaffargarh city and damaged the public property and other infrastructure. Above situation is critical and warranted to adopt immediate and urgent remedial measures for the assurances of the safety of these flood bunds and other important infrastructure. In addition to this, there was abnormal seepage between RD 120+000 -165+000 of Muzaffargarh Flood Bund and sloughing in Rang Pur and Muzaffargarh Branch. The flood water along RD 21+500 to RD 188+000 at upstream encroached free board and created alarming situation. Therefore, the strengthening of

Muzaffargarh is needed as its failure could inundate Muzaffargarh City and other congested abadies.

Fig 1: Location and View of Muzaffargarh Flood Bund



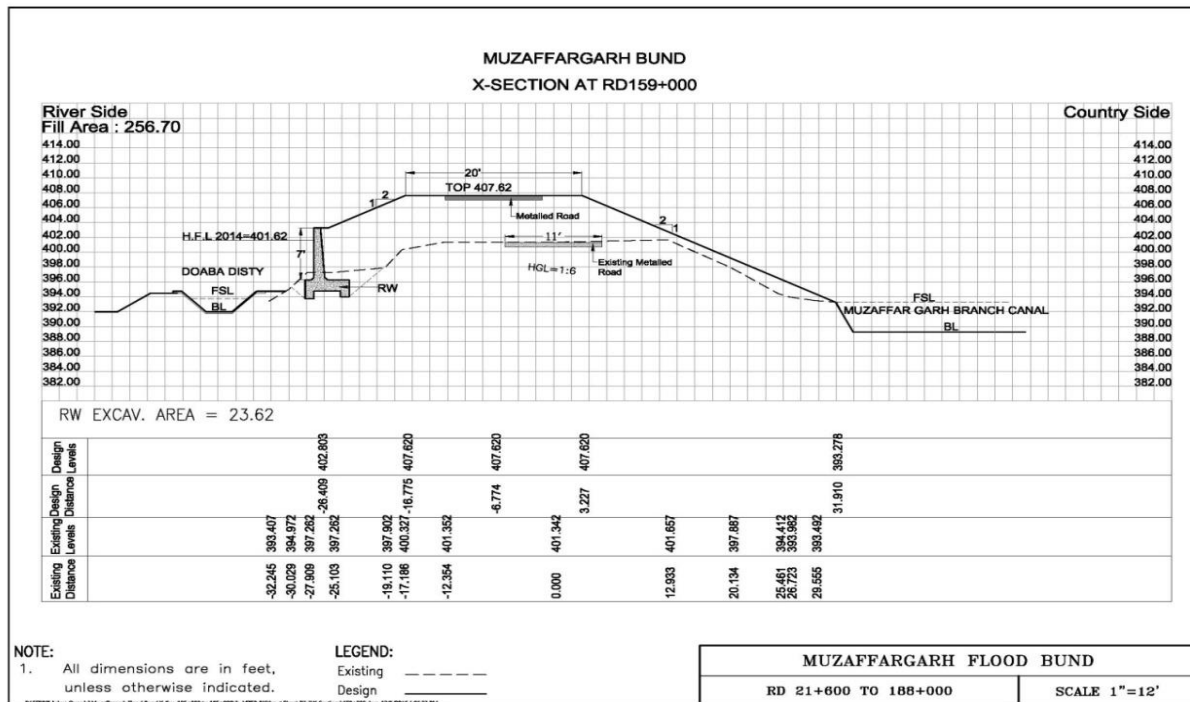
D. Project Design

Salient Feature of the Sub-Project Protection

9. Following protection measures have been included in the scope of work of the sub-project:

- In order to make the flood protection embankment safe against the high flood of 2014, it is proposed to raise Muzaffargarh flood bund about 2 feet from RD 0+000 to 108+000, 109+000+127+000 and from RD 150+000 to 188+000 to maintain a clear 6 feet free board above HLF observed during the flood season.
- Doaba Distributary runs parallel and in the toe of Muzaffargarh Flood Bund from RD 150+000- RD 173+000. There is likelihood of sloughing of the embankment as well as chocking up of the irrigation channel. Therefore, in this reach, a brick masonry wall is proposed to be constructed to retain soil and stabilize the existing/proposed slopes of embankment.
- A metaled road exists on the top of the embankment from RD 150+000 to 188+000 and the embankment is proposed to be raised from its existing level. Therefore, it is proposed to dismantle the existing road and to reconstruct new one. A typical cross section is provided in Fig: 2

Fig 2: Typical Cross Section of Muzaffarabad Flood Bund



DUE DILIGENCE REPORT, PURPOSE AND FINDINGS

10. A detailed due diligence work of the subproject has been undertaken jointly as a team by Resettlement Specialist (RS) of ADB's Technical Assistance for FERRP who worked closely with Project Implementation Unit (PIU), Project Management Consultant, and Environment and Social Unit of PID during September – December 2016.

A. The Purpose of Due Diligence

11. The purpose of due diligence report is to (i) examine the social aspects and any adverse impacts related to Involuntary Resettlement (IR) and Indigenous Peoples (IPs) as mentioned in ADB's Safeguard Policy Statement (SPS) 2009 ; (ii) identify any land acquisition and resettlement (LAR) related impacts; and (iii) recommend preparation of appropriate safeguard document (whether land acquisition and resettlement plan, indigenous peoples plan and/or a due diligence report) as applicable but in accordance with ADB's Safeguard Policy Statement (SPS) 2009.

B. Methodology:

12. The due diligence work undertaken by team was guided by the following methodology:

C. Desk Review of project documents

13. The team reviewed the following project documents (i) project concept paper, (ii) Social Safeguard Policy (SPS) 2009, (iii) Land Acquisition and Resettlement Framework (LARF), (iv) aide memoires, list of subprojects, earlier documentation work prepared by PIU's consultants, PC I, project design, cross-sections and design parameters (vi) Land Acquisition Act 1894, and Google/location map of the project.

D. Consultations with ADB, ESU, PID field Staff:

14. Discussions and consultation on social safeguard aspects of remodeling of Muzaffargarh Flood Bund were also held with ADB's Pakistan Resident Mission, the Mission Leader and Senior Safeguard Officer, the PID field staff and Project Management Consultant.

E. Field Site Visits and Community Consultations:

15. Field site visits and consultations with communities living around the bund and in project area were also conducted and their view points about the project recorded. A socioeconomic survey of the project area was also conducted to record socioeconomic baseline of communities around the project area. (Annex 3 in the baseline).

F. Key Findings

16. The results of due diligence review and field visit are as under:

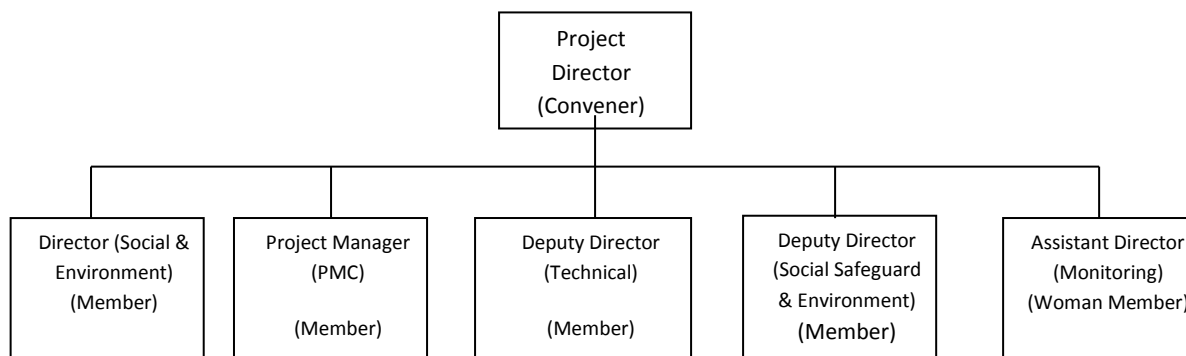
- a) **LAR and IPs Impacts and Categorization of Subproject:** The subproject design and construction activities are limited to the right of way (ROW) of Muzaffargarh Flood Bund which is 101 feet to 195 feet wide in different reaches

and is owned by PID. (ROW at annexure 2). No private land is involved in construction work as all project activities will be carried out within Row.

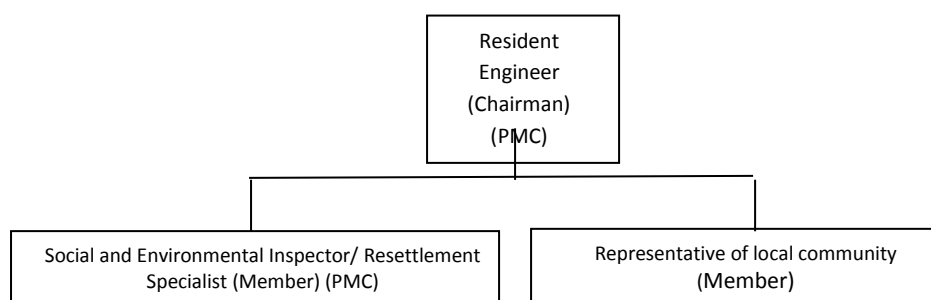
- b) **Indigenous Peoples:** The field visit and survey of project area did not find presence of any indigenous peoples in or groups that have been described as such in SPS 2009. The people of project area are Muslim and they do not recognize themselves as IPs according to SPS 2009. Based on this finding of DDR, the sub-project has been categorized as C for IR as well as IPs policy. (See Annex 4 IR and IPs Annex-5 Checklists).
- c) **Socioeconomic Survey and Community/Gender Consultations:** Detailed socioeconomic survey and consultations with 38 community members living in Awais Nagar Samtia, Muhammad Wala, Bhuttian Wala was carried out in Sep-Dec 2016. The survey found that communities around the bunds are happy over the flood protection works which will protect them and their assets from damages of floods. No adverse impacts were observed on local people especially women who were found in strong favor of the project. Annex 3 carries more details of socioeconomic survey and impact assessment of project area.
- d) **Institutional Arrangements:** All institutions and key positions as envisaged in Land Acquisition and Resettlement Framework (LARF) of project have been fully established and functional. These include a Project Implementation Unit (PIU), comprising of Environment and Social Unit (ESU) and technical and procurement wings. Project Management Consultants and TA Resettlement Specialist are well in place and operating according to the roles and responsibilities assigned to them as described in Project Administration Manual (PAM) and LARF of project. Annex 11 provides detailed roles and responsibilities of key officials of institutions set up for the project.
- e) **Grievance Redressal Mechanism:** At project level, a Grievance Redresses Committee (GRC) comprising of Project Director, Project Implementation Unit (PIU), Punjab Irrigation Department (Convener), Director (Social & Environment-PIU), Project Manager (Project Management Consultant, PMC), Deputy Director (Technical-PIU), Deputy Director (Social Safeguard & Environment-PIU) and Assistant Director Monitoring-PIU (Female Member) has been formed to redress all Grievances of the people and notified by the Secretary, Government of the Punjab, Irrigation Department vide Notification No. NO. SO (FLOODS) VI-3/2015 dated Lahore the 8th February 2017 (copy attached at Annex 12). This committee will act as a body for coordination and implementation of Due Diligence Reports, Short Resettlement Plan (if any) and Initial Environmental Examination/Environment Management Plan in its true letter and spirit as per ADB' SPS 2009. People/surrounding communities will be informed about the GRC and its role and responsibilities. An office of Resident Engineers (Project Management Consultant), representing Project Implementation Unit, Punjab Irrigation Department will be established at each subproject site for implementation and monitoring of subproject activities and will be an easy approach to the local people. A compliant register will also be kept at each subproject site for registering the complaints.

A local level GRC comprising Resident Engineer (RE of PMC), Social and Environmental Inspector and one representative of local communities will also be formed to redress the grievances of the people at local level prior to commencement of civil works. Firstly, the people will lodge their complaints to the local level GRC, which will redress their grievances. If grievances do not resolve at local level then local level GRC will forward the case to the Project Level GRC to redress the grievances, which will resolve the grievances.

PIU Level Grievance Redress Committee



Local Level Grievance Redress Committee



The social & environmental inspector/ resettlement specialist of Project Management Consultant of the subproject is the focal person and be responsible for coordination between the member of committee and the complainant and shall assist the Resident Engineer in calling meetings, preparation of agendas, recording and dissemination of minutes and ensuring effective implementation of decisions.

The local level grievance redress committee will meet once in a month at subproject Project Implementation Office to inspect complaint register whether any complaint is lodged. If there is no complaint, committee will provide a forum to its members and local people of the subproject area to discuss their views and suggestions on the general issues occurring in the implementation of the subproject. If complaints or grievances are received, GRC will play vital role in their complaint resolution. The functions of the committee is to hear the complaint, and if found justified will resolve the grievance. The Environment and Social Unit of PIU, Irrigation Department will also play the role for coordination in redressal of complaints. Focal person of Local level GRC will document all the proceedings of GRC meetings and the decisions taken for resolution of grievances and report it to Environment and Social Unit of PIU.

Grievance Redress Process

A grievance redress mechanism will be available to allow people appealing any disagreeable decision, practice or activity arising due to implementation of sub project. People are /will be fully informed of their rights and of the procedures for addressing complaints verbally or in writing during consultation, survey, and time of execution.

Care will be taken to prevent grievances rather than going through a redress process. The subprojects do not involve land acquisition and land & crop compensation issues as all the subproject will be executed on the Government land

belonging to Irrigation Department.

The complaint and grievances will be addressed through process as described in table given below:

Table: Grievance Resolution Process

Complainant Procedure
1. Complainant lodge a complaint verbally to field staff
2. Such complaints will be resolved at local level by the field staff through informal mediation.
2. If still unsettled, a grievance can be lodged on the complaint register kept with Resident Engineer (PMC). Local level GRC will resolve such complaints in 30 days.
3. If there will be no resolution, a grievance can be forwarded to the PIU level GRC. The complainant will produce documents supporting his/her claim/complaints if required. PIU level GRC will provide the decision within 21 days of receiving the complaint. The PIU level GRC decision must be in compliance with approved Due Diligence Report / Short Resettlement Plan provisions and ADB SPS 2009.
4. If the grievance redress system fail to satisfy the complainants, they can further submit their case to the appropriate court of law / ombudsman court.

- f) **Project Selection Criterion:** The subproject has been designed keeping in view the provisions of project selection criterion related to social safeguard requirements. Following considerations have been carefully followed in designing the project: (a) in compliance with applicable laws and ADB's Safeguard Policy Statement (SPS) 2009; and (b) prepared in accordance with the requirements of an agreed Land Acquisition and Resettlement Framework and (c) the project avoided land acquisition and resettlement, to the maximum extent possible.
- g) **Implementation Schedule/Timeline:** The construction schedule/timeline for the implementation of Muzaffargarh flood bund sub-project is proposed nine months. The implementation schedule is provided in Annexure-6.
- h) **Unanticipated Impacts:** The TA Resettlement Specialist and Project Management Consultant (PMC) and ESU of PIU will identify any unanticipated safeguards (LAR) impacts during implementation of project. If any such impacts are found, these will be addressed in accordance with LARF of project and SPS 2009.

CONCLUSION AND RECOMMENDATIONS

17. Due Diligence work included review of project documents, meetings and discussions with PID field staff and PMC, field visit, socioeconomic and impact assessment survey and consultations with local communities in the villages of Abbas Nagar Samtia, Muhammad Wala and Bhutian Wala located in the surrounding of Muzaffargarh flood protection bund subproject. The survey concluded that flood protection work is limited to the Right Of Way (ROW), 101-195 feet wide owned by PID. The ROW is completely free from any private, commercial, community or farming structures and also do not have any encroachers present in the area. Similarly, there are no tribes or any indigenous, as defined ADB's SPS 2009, have been found living in the project area. The local people are Muslim and they do not recognize themselves as IPs. The project will not cause any land acquisition and resettlement impacts and no one will be physically dislocated from housing or lose any resources due to subproject. Based on no LAR and IPs impacts, the project has been categorized as C for IR and IPs. However, the DDR makes following recommendations to PID to implement before start of construction work:

- a. Adhere to the project design proposed for flood protection works. In case of any unanticipated impacts during project implementation, PIU will immediately inform ADB about the impacts. In that case PIU will also prepare a LARP and obtain approval of ADB and fully implement it before resuming any construction activities.
- b. In case a LARP has to be prepared at any stage of the project implementation, PIU should engage external monitoring agency or an individual to verify and certify implementation of LARP before startup of civil works activities. Further monitoring (internal as well as external) will be undertaken in line with monitoring frequency as specified in the LARP.

List of Irrigation Schemes

No,	Category	Zone	Name of Scheme
Emergent restoration works			
1	Emergent	D.G Khan	Restoring eroded slopes of Muzaffargarh Flood Bund RD 58-78
2	Emergent	D.G Khan	Closing and Strengthening breach site RD 148-149 Muzaffargarh Flood Bund
3	Emergent	D.G Khan	Closing and Strengthening breach site RD 157-158 Muzaffargarh Flood Bund
4	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 0+000 - 100+000
5	Emergent	D.G Khan	Closing & Strengthening relief cut between RD 26-27 Rangpur Canal
6	Emergent	D.G Khan	Restoring Right Bank of Rang Pur Canal RD 341+500 – 347+500
7	Emergent	D.G Khan	Restoring Right Bank of Muzaffargarh Branch RD 37+000 to 59+000
8	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 12-13 Doaba Flood Bund
9	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 13-14 Doaba Flood Bund
10	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 8-9 Rohari Flood Bund
11	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 14-15 Rohari Flood Bund
12	Emergent	D.G Khan	Installation of Missing / Chowked Liner and Protecting Bank of Rohari Flood Bund RD 0+000 to 23+400
13	Emergent	D.G Khan	Closing & Strengthening Relief Cut at J-Head Spur No.2 RD 2 - 3 Khangarh Flood Bund
14	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 0+000 - 35+000
15	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 35+000 - 45+000
16	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 45+000 - 99+000
17	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 99+000 - 141+000
18	Emergent	D.G Khan	Protecting Shehr Sultan Flood Bund RD 15+000 - 45+000
19	Emergent	D.G Khan	Protecting Shehr Sultan Flood Bund RD 46+000 - 97+000 and providing Mobile Gang
20	Emergent	D.G Khan	Protecting ChanderBhan Flood Bund RD 46+000 - 56+000 and Providing Mobile Gang
21	Emergent	D.G Khan	Protecting ChanderBhan Flood Bund RD 58+000 - 71+000
22	Emergent	D.G Khan	Protecting ChanderBhan Flood Bund RD 72+000 - 84+000
23	Emergent	D.G Khan	Protecting Langer wah flood bund RD 71+000 - 75+000
24	Emergent	D.G Khan	Protecting Langer wah flood bund RD 75+000 - 80+000
25	Emergent	D.G Khan	Strengthening Right Bank of Muzaffargarh Branch from Reach RD 61+700 to RD 62+250 to Protect M.Garh City
26	Emergent	D.G Khan	Closing & Strengthening breaching section at RD:20-21 Rohari Flood Bund
27	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 141+000 - 153+000 and Shehr Sultan Flood Bund RD: 0 - 15+000
28	Emergent	D.G Khan	Installation of Missing / Chowked Liner and Protecting Bank of Doaba Flood Bund RD 0+000 to 19+000
29	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 101+000 - 165+000
30	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 165+000 - 188+000 and providing mobile
31	Emergent	D.G Khan	Closing inlet at Muzaffargarh Flood Bund during flood 2014 in Ganesh Section of Khangarh Canal Sub Division.
32	Emergent	D.G Khan	Protecting T.P Link Canal against back water flow of River Chenab RD 183 - 191

No,	Category	Zone	Name of Scheme
Emergent restoration works			
33	Emergent	D.G Khan	Closing Culverts of N-70 By Pass Road for Flood Water Management to protect M.Garh city from the aggressive action of river water
34	Emergent	Lahore	Restoration measures against cut at R.D 49+524/L main Line Upper UCC.
35	Emergent	Lahore	Protective measure to save ShahdaraDisty Flood Bund near village Dindian.
36	Emergent	Lahore	Closing & Stg: mishap site at RD 33+500 – 34+800 & RD 55+800 & 57+500 of Dholan Minor.
37	Emergent	Lahore	Restoration of flood damages RD 7-11 New Gujran Minor.
38	Emergent	Lahore	Closing & Stg: Relief Cut made by the local inhabitants during Flood 2014 RD 80-81/L&R & RD 82-83/L&R MuridkeDisty.
39	Emergent	Lahore	Closing & Stg: mishap site at RD 99-100/L Kala Shah Kaku Disty due to excessive flood water in the channel
40	Emergent	Lahore	Closing and strengthening for 20 No. cuts along BRBD Link Canal occurred
41	Emergent	Lahore	Closing and strengthening for 15 No. cuts along M.R Link Canal occurred
42	Emergent	Lahore	Protective measure against closing of Rain Cut /Ghars in between Reach RD.37+600 to 51+180 on Madodas Bund
43	Emergent	Lahore	Protective measures against erosion of right bund of Deg Diversion Channel in between Reach RD.80-81/R
44	Emergent	Bahawalpur	Erosive action of Sutlej River along BastiAkuka (District: Bahawalnagar)
45	Emergent	Multan	Restoration of Haveli Main Line RD 13-14, damaged
46	Emergent	Multan	Closing of cut at breaching section (R.M.B), activated during flood 2014, as per SOP for the safety of Barrage and its allied structures.
47	Emergent	Multan	Closing breaches / relief cuts on Rangpur Canal occurred breaching section of Trimmu Barrage due to spill / backwater of River Chenab and activation
48	Emergent	Multan	Closing breaches / relief cuts on damaged portion of 1-AL, 1-L, 2-L, 1-R, 2-R, 4-L, 2-R/3-L, channel occurred due to spill / backwater of River Chenab and activation of breaching section of Trimmu Barrage
49	Emergent	Multan	Emergent protection, raising and widening of defence / protection bunds of Dab Kalan Town.
50	Emergent	Faisalabad	Relief Cut RD. 82-83/L of Q. B. Link Canal
51	Emergent	Faisalabad	Relief Cut RD. 89+700 – 89+950/R of Q. B. Link Canal
52	Emergent	Faisalabad	Relief Cut RD. 90+000 – 90+200/R of Q. B. Link Canal
53	Emergent	Faisalabad	Relief Cut RD. 149 - 150/R of Q. B. Link Canal
54	Emergent	Faisalabad	Relief Cut RD. 200 - 201/R of Q. B. Link Canal
55	Emergent	Faisalabad	Closing Rain Cut RD 320-321/L of Q.B.Link Canal due to heavy rain
56	Emergent	Faisalabad	Closing Rain Cut RD 302-303/L of Q.B.Link Canal due to heavy rain
57	Emergent	Faisalabad	Closing Rain Cut RD 318+915/L of Q.B.Link Canal due to heavy rain
58	Emergent	Faisalabad	Closing Rain Cut RD 326-327/L of Q.B.Link Canal due to heavy rain
59	Emergent	Faisalabad	Closing Rain Cut RD 350-351/L of Q.B.Link Canal due to heavy rain
60	Emergent	Faisalabad	Restoration of Breaching Section between RD; 3+000 – 4+000 Right Marginal Bund of Khanki Headworks
61	Emergent	Faisalabad	Restoration of Breaches in Lower Chenab Canal at RD; 38-39/R, 39-40/R and 40-41/R
62	Emergent	Faisalabad	Restoration of relief cut at RD;133-134/L of Lower Chenab Canal
63	Emergent	Faisalabad	Restoration of cut at RD; 94-95/L of Lower Chenab Canal
64	Emergent	Faisalabad	Restoration of damaged inlet in between RD; 2-3/L of Lower Chenab Canal
65	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 2+000-3+000/L U.G Branch.

No,	Category	Zone	Name of Scheme
Emergent restoration works			
66	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD:8+000-9+000/L U.G. Branch
67	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 52+000-53+000/L U.G. Branch
68	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 62+000-63+000/L U.G. Branch
69	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD. 113+500/L&R U.G. Branch
70	Emergent	Faisalabad	Checking of side erosion and strengthening of bank between RD:108000+110+000/L&R U/S+D/S Bridge RD:109+501
71	Emergent	Faisalabad	Closing breaches between RD. 58-59 of Pindi Bhattian Flood Protection Bunds
72	Emergent	Faisalabad	Closing breaches between RD. 67-68 of Pindi Bhattian Flood Protection Bunds
73	Emergent	Faisalabad	Closing breaches between RD. 53-54 & 56-57 of Pindi Bhattian Flood Protection Bunds
74	Emergent	Faisalabad	Closing breaches between RD. 55-56 of Pindi Bhattian Flood Protection Bunds
75	Emergent	Faisalabad	Closing breaches between RD. 48-850, 54+172, 54+300,54+380, and 54+500 of Pindi Bhattian Flood Protection Bunds
76	Emergent	Faisalabad	Closing Relief Cut RD 40-41/L of Q. B. Link Canal due to heavy rainfalls
77	Emergent	Faisalabad	Closing 2 No. newly developed creeks on left side D/S Qadirabad Barrage due to spill of flood Short Term Measures)
78	Emergent	Faisalabad	Restoration of banks of Chakbandi Main Drain from RD.2+000 - 18+000.
79	Emergent	Faisalabad	Closing of Breach and Restoration of affected portion of Jhang Flood Protection Bund at RD.1+000 – 2+000.
80	Critical	D.G Khan	Restoring apron of J-Head Spur RD 125+500 Khangarh Flood Bund Damaged
81	Critical	D.G Khan	Restoring of J-Head Spur No. 2 RD 15000 Khangarh Flood Bund
82	Critical	D.G Khan	Restoring of J-Head Spur No. 3 of Khangarh Flood Bund
83	Critical	Sargodha	Restoration of J-Head Spur No.2 near village Pandi
84	Critical	Sargodha	Restoration of J-Head Spur No.3 near village Kot Patwan
85	Critical	Sargodha	Restoration of J-Head Spur No.4 near village Kolowal / Dera Nasir
86	Critical	Lahore	Closing Breach of mardana drain RD 29+000 to 30+500
87	Critical	Lahore	Closing / strengthening breaches along nikkideg drain reach RD 33+400 - 60+000 and RD 152+000 - 226+000
88	Critical	Lahore	Desilting of nikkideg drain RD 97+500 - 136+000
89	Critical	Lahore	Repairing rain cuts on mangoki drain RD 72+000, 74+200, 112+000, 114+000, 140+115 and 140+145
90	Critical	Lahore	Repairing outfall structure sangowali drain and closing breaches
91	Critical	Lahore	Repairing flood damages along degnullah RD 0+000 to 91+400
92	Critical	Lahore	Repairing flood damages on flood embankment along aiknullah RD 0+500 - 12+500
93	Critical	Lahore	Repairing flood damages along lurriki drain
94	Critical	Lahore	Closing breaches left bund of NullahDeg from Chahore bridge to Jestywala.
95	Critical	Lahore	Construction of cunnette and ganda band in River Ravi to save ShahdaraDistributory near Dandian Village (Babbakwal)
96	Critical	Bahawalpur	Severe river attack of Sutlej River near Village Ratteka
97	Critical	Bahawalpur	Severe river attack of Sutlej River near Village Akuka
98	Critical	Bahawalpur	Erosive action of Indus River between RD:196-197 Minchin Flood Bund (Smoka Village)
99	Critical	Multan	Restoring critical reaches of Chenab flood bund (RD 0 - 10, 90 - 91 and 100 – 140

No,	Category	Zone	Name of Scheme
Emergent restoration works			
100	Critical	Multan	Repairing right bank of lower muzaffraabaddisty
101	Critical	Multan	Restoration / remodeling protection / defence flood bund along with its stone stud near dab kalan town
102	Critical	Multan	Restoration of Rangpur flood bund and its allied structure damaged during flood 2014
103	Critical	Multan	Restoration of downstream stone pitching of escape cum bridge RD 193-194 of haveli main line damaged during flood 2014
104	Critical	Multan	Restoration of damaged lining of haveli main line RD 13-14 / R
105	Critical	Faisalabad	Restoration of choking bund D/S Qadirabad Barrage damaged during flood 2014
106	Inescapable	Sargodha	Protection of Jhelum City from the floods of River Jhelum
107	Inescapable	D.G Khan	Raising and Strengthening Doaba Flood Bund RD:0+000 to RD:19+500
108	Inescapable	D.G Khan	Restoration of J-Head Spur RD:47+500 Shah WalaGroyne damaged during flood 2014
109	Inescapable	D.G Khan	Restoration of Pitching and Apron of Ganda Jakhar Imam Shah
110	Inescapable	Lahore	Rehabilitation of Maddudas Flood Bund
111	Inescapable	Lahore	Restoration of Deg Diversion Channel Bund
112	Inescapable	Sargodha	Restoration of Guide Wall Spur No.8 near village Shahbazpur on right bank of Chenab
113	Inescapable	Sargodha	Restoration of Eroded Bank between RD.3-4, 7-8, 11-12 and 21-22 and closing cuts between RD.23-24 of Farrukhpur Flood Bund
114	Inescapable	Sargodha	Extension of Jhang flood protection bund from RD 64+000 to 71+000 to tie up with railway line (to save Jhang city & adjoining abadies). (Jhang canal division)
115	Inescapable	Multan	Constructing Cunnette at Sher Shah Bridge of River Chenab
116	Inescapable	Multan	Constructing Cunnette in River Bela upstream of Trimmu Barrage
Inescapable work involving remodeling of existing flood protection bunds			
117	Inescapable	Faisalabad	Remodeling of LBN Flood Bund from RD.0+000 to 20+531
118	Inescapable	D.G Khan	Remodeling of Muzaffargarh Flood Bund RD.0-188
119	Inescapable	D.G Khan	Remodeling of Khangarh Flood Bund RD.0-30 to protect Muzaffargarh City
120	Inescapable	D.G Khan	Remodeling of LMB of Taunsa Barrage
121	Inescapable	Lahore	Providing protective measures against flood in DegNullah U/S Kingra Road Bridge.
122	Inescapable	Lahore	Remodeling LMB of Marala Barrage.
123	Inescapable	Sargodha	Remodeling of Masson Flood Bund
124	Inescapable	Multan	Remodeling of Right Embankment of Shujabad Branch from RD: 231580 – 279000
125	Inescapable	Multan	Remodeling of Akbar & Nawabpur Flood Bund.
126	Inescapable	Multan	Remodeling of Sher Shah Railway Flood Bund RD. 0-15000
127	Inescapable	Multan	Remodeling of LMB of Trimmu Barrage
128	Inescapable	Faisalabad	Remodeling of reaches of Jhang flood protection bund and ThatthaMahla Bund
129	Inescapable	Faisalabad	Remodeling of left marginal bund of Qadirabad barrage in critical reaches.

Coordinates and ROW

COORDINATES

Remodeling of Muzaffargarh Flood Bund RD 0+000 to RD 188+000

Sr #	Easting (ft)	Northing (ft)
Point-01	454733.92	10953391.51
Point-02	457247.64	10956184.92
Point-03	461633.93	10958826.99
Point-04	462658.41	10961163.22
Point-05	464819.76	10963005.42
Point-06	468588.04	10971754.63
Point-07	471771.82	10981514.45
Point-08	473877.77	10988097.78
Point-09	476531.96	11000746.99
Point-10	490568.02	11021401.07
Point-11	493646.29	11031005.27
Point-12	511084.74	11048488.04
Point-13	521138.46	11052454.54
Point-14	523818.30	11056307.37
Point-15	527277.35	11061181.28
Point-16	530961.32	11065002.35
Point-17	532737.72	11068426.00
Point-18	535648.06	11070803.67

Right of Way (ROW) = 101 ft & 195 ft



Project Manager
Project Management Consultants
(PMC), Lahore.

Socio-Economic Profile of the Sub-Project Area

1. The survey was carried out to ascertain socio-economic condition and assessment of resettlement impacts of the proposed flood bund for strengthening and rehabilitation.

Methodology

2. In order to collect the representative data, survey, through a structured questionnaire, was carried out. Three villages were selected through simple random sampling technique from head, middle and tail reaches of the Muzaffargarh flood bund, where Focus Group Discussions and consultations were conducted with the local people. The project does not have any adverse impact on local communities so it does not require detailed socio-economic study. Moreover, data has been collected from the three villages from 38 participants (the list of male respondents is provided in Annexure-VII) to ascertain beneficiary opinion regarding possible positive impacts from the proposed project. The names of surveyed villages are given below in Table 2.

Table 2: Surveyed Villages

Sr. No.	Village Name	Location
1	Abbas Nagar Samtia	Head
2	Muhammad Wala	Middle
3	Bhuttianwala	Tail

Data Collection

3. In order to have comprehensive and detailed information, the data was collected by exploring both primary and secondary sources.

Secondary Source

4. The available published information and documents related to the sub-project area, including Census report 1998 of Multan District and other relevant documents (PC-1), Design, Cross Sections indicating ROW, showing area and location of Flood Bund were obtained from the relevant departments/agencies and reviewed by the social team to identify different parameters and yardsticks regarding scope of work to conduct field survey so as to make the study more systematic and reflective of ground situation.

Primary Source

5. The primary quantitative and qualitative data was collected through interviews and Focus Group Discussions. The questionnaires regarding Focus Group Discussions and Gender Survey were designed covering information related to demographic characteristics, existing socio-economic condition, impacts assessment, people's perceptions about the sub-project and remedial measures in case of adverse impact of the sub-project (if any). The data collection tool was discussed in group during orientation of the team before actual field survey and modified as per requirement of the sub-project area and cultural traditions.

Socio-Economic Aspects of Sub-project Area

6. Socio-economic aspects of the sub-project area were studied on the basis of Focus Group Discussions. At present, a brief description related to socio economic aspects is provided in following sections:

Distribution of the Respondents Regarding Location

7. Respondents belonged to the three selected villages from head, middle and tail reaches in the surrounding of the Muzaffargarh Flood Bunds were interviewed. Detail of the selected villages is provided above in Table 2.

Family Composition

8. According to the results of survey, total households of the surveyed villages were 1050 with population of 9,000. The average family size was 8.57. . The survey data indicates that 70 percent household in Abbas Nagar Samtia 45 percent in Muhammad Wala and 50 percent in Bhuttianwala lived in nuclear family system. All households were local and 100 percent of the inhabitants were Saraiki speaking. The village wise detail of population is given in Table 3.

Table 3: Population of Sample Villages (Numbers)

S #	Village Name	Location	Households	Total Population	Males	Females
1	Abbas Nagar Samtia	Head	250	2000	1020	980
2	Muhammad Wala	Middle	500	4500	2250	2250
3	Bhuttianwala	Tail	300	2500	1250	1250
	Total		1050	9000	4520	4480

Average family size 8.57

Occupation and Source of Income

9. During the field survey, information regarding major source of income of the inhabitants was collected. According to the survey, labour was main source of income of the local population and farming along with livestock rearing is the secondary source of income in the sub-project area. Proposed sub-project area is adjacent to the Muzaffargarh city, where various industrial units are providing job opportunities to skilled and unskilled labour. The other means of livelihood includes private and government jobs and labour of various kinds.

10. . The survey data indicates that average monthly income of the households from farm and off farm sources was more than Rs.12, 000 per month. The majority (59 percent) of the inhabitants were living in kacha houses.

Literacy Level

11. Education plays a key role in changing social and economic condition of the individuals. The education enhances the skill and ability to learn and act to improve one's lot. Data was collected from the respondents regarding educational facilities available in the area. Most of the villages do not have adequate educational infrastructures and allied facilities especially for the females. The sub-project area falls between Muzaffargarh and Multan cities at the distance of 16-50 km from the cities, where educational facilities of all level are available. Regarding the surveyed villages, educational facilities were available up to primary level for boys and girls in all sample villages, while middle school for girls was available in Bhuttianwala village only. It was observed that there was also growing trend of getting religious education and Dini Madrassas were available in all sample villages. In spite of available primary level of educational facilities, overall literacy level of education is still low in the sub-project area. The recorded literacy level of village Abbas

Nagar Samtia was 20 percent, this figure was 18 percent in both Muhammad Wala and Bhuttianwala. The literacy level of the surveyed villages is provided in Table 4 below:

Table 4: Educational Facilities in Sample Villages

S #	Village Name	Primary School		Middle School		Dini Madrassa
		Boys	Girls	Boys	Girls	
1	Abbas Nagar Samtia	✓	-	-	-	✓
2	Muhammad Wala	✓	✓	-	-	✓
3	Bhuttianwala	✓	✓	-	✓	✓
Overall (%)		100	67	0	33	100

Availability of Social Amenities in the Sub-project Area

12. Social infrastructure and amenities are crucial to develop sustainable communities. These are electricity, water supply, sewerage system, metalled road, and other facilities like health and educational facilities.

13. The survey reveals that facility of electricity was available in 100 percent sampled villages while, other social facilities were not existed. The detail of availability of social amenities is provided in Table 5.

Table 5: Availability of Social Amenities in the Sample Villages

S #	Village Name	Civic Facilities				
		Water Supply	Sewerage System	Electricity	Sui Gas	Hospital/ Dispensary
1	Abbas Nagar Samtia	-	-	✓	-	-
2	Muhammad Wala	-	-	✓	-	-
3	Bhuttianwala	-	-	✓	-	-
Overall (%)		0	0	100	0	0

Common Diseases

14. Due to the miserable condition of health facilities, people of the sub-project area were suffering from various common diseases. The respondents pointed out fever, skin diseases, blood pressure, and diarrhoea and kidney problem. People have to travel 16-50 kilometres for the treatment of diseases in cities.

Caste System and Religion

15. In the rural areas of Pakistan, caste/baradry plays an important role to unite the people. Strength of groups depends on a number of the households of each caste. The survey data indicates that Khokhar, Bhanbar, Kherha, Baloch, Bhutta and Arain were in majority in the sub-project area. The 100 percent of the population of these villages was Muslim.

Cropping Pattern

16. Sugarcane, Wheat, Cotton and Rice are main crops grown in the sub-project area. Besides these crops seasonal fodder is also grown for livestock. Market facilities were available in Muzaffargarh and Multan cities, which are situated about 16 -50 km from the sub-project area. Generally, farmers sell their products to middlemen at local level.

Source & Quality of Drinking Water

17. The quality of drinking water is directly linked to the health. The survey findings reveal that the quality of ground water of the sub-project area was good. Local people installed hand pumps, and electric motorized pumps to get water for their drinking and domestic purposes.

Community Consultations

18. Participation and involvement from the community and other stakeholders is essential throughout the planning and design process of any project. Public consultation is a continuous process and plays a vital role to assess affect and impacts of the sub-project on the people. The process adopted for the consultations is given below:

Focus Group Discussions

19. To ensure involvement of men and women of all backgrounds and social status, Focus Group Discussions (FGDs) were held with local community at village level in the sub-project area at head, middle and tail reaches of the Muzaffargarh Flood Bund. Consultation were held with male and female separately. The discussions focused on impacts of the floods on the local communities and impacts of the proposed sub-project. A glimpse of the male and female consultations is provided in Annexure-7 to Annexure-10. The important general objectives of the consultation process were:

- To assess hardships faced by the community during the past floods;
- To assess need of the community in the sub-project area;
- To provide key project information to the stakeholders, and to solicit their views on the sub-project and its potential or perceived impacts and collaboration in problem solving;
- To develop and maintain communication links between the sub-project proponents and stakeholders;
- To ensure that views and concerns of the stakeholders are incorporated into the sub-project design and implementation with the objectives of reducing, offsetting the negative impacts and enhancing benefits of the proposed sub-project;
- To create a sense of ownership among the stakeholders regarding the sub-project; and
- To increase confidence about the proponents, reviewers and decision makers.

20. Floods are common problem faced by the local community almost every year. Due to this natural disaster, people face loss of their structures, crops, livestock and other valuable assets. The disasters of the flood are countless, the people of the area have to displace, face epidemic diseases and they lead a miserable life during the flood seasons. The people of the area were pleased to know about the proposed sub-project (Rehabilitation and Strengthening of Muzaffargarh Flood Bund) because; it will minimize the threat of breaching the flood protection bund.

21. According to the participants of the consultations, following positive impacts were anticipated by the implementation of the proposed sub-project:

- Displacement of local community will be minimized by controlling of flood flows within river boundaries;
- Due to the strengthening of the flood protection bund, cultivable land will be protective and it will increase productivity;
- Minimize the damages of existing infrastructure in the river area;
- Protect to cultivable and irrigated lands and increase the productivity;
- Proposed sub-project will provide an additional sustainable life and enhancement in socio-economic conditions of the farmers will uplift of general public economies;
- Save and protect the lives of their livestock which is important source of livelihood and;
- Moreover, it will protect to the main city of Muzaffargarh and other towns.

22. In addition, execution of the proposed sub-project will generate employment opportunities in the area and will contribute in poverty reduction. Due to reduction of fear of flood and protection of their infrastructures, the local people will improve their agriculture and business resulting creation of new jobs and services for the local poorer. Moreover, it will reduce the soil erosion which will prove beneficial for the local farmers. This will go a long way to ensure security and prosperity in the area.

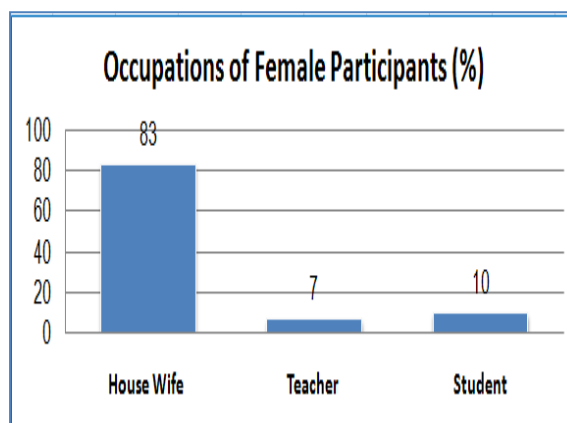
Gender Consultation

23. In male dominated society, women have always been underestimated and discriminated in all aspects of life. Moreover, the traditional duties of managing households and fewer opportunities create hindrances in their social and economic empowerment. Women empowerment and gender equality are the basis for sustainable and meaningful development. Achievement of these goals requires sound policies, a holistic approach and long term commitment. Over the years various efforts have been made by the Government and Non-Government Organizations to promote women empowerment in general.

24. District Muzaffargarh falls in the category of less developed area. Women of the sub-project area work side-by-side with men in agriculture and livestock sectors to supplement the income of the families in spite of all limitations.

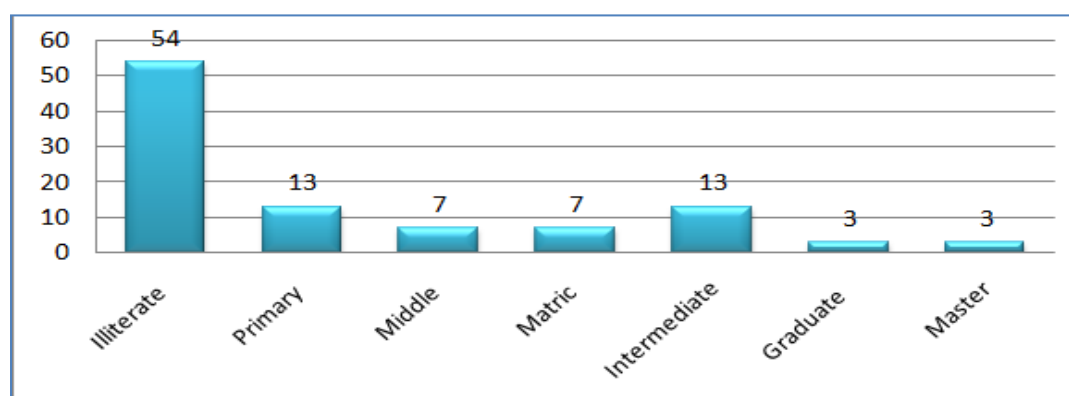
25. Keeping in view the important role of the female in the household as well as in the society, gender consultations were conducted to record the views of the females regarding proposed intervention. Community consultations were conducted in two villages with 30 participants having different backgrounds. A glimpse of gender consultations is provided as Annexure-9 while the list of female participants is attached as Annexure 10. Findings of the gender consultations are presented in the following paragraph.

- The survey indicates that the women of the selected villages were participating in various activities including household activities, child caring and importantly in income generation activities like management of livestock and work in fields in the season of sowing and harvesting of crops. From the findings of FGDs, it has been learned that majority of (83 percent) female were house wives, 7 percent were engaged in teaching profession and remaining 10 percent were students. Figure-3 Occupation of Female Participants.



- The majority of housewives were also involved in agriculture labour and livestock rearing. Occupation of female participants shown in Fig 3 above.
- Affordable, effective and efficient health care services are essential to the whole community. Due to lack of health care facilities in the sub-project area, health condition of the female is not good. They have to travel Muzaffargarh and Multan cities for their proper treatment. Due to low income most of the population is unable to afford cost of private practitioner. Services of licensed lady health visitors are not up to the mark.
- During the consultation, the data was collected regarding the employment status of females in government and private sector. The data indicates that 12 female were working as teachers (4 in the government and 8 in private sector). Women of the area were actively involved in income generation activities associated with agriculture sector.
- Data regarding education of the females revealed that there were no constraints for females in obtaining education except the non-availability of educational institutions at village level and poor transport facilities. In spite of that, the trend of schooling for females prevailed and parents treat equally to the boys and girls in getting education. Out of total, 54 percent of the participants were illiterate while remaining 46 percent had attained different levels of education from primary to graduation as shown in Fig 2

Fig 4: Literacy Level of Female Participants



- NGOs arrange different activities to support the poorer and needful persons including females in the areas of agriculture, health, education and access to water among others and create awareness about various aspects of development. It was observed during the consultations that no NGO existed to provide social services to the community members especially to the females.
- In the rural society, women remain busy in household chores and other domestic works. The female respondents reported that husbands were the main decision makers on the overall situation in family matters, education of children and their marriages. Moreover, cultural values and ego were main constraints of limiting the role of women in decision making of socio-economic activities in sub-project area. It was observed that there was no gender based violence prevailed among the surveyed communities.
- Health, education and transport facilities were the most pressing needs of women in the sub-project area. The participants expressed establishment of technical training centres is essential for women to learn different skills and participate in better income generating activities.
- Gender specialist explained about the construction activities and time period of implementation of sub-project. Participants were also explained by providing

alternative arrangement for the local community. Positive response showed by the female participants about the sub-project because rehabilitation and strengthening of the flood bund would reduce the major threat of flood which they have to face almost every year. Moreover, there will be employment opportunities for them during the tree plantation along the embankment. Details of sample villages of gender consultation are provided in Table 3.

Table 6: Sample Villages of Gender Consultations

S #	Village	Location	Nos. of Participants
1	Abbas Nagar Samtia	Head	13
2	Muhammad Wala	Middle	17
Total			30

Consultation with Other Stakeholders

The potential stakeholders were inhabitants, Punjab Irrigation Department (PID) working in the sub-project area. During the consultation, information about the sub-project was shared in detail.

Consultations were held with PID officials (sub divisional officer and other relevant staff) and technical staff of consultants for design parameters of Muzaffargarh Flood Bund.

Punjab Irrigation staff explained importance of Muzaffargarh Flood Bund to save the Muzaffargarh city and other settlements against the exceptionally high flood and necessity of strengthening of these two flood bunds.

Sub-Project Impacts

The findings of the impact assessment survey depict that there are no negative impacts of sub-project on land, structures, crops, trees, business, and employment, etc. rather it will save Muzaffargarh city. Khan Pur town, Muhammad Wala and other abadies. Due to the strengthening of the flood protection bund, fertile agriculture land and irrigation infrastructure will be protected from the flood hazard. Involuntary Resettlement (IR) and Indigenous People (IP) checklists are attached as Annexure-4 & 5.

Impacts on Land:

All civil works will be carried out within the existing ROW. Hence, no additional private land is required in the execution of this sub-project. No resettlement issue was observed.

Impacts on Trees and Crops:

The works will not impact any tree and no crop will be damaged as all civil work activities will be implemented within ROW and there is no cultivation. Moreover, no tree will be cut down.

Impact on Building and Structure:

Not any building or any other structure will be affected by the Sub-project activities. No resettlement issue was observed.


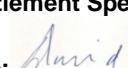
Indigenous People:

There were no indigenous people in the sub-project area. For the last many decades, there is no change of huge migration by any project/factor, so cannot categorize indigenous people in the sub-project area.

Positive Impacts:

The sub-project will help to provide protection to the valuable infrastructures, agricultural lands, thick garden and other properties from the ferocious River action. Moreover, it will save Multan city and many adjoining settlements from flood. Moreover, the local labour will be hired during implementation of the sub-project. This will go a long way to ensure security and prosperity in the area.

Involuntary Resettlement Impact Categorization



A. Project Data Country/Project No./Project Title : PAK Flood Emergency Resilience Project PAKISTAN- FERRP REMODELING OF MUZAFFARGARH FLOOD BUND			
B. Involuntary Resettlement Category [<input checked="" type="checkbox"/>] New [<input type="checkbox"/>] Re categorization — Previous Category [<input type="checkbox"/>]			
<input type="checkbox"/> Category A	<input type="checkbox"/> Category B	<input checked="" type="checkbox"/> Category C	<input type="checkbox"/> Category FI
C. Comments <div style="display: flex;"> <div style="flex: 1;"> <p>ESU of PIU, FERRP: The subproject does not involve land acquisition and displacement of people or any other assets. No Person will be directly or indirectly affected by implementation of the remodelling and strengthening of Muzaffargarh Flood Bund sub-project as there is no person/population lives on the sub-project area. Similarly, there is no loss of trees, crops, structures/buildings and livelihoods. All land belongs to Irrigation Department and sub-project work is only remodelling/strengthening of existing Muzaffargarh flood bund within Government land owned by Irrigation Department. Based on the ADB involuntary resettlement impact categorization, screening checklist, this sub-project falls under category “C” and Due Diligence Report is prepared for the sub-project.</p> </div> <div style="flex: 1;"> <p>Project Management Consultant: Based on the review of the design documents and impact assessment survey, it is confirmed that the project does not involve any land acquisition, resettlement issues, loss of livelihoods, as construction activities will be limited to the RoW i.e. 101ft -195ft.</p> </div> </div>			
E. Approval <div style="display: flex;"> <div style="flex: 1;"> <p>Prepared by: PIU , Social and Environmental Unit :  Signature: Name: Rao Zakrya Farooq Date: December, 2016</p> </div> <div style="flex: 1;"> <p>Reviewed/Cleared by TA Resettlement Specialist  Signature: Name: Abdul Hameed Date: January 22, 2017:</p> </div> </div>			

Involuntary Resettlement Impact Categorization Checklist

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?		✓		Sub-project does not involve any land acquisition.
2. Is the site for land acquisition known?		✓		No Land acquisition involved
3. Is the ownership status and current usage of land to be acquired known?		✓		Irrigation Department is the owner of that land. Existing Muzaffargarh Flood Bund will be remodelled.

4. Will easement be utilized within an existing Right of Way (ROW)?		✓		All civil works activities will be carried out within RoW already available belong to Irrigation Department.
5. Will there be loss of shelter and residential land due to land acquisition?		✓		
6. Will there be loss of agricultural and other productive assets due to land acquisition?		✓		
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?		✓		
8. Will there be loss of businesses or enterprises due to land acquisition?		✓		All civil works activities will be carried out within RoW and there will be no loss of business or enterprises.
9. Will there be loss of income sources and means of livelihoods due to land acquisition?		✓		No loss of Income sources.
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
10. Will people lose access to natural resources, communal facilities and services?		✓		
11. If land use is changed, will it have an adverse impact on social and economic activities?		✓		
12. Will access to land and resources owned communally or by the state be restricted?		✓		
Information on Displaced Persons:				
13. Any estimate of the likely number of persons that will be displaced by the Project? [✓] No [] Yes If yes, approximately how many? Not applicable as No one with kiosks will be relocated.				
14. Are any of them poor, female-heads of households, or vulnerable to poverty risks? [✓] No [] Yes				
15. Are any displaced persons from indigenous or ethnic minority groups? [✓] No [] Yes				

Indigenous People Impact Categorization

A. Project Data			
Country/Project No./Project Title : PAK Flood Emergency Resilience Project FERRP REMODELLING OF MUZAFFARGARH FLOOD BUND			
C. Indigenous Peoples Category			
[<input checked="" type="checkbox"/>] New [<input type="checkbox"/>] Re-categorization — Previous Category [<input type="checkbox"/>]			
<input type="checkbox"/> Category A	<input type="checkbox"/> Category B	<input checked="" type="checkbox"/> Category C	<input type="checkbox"/> Category FI
B. Project requires the broad community support of affected Indigenous Peoples communities.			
		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
C. Comments by Deputy Director, ESU of PIU			
ESU of PIU: There are no "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the Sub-project area. The sub-project is categorized "C"		Project Management Consultant: No IPs or any tribes as described in SPS 2009 have been found in the sub-project area. Local people do not recognize themselves as IPs. The subproject is categorized C for IPs.	
D. Approval			
Prepared by: PIU , Social and Environmental Unit :		Reviewed/Cleared by:	
Signature: 		Signature: 	
Name: Rao Zakrya Farooq		Name: Abdul Hameed	
Date: December, 2016		Date: January 21, 2017	

Indigenous Peoples Impact Screening Checklist

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples Identification				
1. Are there socio-cultural groups present in or use the project area who may be considered as "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the project area?		<input checked="" type="checkbox"/>		There are no "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the sub-project area.
2. Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the project area as belonging to "ethnic minorities", scheduled tribes, tribal peoples, national minorities, or cultural communities?		<input checked="" type="checkbox"/>		

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
3. Do such groups self-identify as being part of a distinct social and cultural group?		✓		
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?		✓		
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?		✓		
6. Do such groups speak a distinct language or dialect?		✓		
7. Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?		✓		
8. Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?		✓		
B. Identification of Potential Impacts				
9. Will the project directly or indirectly benefit or target Indigenous Peoples?		✓		
10. Will the project directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)		✓		
11. Will the project affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)		✓		
12. Will the project be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?		✓		
C. Identification of Special Requirements <i>Will the project activities include:</i>				
13. Commercial development of the cultural resources and knowledge of Indigenous Peoples?		✓		
14. Physical displacement from traditional or customary lands?		✓		

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
15. Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of Indigenous Peoples?		✓		
16. Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by indigenous peoples ?		✓		
17. Acquisition of lands that are traditionally owned or customarily used, occupied or claimed by indigenous peoples ?		✓		

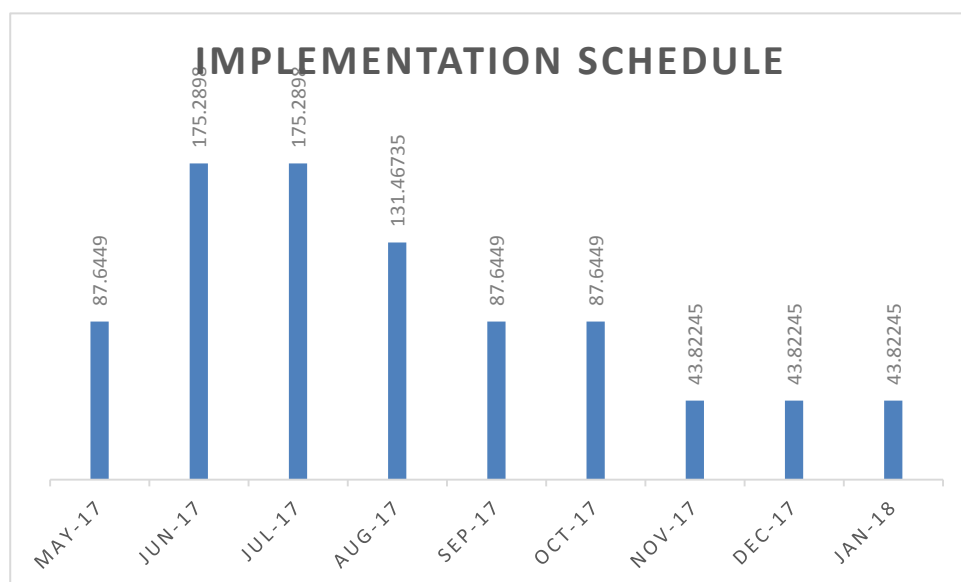
D. Anticipated project impacts on Indigenous Peoples

Project component/ activity/ output	Anticipated positive effect	Anticipated negative effect
18. Earth work to strengthen the existing flood bund	Not applicable	Not applicable

Implementation Schedule

NAME OF PROJECT: REMODELING OF MUZAFFARGARH FLOOD BUND RD 0+000 TO RD 188+000

Sr.No	Year	Amount in Million
1	May 2017 to January 2018	876.449
Total		876.449



List of Male Participants

S #	Name	Father's Name	Occupation
1-Abbas Nagar Samtia			
1	Ghazanfar Abbas	Mubashar Abbas Khan	Agriculture
2	Muhammad Arif	Ghulam Hussain	Agriculture
3	Jan Muhammad	Kareem Bukhsh	Labor
4	Ghulam Hussain	Elahi Bukhsh	Tailor
5	Zafar Abbas	Manzoor Hussain	Private Job
6	Nazar Muhammad	Allah Wasaya	Labor
7	Altaf Hussain	Manzoor Hussain	Labor
8	Sabir Hussain	Nabi Bukhsh	Agriculture Labor
9	Zia Hussain	Jan Muhammad	Labor
10	Muhammad Niaz	Bashir Ahmad	Agriculture
s1 1	Shahzad	Rehmat Ali	Agriculture
12	Imtiaz	manzoor Hussain	Labor
13	Shahid Nawaz	Muhamjmad Shafi	Labor
14	Mohsin	Muhammad Bukhsh	Student
15	Fiaz Hussain	Manzoor Hussain	Labor
16	Ishfaq Ahmad	Ghulam Hussain	Shopkeeper
17	Mushtaq	Ghulam Hussain	Shopkeeper
18	Ghulam Hur	Allah Wasaya	Labor
19	Bashir Ahmad	Nabi Bukhsh	Agriculture
2- Muhammad Wala			
1	Ghulam Rasool	Allah Wasaya	Business
2	Muhammad Ashraf	Muhammadv Ismail	Agriculture
3	Allah Wasaya	Khan Muhammad	Labor
4	Qurban Hussain	Abdul Ghafoor	Business
5	muhammad Ashraf	Haji Atta Muhammad	Livestock
6	Ghulam Abbas	Muhammad Nawaz	Agriculture
7	Muhammad Sabir	Allah Ditta	Agriculture
8	Muhammad Shahzad Akhtar	Muhammad Akhtar	Student
9	Ahmad Bux	Allah Wasaya	Labor
3-Bhuttianwala			
1	Abdul Hameed	Abduol Aziz	Agriculture
2	Muhammad Sadique	Elahi Bukhsh+	Government Service
3	Malik Ijaz Ahmad	Malik Muhammad Bukhsh	Government Service
4	Nasir Abbas	Muhammad Abbas	Advocate
5	Muhammad Ilyas	Muhammad Bukhsh	Advocate
6	Muhammad Adeel Hussain	Imam Bukhsh	Private Job
7	Malik Atique Hussain	Ghulam Muhammad Waris	Agriculture
8	Malik Shafiq Waris	Ghulam Muhammad Waris	Agriculture
9	Muhammad Suleman	Saeed Ahmad	Agriculture
10	Muhammad Bux	Allah Yar	Agriculture

Community consultations at different locations



A view of consultation at Muhammad Wala



A view of consultation at Abbas Nagar Samtia



A view of consultation at Bhuttianwala

View of Gender Consultations



A view of Consultation at Muhammad Wala



Consultation at Abbas Nagar Samita

List of female participants

S #	Name	Age	Education	Occupation
1- Village Abas Nagar Samtia				
1	Aleena	22	MA	Student
2	Rifat	40	Middle	House wife
3	Shazia	45	FA	House Wife
4	NaseemBano	60	Middle	House Wife
5	Haseena	30	Un-educated	House Wife
6	Ruquiya	65	Un-educated	House Wife
7	Fatima	19	FA	Student
8	Hafeez Bibi	40	Un-educated	House Wife
9	Kosure	43	Un-educated	House Wife
10	Suhgara Bibi	52	Un-educated	House Wife
11	Noor Bibi	50	Un-educated	House Wife
12	Farzana	40	Un-educated	House Wife
13	Perveen	28	Un-educated	House Wife
2- Village Muhammad Wala				
1	Shakeela	30	FA	Teacher
2	Nageena	22	BA	Teacher
3	Najma	19	FA	Student
4	Zareena	50	Primary	House Wife
5	Akeela	40	Primary	House Wife
6	Shaheena	40	Primary	House Wife
7	Quarat-ul-Ain	18	Matric	Student
8	Sakeena Mai	60	Un-educated	House Wife
9	Nazeera	50	Un-educated	House Wife
10	Aimna	45	Primary	House Wife
11	Zohra	60	Un-educated	House Wife
12	Nasreena	45	Un-educated	House Wife
13	Haseena	46	Un-educated	House Wife
14	Samina	35	Un-educated	House Wife
15	Munaira	25	Matric	House Wife
16	Samina	40	Un-educated	House Wife
17	Shamshad	32	Un-educated	House Wife

Project Implementation Arrangements–Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
Project Steering Committees	<ul style="list-style-type: none"> Oversee progress and provide guidance on the FERRP. Meet twice per year, with additional meetings as needed.
Planning and Development Department, Punjab, through the Project Coordination Unit (PCU)	<ul style="list-style-type: none"> Recruit and supervise all incremental staff for PCU as well as data clearing house in P&D. Procure computer hardware, software and other equipment. Establish and staff PCU within the P&DD, headed by a Project Coordinator. The PCU will have overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according to the selection criteria, relating to disaster risk management support; and Irrigation infrastructure, and provincial and districts roads in Punjab. Operate imprest account Processing of eligible payments related to activities of the PCU and data clearing house. Ensure that the subprojects proposals are compliant to environmental and social safeguard requirements of ADB Establish a data clearing house within the P&DD for interfacing of the GIS-based database generated at DDMA as well as PDMA and linking it with all relevant line departments with the advice to use it as a planning tool so that the DRM can be mainstreamed in the development cycle. Provide to the Asian Development Bank (ADB) in a timely manner quarterly and annual reports including annual financial statements duly audited as per the Loan Agreement.
Provincial Communication & Work Department, Punjab	<ul style="list-style-type: none"> Carry out monitoring and evaluation regularly and on time. Procure and supervise civil works. Payments to suppliers and contractor. Operate imprest account. Recruit and supervise construction supervision consultants Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components. Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement. Conduct spot checks for physical verification of safeguards compliance and complete checklists for each subproject. Carry out monitoring and evaluation regularly and on time. Disseminate and publish procurements and contracts related information. Recruit and supervise Consultants for development of standard operating procedures (SOP) for inspection of road infrastructure. Procure the inspection equipment for Safety Evaluation Authority.

Project implementation organizations	Management Roles and Responsibilities
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- Get the SOPs developed for inspection of road infrastructure and ensure that they are being followed religiously.

Project Implementation Unit, C&W

- Prepare screening and categorization checklists;
- Conduct consultations and information disclosure
- Coordinate with relevant local agencies, particularly revenue departments;
- Prepare LARPs
- Prepare and submit monitoring reports to ADB to confirm resettlement plans have been implemented;
- All procedural requirements including translation and disclosure of LARPs will be implemented by the PIU/ESU supported by the consultant;
- Support the EA/IA and ensure the delivery of compensation and other entitlements and maintain records;
- The consultant and the EA/IA in coordination will be responsible for maintaining a complete database of all affected persons, inventory of assets, payments and other relevant field data;
- Develop a functioning grievance function with gender sensitive protocols and outreach and links to the provincial ombudsman's office; provide training to ESU/PIU staff to handle grievance and monitor progress.
- Maintain an MIS related resettlement and social development.

TA Consultant Support

The loan sponsored TA safeguards consultants provide support to the EAs/IAs in coordination with relevant government agencies and will assist preparation and implementation of LARPs besides assisting preparation and disclosure of monitoring reports. The respective EA/IAs and BORs and related local agencies will provide the necessary support services for facilitating expeditious preparation, implementation and monitoring of LARPs. TA consultants will work with the revenue department and the PIU/ESU to support the following:

- Consultation with affected communities and information disclosure.
- Support the preparation of the revenue record and paper work required for finalizing the land awards.
- Support displaced persons in preparing their documents to receive compensation.
- Participate in meetings to ensure transparency and maintain records.
- Assist PIU/ESU in preparation of monitoring reports to be provided to ADB for review.
- Support the functioning of the grievance mechanism.
- Establish and maintain an up to date management information system to include all relevant information on displaced persons.

Project implementation organizations	Management Roles and Responsibilities
Asian Development Bank	<ul style="list-style-type: none"> • Provide technical and financial support and oversight in accordance with loan agreement. • Provide guidance and assistance to EAs/IAs/PCUs/PIUs throughout project implementation to ensure smooth and timely implementation of the project in accordance with the Loan and Project Agreements. • Review all documents that require ADB approval. • Conduct requisite loan review missions, including mid-term review and project completion missions. • Monitor compliance with loan covenants, social and environmental safeguards and technical and financial requirements. • Ensure timely processing of withdrawal applications and release eligible funds. • Review audit reports and ensure compliance with financial audit recommendations. • Review project performance reports and provide advice and guidance to EAs/IAs/PCUs/PIUs, as required. • Update eOps and comply with ADB disclosure requirements.

GRC Notification

GOVERNMENT OF THE PUNJAB
IRRIGATION DEPARTMENTDated Lahore the 08th February, 2017**NOTIFICATION**

NO.SO(FLOODS)VI-3/2015: Consequent upon the approval of the Competent Authority, a Grievance Redress Committee comprising of the following members is hereby constituted to ensure the institutional arrangements as envisaged in the social & environment framework for Disaster Climate Resilience Improvement Project (DCRIP) & Flood Emergency Reconstruction and Resilience Project (FERRP) funded by World Bank and Asian Development Bank. :-

Sr. No	Name	Designation	Address
1	Project Director	Convener	Project Implementation Unit, for DCRIP & FERRP, Irrigation Department, Lahore
2	Director (Social & Environment)	Member	Project Implementation Unit, for DCRIP & FERRP, Irrigation Department, Lahore
3	Project Manager	Member	Project Management Consultant
4	Deputy Director (Technical)	Member	Project Implementation Unit, for DCRIP & FERRP, Irrigation Department, Lahore
5	Deputy Director (Social Safeguard/Environment)	Member	Project Implementation Unit, for DCRIP & FERRP, Irrigation Department.
6	Assistant Director (Monitoring)	Woman Member	Project Implementation Unit, for DCRIP & FERRP, Irrigation Department

2. The Committee will coordinate in implementing the Environment & Social Management Plans (ESMPs), Initial Environmental Examination (IEE)/ Environmental Impact Assessment (EIA), Environment Management Plan (EMP), Land Acquisition & Resettlement Plans (LARP) and Due Diligence Reports of sub projects. The committee will also facilitate the Project Implementation Unit (PIU) for DCRIP & FERRP of Irrigation Department to redress the grievances of displaced/affected persons (if any) during implementation of above said Social and Environmental Reports.

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SECRETARY IRRIGATION

No. & Date Even

A copy is forwarded for information to the:-

1. PS to Secretary, Government of the Punjab, Irrigation Department, Lahore
2. Project Director, PIU, Irrigation Department, Lahore
3. PA to Additional Secretary (Tech), Irrigation Department, Lahore
4. Director Social & Environment, PIU, Irrigation Department, Lahore
5. Project Manager, Project Management Consultant
6. Deputy Director, Social & Environment, PIU, Irrigation Department.
7. Deputy Director, Technical / Assistant Director Monitoring PIU, Irrigation Department.

Wman 08.02.17
SECTION OFFICER (FLOODS)