Involuntary Resettlement Due Diligence Report

PUBLIC

June 2024

Nepal: Irrigation Modernization Enhancement Project

Prepared by Department of Water Resource and Irrigation, Government of Nepal for the Asian Development Bank (ADB).

CURRENCY EQUIVALENTS
(as of 28 February 2024)

Currency unit	–	Nepali Rupee (NR)
NR 1.00	=	$ 0.0075
$1.00	=	NRs 132.76

ABBREVIATIONS

ADB	–	Asian Development Bank
AKC	–	Agriculture Knowledge Center
CAMO	–	Central Agriculture Development Office
CPMO	–	central project management office
CPR	–	community property resources
DDR	–	due diligence report
DWRI	–	Department of Water Resources and Irrigation
FMIS	–	farmers-managed irrigation system
GRC	–	grievance redress committee
GRM	–	grievance Readdress Mechanism
IMEP	–	Irrigation Modernization Enhancement Project
IP	–	Indigenous Peoples
LGOA	–	Local Government Operational Act
MOM	–	management, operation, and maintenance
O&M	–	operation and maintenance
PIU	–	project implementation unit
RIP	–	Rajapur Irrigation Project
RIMO	–	Rajapur Irrigation Management Office
SMC	–	subproject management committee
SPS	–	Safeguard Policy Statement
SPPR	–	subproject preparation report
WUA	–	water user association
WUC	–	water user cooperatives
WRIDD/SD	–	Water Resources and Irrigation Development Division/Subdivision

NOTE

In this report, "$" refers to United States dollars.

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I. INTRODUCTION

A. Project Description

1. Asian Development Bank (ADB) has supported in irrigation sector Nepal since the 1980s through five farmers-managed irrigation system (FMIS) sector projects consisting of 1,190 subproject (456 small and 734 medium scale) irrigating a total area of 140,704 ha. Although the projects were evaluated successful[1], there are however key issues that need to be addressed to meeting the needs of productivity and climate resilience including; (i) the devolved irrigation and agriculture agencies lack capacities and resources to support the irrigation and agriculture management, issues include slow progress in formulating needed legislation, deploying staff, as well as lack of clarity on mandates and responsibilities and coordination among the three tiers of government; (ii) the management performance of the WUA remains weak, with insufficient capacities and resources to meet present needs and future requirement under climate change; (ii) there is a need for a strong nucleus organization at the field level for integrated management of irrigation and agriculture to meet operational requirements including, improved irrigation efficiencies, agriculture productivity and climate resilience; (iii) there is a lack of communications to the dispersed schemes, effective communication to the different sub-project stakeholders is critical to meet long term needs of irrigation and agriculture including advisories on weather, climate change, water and agriculture management, crop technologies; (iv) farmers face many challenges including climate change, acute labor shortages, low productivity and lack of access to inputs, marketing constraints, food and nutrition security and lack of dissemination of technologies. The government needs to support the sector to prepare national strategies to address the increasing risks and understanding of climate change to make the systems resilient and self-sustainable.

2. The Irrigation Modernization and Enhancement Project (IMEP) will be aligned with the following impact: national food security increased. The project will have the following outcome: productivity, sustainability, and profitability of farms increased. To meet the project objectives the project will have three outputs as summarized below.

3. **Output 1: Irrigation infrastructure modernized**. This output will modernize FMIS infrastructure in Bagmati, Koshi, Lumbini, and Madhesh provinces to improve performance and increase resilience to climate change. Across those irrigation systems, the project will (i) provide gated intake structures and protect riverbanks and hill slopes to reduce flood and sediment ingress; (ii) improve irrigation efficiency, stability, and equitable management of irrigation water through targeted canal lining and improved control structures and provision of cross drainage; (iii) support on-farm irrigation by upgrading minor canals and expanding use of modern pipe distributions; (iv) introduce hill lift irrigation schemes in the largely unirrigated mid hill upland areas (Tar). The program will include:

(i) Rehabilitation and upgrading of about 33,000ha of surface water irrigation including (i) 66 hill irrigation schemes (5,889ha), 34 terai irrigation schemes (11,563ha) in Koshi, Madhesh and Bagmati provinces; and (iii) upgrading for modernization of key infrastructure of the Rajapur Irrigation Project (RIP- 14,500ha) in Lumbini Province. In addition, the project will construct 12 new pilot hill lift schemes (1,400ha) with modern lifting and high efficiency piped irrigation in the mid hill areas of Gandaki and

[1] ADB. 2020. Completion Report: Community Irrigation Project in Nepal. Manila. Covered small scale FMIS in Lumbini, Karnali and Sudurpaschim Provinces. Whereas the (i) ADB. Nepal: Irrigation Sector Project (1988), (ii) ADB. Nepal: Second Irrigation Sector Project (16 May 1996), (iii) ADB. Nepal: Community-Managed Irrigated Agriculture Sector Project (17 Nov. 2004), and (iv) Nepal: Community-Managed Irrigated Agriculture Sector Project–Additional Financing (10 April 2014) were the four medium scale FMIS supported by ADB, which covered Koshi, Madhesh, Bagmati, Gandaki, Lumbini, Karnali and Sudurpaschim Provinces.

Lumbini Provinces.

(ii) Improved on-farm irrigation will be supported at all the FMIS subprojects and Rajapur. Advanced on-farm irrigation including piped, micro irrigation and polyhouses will be supported at the hill lift sub projects.

(iii) Pilot community conjunctive groundwater program at three selected terai FMIS locations focusing on the electrification of farmers and other tubewells.

4. **Output 2: Irrigation and agriculture agencies and farmer organizations strengthened**. The output is designed to develop the management and institutional framework to ensure the project investments meet their targets of irrigation efficiency, productivity, and sustainability. The program will be implemented through a new and modernized approach to integrated Crop and Water Management (ICWM) incorporating climate change; sustainable operation and maintenance (O&M) of the irrigation infrastructure, empowered farmer organizations, support the development of agri-enterprises, support in market chain and access to finance. The output will strengthen the capacity of WRIDDs, AKCs and the irrigation and agriculture units at the local level in integrating irrigation management and agriculture development in overall FMIS sector development. At the farm level, the project will; (i) strengthen WUAs capacity to better operate and maintain irrigation systems;[2] and (ii) establish in selected irrigation systems Water User Cooperatives (WUCs) at pilot level who will have integrated irrigation management and agribusiness functions designed to maximize the opportunities of irrigation investments including improved access to government subsidies and rural finance, support for the market chain, facilitate agri-enterprises, and network with private agri-enterprises.[3] For the hill lift irrigation schemes the WUCs will operate as water utilities using metered charging systems and will collect fees to help meet full cost recovery for operating costs. The output will develop new ICWM guidelines including design, management and extension support, climate change risks, and develop a road map for the long-term strategy for investment and management of the FMIS schemes in Nepal. The guidelines and parallel training modules will be used to support the project programs as well as wider training of irrigation and agriculture extension workers in Nepal. The program will include:

(i) Training and strengthening of the devolved institutions with focus on the WRIDDs, AKCs and the irrigation and agriculture units at the local level.

(ii) Strengthening of field level management including (a) strengthening of WUAs; and (b) explore for establishment of parallel new WUCs who could enhance support in irrigation management operations and agribusiness functions. The WUCs will be initially piloted in 20 subprojects (12 hill lift, 3 terai FMIS, 2 hill FMS and 3 Rajapur). Subject to the results of the pilots and farmer interest the WUC program would be upscaled to other sub-projects. The farmers will work with the WRIDDs who will support them in the initial establishment and registration of the WUCs through the cooperative units at the local level. Irrigation management functions will be supported by the WRIDDs/hill lift offices, and agribusiness functions supported by the AKCs. The WUC management will initially incorporate the key representatives of the WUA.

(iii) Enhanced Access to Rural Finance. The project will review current policy and programs for finance and subsidies for irrigation and agriculture. Based on the review the project will work with selected local administrations, lending agencies, private sector, WUA and WUC to train and pilot new and workable models to improve access and better target financial support for farmers to invest in farm enterprises, on-farm

[2] The WUAs will remain as core organization for irrigation management in all subprojects,

[3] The WRIDDs will support farmers in the initial establishment and registration of the WUCs through the cooperative units at the local level. Irrigation management functions will be supported by the WRIDDs, and Agribusiness functions supported by the AKCs. The board of directors of the WUCs will initially incorporate the key representatives of the WUA. The twenty pilot WUCs will initially include 12 hill lift, 3 terai FMIS, 2 hill FMS and 3 Rajapur). Subject to the results of the pilots and farmer interest, the WUC program would be upscaled to other sub-projects.

irrigation, upgrading of irrigation etc. The program will also address alternative ways to meet financing costs for irrigation maintenance and repairs beyond the capacities of the farmers themselves.

5. **Output 3: Modern agriculture and value chain facilities introduced:** The program will address core weaknesses in agriculture including the limited uptake of modern agriculture technologies, lack of mechanization and agriculture facilities The program will explore upstream and downstream opportunities to promote value addition including demonstration and training in: (i) adopting climate-smart agricultural practices to improve crop yield, quality and production (ii) adopting advanced agricultural technologies including modern farm machineries and equipment to enhance efficiency, productivity, and address labor shortages; (iii) value adding through agriculture facilities including crop collection and processing, crop storage, and buying and selling of inputs and outputs. The Project will support the establishment of digital advisory services which through digital apps and mobile phones will provide information on weather, marketing and agriculture advisory services which will improve farmers' operational efficiency and decision-making. As the farmers and farmer organizations lack access to finance the project will pilot the provision of partial financing to selected WUAs/WUCs who based on viable and sustainable business models want to invest in modern agriculture machineries and construction or rehabilitation of agriculture facilities including marketing, storage and processing. The WUA/WUC will be required to contribute 50% of financing for machinery and 15% for facilities, following working directives of DOA. The program will include:

(i) Development: of agricultural technologies and enterprise development focusing on the interventions that will make the most impact to the needs of farmers in the sub-project areas and will include planning and management of cropping patterns using farmer field school approach, training and demonstrations including seed multiplications, green manuring, zero tillage, nature-based solution for soil conservation, and consolidated farming amongst others. The training will identify potential business opportunities and promote the establishment of agriculture enterprises.

(ii) Demonstrations: of (a) agriculture equipment and machinery to support mechanization to reduce reliance on scarce agricultural labor; (b) agriculture facilities to improve the marketing and processing including agriculture collection centers, grain storage, WUC storage facilities and polyhouses. The project will procure equipment to be used in the demonstrations which will be assigned to the WUAs/WUCs for future rental to farmers once the demonstrations are completed.

(iii) Upscaling: Following on from the demonstrations the project will provide financial support for selected WUAs/WUCs to invest in modern agriculture machinery, polyhouses, and agriculture facilities. Support will be provided to WUA/WUCs to construct or rehabilitate WUA/WUC facilities for crop storage and agro processing. The aim will be to support selected investments that can demonstrate a viable and sustainable management and business model, be self-financing, and can show significant impact to the viability of the subproject. The project will procure and assign equipment and facilities to the relevant WUA/WUC who will contribute 50% of the costs for machinery and 15% for the WUA/WUC facilities.

(iv) Establishment: of communications through digital advisory services to provide cost effective access to information to the dispersed and remote irrigation areas and stakeholders. The program will include targeted weather, climate change, marketing, and agricultural advisory services. The system will build on existing social media and include videos, SMS, and apps with emphasis on user experience focusing on how to meet the needs of different demographic groups of farmers, government, private sector, and small-scale entrepreneurs.

6. The estimated costs of the project are summarized below.

Table 1: Summary of Cost Estimates

Item			Amount (US$) million	
A. Base Cost				
Output 1. Enhanced Irrigation Infrastructure			86.07	
Output 2. Modernized Irrigation and Agricultural Institutions			3.86	
Output 3. Modernized Agricultural Systems			10.40	
Project Management			8.24	
Subtotal (A)			108.58	
B. Contingencies			19.99	
C. Financial Charges During Implementation			5.92	
Total (A+B+C)			**134.49**	
Figures may not sum due to rounding.				
a Includes taxes and duties of $10.5 million to be financed by the Government.				
b. Base costs in 2024 prices.				
c. Physical contingencies computed at 10% for all activities except for training, agriculture facilities, consultants and project management which are computed at 5%. Price contingencies computed at 1.8% in 2024 to 2027, 1.9% in 2028 and 2029 and 2.0% thereafter for foreign currency costs; and 6.2% in 2024 and 63.0% per year thereafter for local currency costs; conversion between currencies assumes purchasing power parity.				
d. Interest during construction for the ADB COL loan of 1.124%, for five years is added to the loan.				
Source: Asian Development Bank estimates				

Summary Financing Plan			
	Amount	Share of Total	
Source	($ million)	(%)	
Asian Development Bank			
ADB	115.00	85.51%	
Nepal Government	14.78	10.99%	
Beneficiaries	4.70	3.50%	
Total	134.49	100.0%	
Source: Asian Development Bank			

B. Objectives and Scope of the Report

7. In all ADB-financed projects, safeguards risks are carefully assessed, and likely impacts, including mitigation measures, are designed and reflected in individual safeguard planning documents. The objectives of this involuntary resettlement due diligence report (IRDDR)are to : (i) review the proposed scope and outputs of the project and assess social safeguard risks associated with the anticipated project activities; (ii) evaluate all possible alternatives to avoid involuntary resettlement (IR) impacts, if resettlement impacts have been identified; (iii) propose mitigation measures to ease or minimize involuntary resettlement concerns, if involuntary resettlement impacts cannot be avoided; (iv) confirm the absence of involuntary resettlement impacts, if resettlement impacts have been identified with proper supporting documentation; and (iv) develop recommendations for managing involuntary resettlement risks as per ADB SPS 2009 throughout the project implementation period.

C. Description and Location of the Project Components

8. **Rajapur Irrigation Project**: The Rajapur Irrigation Project (RIP) covers the entire area of Rajapur Municipality and Geruwa Rural Municipality of Bardiya district under Lumbini Province. The system provides irrigation services to 14,500 hectares of cultivated land spread over the command areas of Budhikulo, Tapara, Manu and Khari-Chandrapur. The system has historical track record

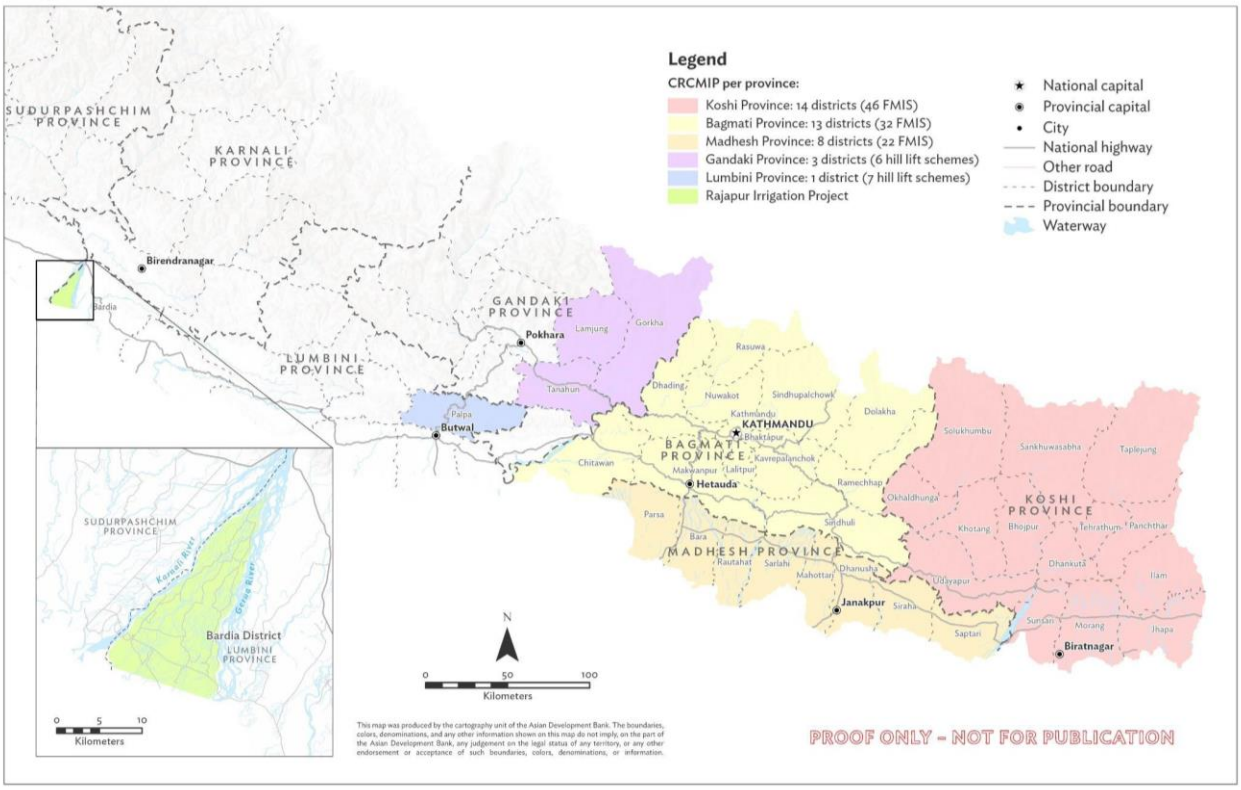
of operation through their indigenous institutions governed by traditionally evolved norms and regulations. However, frequently changing nature of river course, high silting in the Budhikulo gradually started making it again difficult for farmers to manage the system by their own resources. The department again initiated seeking for external assistance to fix the major issues like improvement in approach channel, regulating gates, cross regulators, desilting basins etc. To this end, the improvement and rehabilitation of Rajapur irrigation system has been included in the scope of IMEP. The improvement process has been carefully designed while respecting the norms and values of communities. The location of the project component area is highlighted in **Figure 1.**

9. **Modernization of Farmer Managed Irrigation System**: The proposed IMEP will rehabilitate the irrigation infrastructure of about 100 FMIS in Koshi, Madhesh, and Bagmati Provinces, using a participatory approach;[4]. Traditionally, farmers have built temporary weirs from riverbed materials, often reinforced with brushwood, but these need reconstruction after each flood – possibly several times per season. These FMIS are suffering from (i) water shortage, with numerous schemes on small rivers; (ii) high costs of maintenance of weakly-developed irrigation infrastructure on unstable hillslopes; and (iii) unreliable livelihoods, resulting in labor shortages for irrigation management and agriculture and (iv) inability to obtain sufficient water from seasonal rivers with large flood flows. List of the scheme with province, district and municipality is given in **Appendix A.**

10. **Hill Lift Irrigation Project**. The Hill Lift Irrigation Project (HLIP) will pilot 12 subprojects to provide reliable irrigation to the agricultural lands located on old river terraces, called Tar in Nepal, by pumping water from perennial rivers located in the river valleys below. The Tar lands have relatively flat and/or mildly rolling topography located along the major rivers, ranging from a few hectares to several hundred hectares in size, are potential arable lands with the potential of multiple cropping but availability year-round irrigation is very limited. These are complex schemes involving high head pumping (100-140m) and the development of new approaches to ensure the long-term viability and sustainability of the investments is required. During the fact-finding mission, only one location for the hill lift irrigation subproject out of 12 subprojects was finalized, which is in Baireni. The remaining 11 locations will be finalized later. List of the scheme with province, district and municipality is given in **Appendix 1.**

[4] The past ADB supported irrigation sector projects also covered Koshi, Madhesh, and Bagmati provinces but there is still demand for more rehabilitation. The remainder of the country was covered by irrigation sector projects implemented by the World Bank. The FMIS will be selected by strictly adhering to the 18 predefined subproject selection criteria including size of the schemes, farmer's demand and willingness to participate, water availability, indicative socio-economic situation including vulnerable community, urgency for rehabilitation, cropping pattern, and distribution of landholdings.

Figure 1. Coverage Area of Irrigation Modernization Enhancement Project.



Source: Draft Project Administrative Manual

II. SCOPE OF THE WORK

A. Overall Scope of Work

11. The overall scope of the work includes (a) rehabilitating the irrigation infrastructure of approximately 100 FMIS in Koshi, Madhesh, and Bagmati Provinces, using a participatory approach; (b) constructing 12 new lift irrigation systems to irrigate about 1,416 hectares in the mid-hill areas of Gandaki and Lumbini Provinces; and (c) rehabilitating the Rajapur Irrigation Project,[5] which irrigates about 14,500 hectares in Lumbini Province, to improve agricultural water productivity and address the flood and sedimentation problems. All these interventions will help modernize systems to withstand extreme climatic events, increase system resiliency, pump water to uphill dry land to boost agriculture production and ensure water availability despite declining water sources, protect infrastructure and farms from high floods and sediment loads, and encourage farmers to adopt climate-resilient agricultural practices. The scope of the project is summarized in the following table.

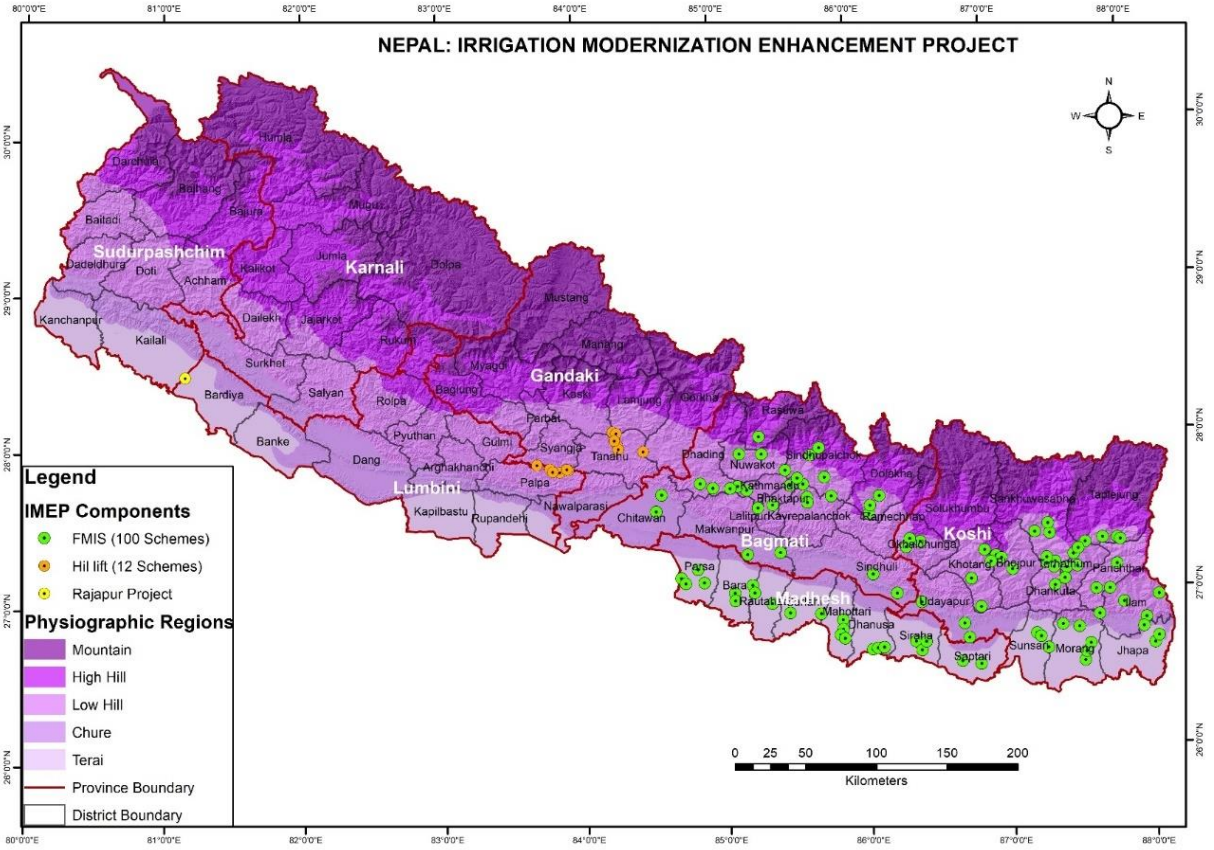
[5] The Rajapur Irrigation Project, which is jointly operated by government and farmers, is an integrated system of many traditional FMIS. It is located in Terai between two braided and shifting channels of Karnali River. The system suffers from floods and high silt-laden inflows causing siltation of intakes, canals, and fields. Geruwa channel of river has been silted rendering three intakes of RIP dysfunctional. Rajapur command area is cereal pocket of Nepal.

Table 2. Overall Scope of the Project

Project Component	Number of Systems	Command Area (Hectares)
FMIS	100	17,452
HLIP	12	1,416
RIP	1	14,500
Grand Total	**113**	**33,367**

Source: Compiled from Subproject preparation report, Detail design report 2022-23

Figure 2. Location of Irrigation Modernization Enhancement Project Components



Source: Administrative boundary, Survey department Nepal: Project location plotted based on the design report 2022/23

B. Rajapur Irrigation Project

12. The Rajapur Irrigation Project (RIP) is a long-established traditional FMIS taking water from the Karnali River and is situated between the two branches of the river - western (Karnali) and eastern (Geruwa) areas. The RIP covers the 15,000 hectares island formed by these two branches, and originally comprised six individual irrigation systems which were rehabilitated between 1991 and 2001with financial support from ADB, under the Rajapur Irrigation Rehabilitation Project (RIRP). Originally there were six intakes; three were merged into the Budhikulo, and three remain separate – these are the eastern intakes which take water from the Geruwa river.

13. Problems of access to water for the Budhikulo were largely resolved in Rajapur Irrigation Rehabilitation Project, but there remains a serious problem of sediment control which both damages irrigation and leads to flooding in the downstream of the island. This problem has become even

worse as the increased water supply brings extra sediment into the system. This is the major issue to be addressed in the present project. The eastern intakes have been adversely affected by recent changes in river morphology which cannot easily be resolved and require further studies and environmental assessments.

14. The system is fully functional, although it requires continued maintenance for silt removal and gabion repair and a small amount of locally managed upgrading and repair. A separate GON program has extended the flood alleviation/river training works with the target of protecting the entire island. Agriculture remains important for local livelihoods and for national food security. For these reasons a further project is required.

15. The project intervention will be limited to upgrading for modernization of key infrastructure of the Rajapur Irrigation Project. During the project preparation, the project beneficiaries through their Water User Associations have proposed several activities to be included under the scope of the rehabilitation of RIP. Based on the demand priority, availability of funds and readiness in terms of technical design, the activities are further prioritized following stage wise implementation. **Table 3** presents the scope of the work with priority of implementation.

Table 3. Scope of Work under RIP

S. N.	Proposed Canal Structures	Priority Phase	IR Categorization	IP Categorization
1	**Upgrading of Budhi Khola Approach Channel**			
1.1	Repairs to Approach channel	1a		
1.2	Improvement Approach Channel	1b		
1.3	Ramp Construction	1b		
1.4	New Trash Deflector	1b		
2	**Upgrading of Budhi Kulo Intake**			
2.1	New Budhi Kulo Flushing Sluice	1a		
2.2	Upgrading Budhi Kulo Intake gates	1a		
3	**Karnali Riverbank Protection**			
3.1	Karnali RB protection (0+00-0+446)	1a		
3.2	Karnali RB protection (0+446-1+500)	1a		
3.3	Karnali RB protection (1+500-2+000)	1a		
4	**Main Canal Structures**			
4.1	Intakes			
4.1.1	Bhagaipur New Intake from Budhikulo	1a		
4.1.2	Bankhet New Intake from Budhikulo	1a		
4.1.3	Janaknagar New Intake from Budhikulo	1a		
5	**Branch Canal Structures**		C	B
5.1	**Settling Basins**			
5.1.1	Patabhar settling basin	1a		
5.1.2	Badalpur settling basin	1a		
5.1.3	Gola settling basin	1b		
5.1.4	Bhimapur settling basin	1b		
5.1.5	Tapara settling basin	1c		
5.2	**Regulators**			
5.2.1	Daulatpur -Murkatta Bandh	1a		
5.2.2	Badalpur-Tethan	1a		
5.2.3	Patabhar-Tikuligarh	1a		
5.2.4	Patabhar-Dasnahari	1a		
5.2.5	Nayagaon-Indaiya	1a		
5.2.6	Nayagaon-Jagduwa Kulo	1a		
5.2.7	Bhimapur-Semarawa	1a		
5.2.8	Bhimapur-Satgaiya	1a		
5.2.9	Tapara-Pahadipur	1a		
5.2.10	Tapara-Ishworigunj	1a		

S. N.	Proposed Canal Structures	Priority Phase	IR Categorization	IP Categorization
5.2.11	Bhimapur/Muraiya aqueduct/syphon	1a		
5.3	**Escapes**			
5.3.1	Nayagaun escape	1a		
5.3.2	Daulatpur escape	1a		
5.3.3	Chargaun escape	1a		
5.3.4	Bagaipur escape	1b		
5.3.5	Janaknagar escape	1b		
5.3.6	Jhabai escape	1b		
5.3.7	Badalpur escape	1b		
5.3.8	Tapara escape	1b		
5.3.9	Manua escape	1b		
5.3.10	Bhimapur escape	1b		
5.4	**Secondary Canal Structures**			
5.4.1	Secondary Canal Proportional Flow Divider 3-Opening (10)	1b		
5.4.2	Secondary Canal Proportional Flow Divider 2-Opening (15)	1b		
5.4.3	H-Canal for Khairi Chandanpur in Low land Area (430m)	1b		
5.4.4	Secondary Canal Escapes (30 Nos)	1b		
6	**Rehabilitation of Geruwa Kulo Intakes**			
6.1	Rehab of Khairi existing intake	1a		
6.2	Repair Khairi Gabion Weir	1a		
6.3	Rehab of Manau existing intake	1a		
6.4	Repair of Manau Gabion Weir	1a		
7	**Procurement of Equipment**			
7.1	Procurement of Excavators	1b		

Source: Detail Design report Rajapur Irrigation Project -February 2024

16. Rehabilitation/improvement/modernization measures proposed in RIP are mostly confined to the improvement of Budhi Kulo approach canal, river protection work, fixing of gates, water regulating structures and desilting basins in existing canals/riverbed. None of the works proposed under project scope involve land acquisition.

17. The irrigation system under proposed intervention has been built and operated by the Tharu community for more than 100 years. Around 87 percent of project beneficiaries belong to the Tharu ethnicity who are classified as marginalized ethnic groups and are likely to benefit due to improved irrigation services and other activities financed under the project.

C. Hill Lift Irrigation Project

18. The objective of the piloting of HLIP is to provide reliable irrigation to the agricultural lands located on old river terraces, called *Tar* in Nepal, by pumping water from perennial rivers located in the river valleys below. The Tar lands have relatively flat and/or mildly rolling topography located along the major rivers, ranging from a few hectares to several hundred hectares in size, are potential arable lands with the potential of multiple cropping but availability year-round irrigation is very limited. These are complex schemes involving high head pumping (100-140m) and the development of new approaches to ensure the long-term viability and sustainability of the investments is required.

19. A total of 12 locations for hill lift irrigation systems have been identified as candidates for project financing. Considering the additional needs for technical due diligence, assessment of farmer's acceptance, the entire hill lift component has been placed under priority 1b. Based on the

prefeasibility reports, the scope of the hill lift system is as follows.

Table 4. Scope of Work under HLIP

S. N	Scope of Work	Unit	Number	IR Categorization	IP Categorization	Remark
1	Tubewell	Number	N/A	C	C	Location and number are yet to be identified. The tubewell will be drilled in river flood plain area which is generally lies in the ownership of government. The number of tubewell in each hill lift scheme will depends on the discharge recorded after investigation tubewell installed
2	Pipe from tubewell to storage tank	Meter	12,412	B	B	The length of pipeline will be changed after the reassessment of service area of each system
3	Storage Tank	M^2	4721	C	C	The size of the tank will be finalized after the detailed design and confirmation of command area
4	Distribution network	KM	123.6	B	B	Around four out of 12 systems are getting water from the surface system, the system may need to revise reducing the length of distribution network

Source: *Compilation from subproject feasibility reports, Augus 2019 & November 2022.*

20. The scope of work includes the tubewell drilling, construction of reservoir tank and pipelines from tubewell to reservoir and reservoir to farmer' field. The tubewell will mostly be drilled into river flood plain area which is generally free from any use and lies in the ownership of government. Similarly, reservoir tanks are proposed in GON land. The tubewell drilling locations are yet to be confirmed. The distribution pipeline will be underground and aligned following both right of way (ROW) of the local road and individual farmlands. The alignment along farm fields may result in temporary income loss in case of the existing standing crops along alignments during pipelaying. Potential temporary losses will be mitigated by planning pipelaying work during the dry season (November-March) when the field area lies fallow. To the greatest extent possible, the pipelines will be aligned along roadsides. Based on the scale of the impacts assessed after the confirmation of final design footprint of the remaining 11 locations, an appropriate safeguard document, resettlement plan (RP) or combined resettlement and indigenous peoples plan (RIPP), will be prepared, approved, and endorsed by DWRI. All these activities will be completed before the contract award.

21. Approximately 58.72 percent of project beneficiaries belong to IP communities such as Gurung, Kumal, and Bote, who live alongside the general population in the project command area. The beneficiaries, including the IPs who constitute more than half of the project beneficiaries, are expected to benefit from the irrigation facilities provided in their dry land.

D. Farmer Managed Irrigation System

22. Approximately above 300 candidate schemes were identified and examined against IMEP scheme selection criteria. The screening result shortlisted 100 subprojects for preparing subproject preparation report (SPPR). Based on the readiness in terms of completion of subproject preparation report and advance stage of technical design, the shortlisted schemes were further prioritized following stage wise implementation. Accordingly, 61 subprojects ready for advance procurement are included in priority 1a and the rest 39 are kept under **1**b. The safeguard assessment has been

concluded for all 100 subprojects and confirms that none of the system will incur partial or temporary impact due to construction activities.

Table 5. Scope of Work under FMIS

S. N	Scope of Work	Unit	Number	IR Categorization	IP Categorization	Remarks
1	Intake structure (Guide and Afflux Bund, Head / Cross Regulator)	Number	100	C	B	64 side intakes 36 weir structures
2	Lining (running meter)	Running meter	132,213			
3	Pipe laying	Running meter	196,93			
4	Other structures (division box, drop structures	Number	1772			
5	Footbridge, VRBs)	Number	571			
6	Outlets	Number	1143			

Source: Compilation from subproject design report 2022-23

23. Under the scope of FMIS component, the project is supporting small/medium community-led projects mostly focused on rehabilitation and/or repair of existing irrigation infrastructure where the improvement process will not change their existing footprints. These interventions are small undertakings barely needing complex structures that could have potential significant adverse impacts on social environment. Thus, none of the project activities will require land acquisition. Around 30.51 percent of project beneficiaries are belonging to the indigenous people. The project area of FMIS component is spread over 35 districts with varied ecological regions. Almost all ethnic groups available in the country will be the beneficiaries of the FMIS. All FMIS under proposed intervention are operational since long time, upgrading/improvement of the existing system will not have adverse impacts on indigenous people.

E. Modern Agriculture and Value Chain Facilities

24. The project will support interested WUAs/WUCs in rehabilitation or construction of agriculture facilities like marketing, storage, and processing units. The development of these facilities is kept under Output 3 and will be piloted through the provision of partial financing to selected WUAs/WUCs who want to invest in these facilities based on viable and sustainable business models. The project will support WUA/WUC who will contribute 15% for the facilities following working directives of Department of Agriculture. For these activities, the existing facilities will be improved where the additional land, if required, will be managed by the WUAs/WUCs.

25. All these activities will commence only after loan approval, the assessment of IR and IP impacts will be evaluated following the process and procedures outlined in Resettlement Framework.

III. VOLUNTARY LAND DONATION PROCESS

26. Under the scope of this IR-DDR, the intervention will be limited to the rehabilitation of 100 FMIS, Rajapur Irrigation system and 12 hill left irrigation schemes. In Rajapur and FMIS, the project intervention will be limited within the footprint of existing canal system where involuntary resettlement impacts are nil. The preliminary survey and investigation of Hill lift irrigation system showed that the tubewell will be installed in the river flood plain area and delivery pipe and distribution network will follow the buried pipe system. Five out of the 12-storage tanks are proposed in forest land, six in public land and one in private land where the landowner has expressed his willingness to donate the land voluntarily.

27. The project may accept voluntary donation of landform the eligible donor. The process and steps to be followed for assessing eligibility of voluntary donation and documentations are given below:

28. **Step 1**: The project will be open to the possibility of voluntary land donation from any interested person/community. The land requirement will be explained to the interested donor(s). ADB's SPS, 2009 social safeguard requirements will also be explained to the people willing to donate land.

29. **Step 2**: After donation of land is decided by the donor(s), the SMC will initiate formalization of land donation by issuing a letter to the willing donor(s) with details of public purpose for which land is required and the donor(s). The donor will signify its consent through signing the voluntary donation consent form (sample template is attached in Appendix 3. The SMC, with the help of PIMS, will take necessary legal steps to formalize the donation of land. SMC/CPMO will facilitate the entire donation process and maintain its documentation.

30. **Step 3**: The donated land will either be transferred to the name of the WUA, or an agreement will be made between the land donor and the WUA Chair, with a witness from elected local representatives, such as the Ward Chair or the Mayor. The Deed of Gift will be executed and the ownership transfer for land parcels will be registered in the name of the WUA) and all necessary fees and stamp duties will be borne by the project. Henceforth, the land ownership and related land record will be revised/amended with Record of Rights showing the transfer of ownership in the name of WUA/WUC.

31. **Step 4**: An independent third-party will be engaged by the PMU in case of voluntary land donation to verify that the donation is indeed voluntary and did not result from coercion, using verbal and written records, and to ensure that the donor meets the eligibility criteria as stated above. The report of the independent third-party will be included in the semi-annual social safeguards monitoring reports.

32. During the project implementation, if proposed location or project footprints are changed, the land may require to be obtained following other process outlined in resettlement framework prepared for this project.

IV. SOCIO ECONOMIC ASSESSMENT AND PUBLIC CONSULTATION

33. Socio economic assessment of project beneficiaries has been carried out by the design consultants deputed for Rajapur and selected Hill lift schemes. For FMIS component, respective Water Resource and Irrigation Development Divisions (WRIDDs) have collected social information as a part of the subproject preparation. The socio-economic information presented in this DDR is principally obtained from two sources: a) compilation of information from subproject preparation reports and other available project documents and (b) figures are projected by applying the ratio of particular social indicator taken form Nepal Population and Housing Census 2021 for the same municipality/ ward in which the project area exists.

34. Additionally, TA consultants visited to insight the field situation by observing specific locations proposed for intervention in Rajapur and Hill lift schemes. Field visits were followed by consultations with local people, elected representatives (municipal authorities). These visits and consultations were concentrated on understanding the need and demand for external intervention, land ownership status for ascertaining the likelihood of involuntary resettlement impact, if any. Social and environment safeguards consultant, engineer from Rajapur Irrigation Management Office, Association Organizer from respective WRIDDS were engaged to assess the surrounding social and natural environment of the proposed project sites.

A. Socio-economic Condition of Beneficiary Households

35. The socio-economic assessment results are summarized in the following paragraphs.

36. **Population and Demography**: The proposed project area spread over the 88 municipalities/ or rural municipalities of Koshi, Bagmati, Madhesh, Gandaki and Lumbini provinces. According to statistics available in SPPR, the total population likely to be benefited by the improved irrigation services is 241,208 with an average household size of 5.1. The number of female populations is slightly higher (51.12%) than that of the male population (49.05%). The demographic characteristics of the project area are summarized in **Table- 6**

Table 6. Population, Average Family Size

Project Component	Number of System	Number of Households	Population			
			Male	Female	Total	Average of HH size
FMIS	100	26406	69048	72342	141390	5.3
HLIP	12	5329	8504	10108	18612	3.5
RIP	1	14501	40359	40846	81206	5.6
Total	**113**	**46236**	**117911**	**123296**	**241208**	**5.1**
Percentage			**48.88**	**51.12**		

Source: SPPR/DDR and project reports: 2022-2023

37. **Cast and Ethnicity:** The proposed project area is inhabitants of various castes and ethnicity having diversity of culture, custom, tradition, norms, and values associated with ethnic culture to which they are associated. The majority, (51.72%) of project beneficiaries belongs to indigenous caste groups followed by Brahmin/Kshetri (40.14%). Likewise, the population of Dalit consist of 5.21% whereas 4.20 % of project beneficiary belongs to Musalman. While analyzing the population by project component, the population of IPs accounts for above 87% in Rajapur followed by 56% in hill lift scheme. This indicates that development of irrigation system will largely be beneficial to Janjaties (IP) and Dalits (occupational caste) of project beneficiaries who are officially known as marginalized and deprived social groups of society.

Table 7. Caste/Ethnic Composition of Beneficiary Households

Project Component	House holds	Beneficiary Population	IP HHs	IP Population	Dalit HHs	Dalit Population	Musalman HHs	Musalman Population	Brahmin/ Kshetri and Other HHs	Brahmin/ Kshetri Other
FMIS	26406	141390	8528	43133	1648	8327	967	5733	15263	84198
Percentage			32.30	30.51	6.24	5.89	3.66	4.05	57.80	59.55
HLIP	5329	18612	3007	10929	903	3388	276	935	1142	6431
Percentage			56.44	58.72	16.95	18.20	5.18	5.03	21.44	34.55
RIP	14501	81206	12625	70702	115	849	620	3470	1141	6185
Percentage			87.07	87.07	0.79	1.05	4.3	4.27	7.87	7.62
Grand Total	**46236**	**241208**	**24161**	**124764**	**2666**	**12564**	**1863**	**10138**	**17547**	**96814**
Overall Percentage			**52.26**	**51.72**	**5.77**	**5.21**	**4.03**	**4.20**	**37.95**	**40.14**

Source: SPPR/DDR and project reports: 2022-2023

38. **Population by Age group.** The age group of the project beneficiaries has been derived applying the respective age group ratio of municipality /ward population in which the project area exists. The population proportion has been taken form the statistics available in Nepal Population and Housing Census (NPHC) 2021[6]. Among the project beneficiaries, the majority of population (62.52%) belonged to the age group ranging between 15-59 years. These groups of population are considered as economically active population groups and can benefit from the temporary employment opportunity generated due to project intervention. The rest of the groups of population are dependent, i.e., age group between 0-14 (26.71%) and population above years (10.76%) **Table-8.**

Table 8. Population by Age group

Project Component	Total Population	0-14 Age group			15-59 Age group			Above 60 age group		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
FMIS	141390	20783	19374	40157	40278	45181	85459	7874	7898	15772
HLIP	22147	2956	2713	5669	5791	7795	13586	1328	1565	2893
RIP	81206	10019	9538	19557	24044	29928	53972	3644	4033	7677
Total	244743	33758	31625	65383	70113	82904	153017	12846	13496	26342
Percentage				**26.71**			**62.52**			**10.76**

Source: Derived by analyzing of project population with age group ratio of project municipalities

39. The educational status of the project beneficiaries has been derived applying the respective educational ratio of municipality /ward population in which the project area exists. Among the project beneficiaries exceeding five years of age, the highest percentage (41.68%) of educational level lies in basic level or up to grade-8 of formal education followed by higher secondary level 9-12 (27.19%). Only 3.2% of project beneficiaries have completed educational level 12 or above whereas 27.9 percent of the population are illiterate. The educational status of the population is given in **Table 9.**

[6] https://censusnepal.cbs.gov.np/results/downloads/ward

Table 9. Educational Status of Household Members

Project Component	Basic Level (class 1-8)			Secondary level (class 9-12)			University Level (12 and above			Illiterate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
FMIS	27358	23407	50765	17209	14223	31432	2178	1352	3530	14428	26356	40783
HLIP	4515	4612	9126	3152	3380	6531	449	415	864	953	2557	3510
RIP	14292	14292	28585	9605	10161	19766	1245	1214	2459	7765	7176	14941
Total	46165	42311	88476	29966	27764	57729	3872	2981	6853	23146	36088	59234
percentage	44.76	38.76	41.68	29.05	25.44	27.19	3.8	2.73	3.2	22.4	33.06	27.9

Source: Derived by analyzing of project population with educational ratio of project municipalities

40. The overall literacy rate among the project beneficiaries is 72.1%, which is slightly lower than the national average (76.2%[7]). The lower average might be attributed as the project area mostly lies in the remote hill and mountain terrain of Nepal. The figure is validated by the statistics available in NPHC 2021 which showed that out of the total population in urban municipalities, only 21 % are illiterate whereas the illiterate rate of population living in rural municipalities is 27.6%.

41. **Disability** The NPHS 2021 shows that 2.2 percent of the total population have one or the other type of disability. Among the project beneficiaries, around 2,4% population are disable which is slightly higher than national average. Out of the three-project components, the higher number of disabled populations lies in Rajapur (3.89%) followed by 3% in hill lift and 2% in FMIS. **Table-10**.

Table 10. Disability Status of Household Members

Project Component	Total population	Disable Male	Disable Female	Total Disable population	Overall Percentage
FMIS	141390	1545	1282	2827	2.00
HLIP	22147	353	311	665	3.00
RIP	81206	1631	1529	3160	3.89
Total	**244743**	**3529**	**3122**	**6651**	**2.4**
Percentage		**53.06**	**46.94**	**100**	

Source: Derived by analyzing of project population with disabled population ratio of project municipalities

42. **Land holding**. Land is one of the most important livelihood assets for rural communities in Nepal. **Table-11** provides basic characteristics of the land distribution in the project area by holding category. Around 45% of the project beneficiaries hold less than 0.5 ha of cultivated land followed by 29.7% holding between 0.5-1 ha. Likewise, 18% of farmers hold above 1 ha whereas around 7% people don't have arable land in the command area of the system. It is expected that improved irrigation facilities will lead to an increase in cropping intensity which will demand additional farm labour by creating on-farm employment opportunities for land less or farmers having small holdings, who are in majority among project beneficiaries **(Table-10).**

Table 11. Households by Landholding

Propjet Component	Total HHs	Land Holding Category			
		Landless	Less than 0.5 ha	Between 0.5-1.0 ha	Above 1.0 ha
FMIS	26406	1130	11907	9954	3415
HLIP	5329	39	4002	955	333
RIP	14501	2245	4915	2715	4626
Grand Total	**46236**	**3414**	**20824**	**13624**	**8374**
Percentage		**7.38**	**45.04**	**29.47**	**18.11**

Source SPPR and detail design report 2022/2023.

[7] https://censusnepal.cbs.gov.np/results/literacy

43. **Women-headed Households**: Agriculture Census 2021-22 shows that 32.4 percent, or 1.33 million, households in the country are headed by women. Female headed households' information of project implementation provinces illustrates that about 34.84% of households are headed by women which is slightly higher than national scenario (32.4%) of all those having ownership or secure rights over agricultural land. **Table 12**.

Table 12. Agricultural population with ownership or secure rights on agricultural land by sex

Project Component	Province	Total number of agricultural population (aged 18 years and above)			Number of agricultural population owning or having secure rights over agriculture land		
		Male	Female	Total	Male	Female	Total
Overall Nepal		6347936	6863412	13211349	2723625	1430719	4154343
FMIS	Koshi	1136664	1239143	2375807	504851	298560	803411
	Madhesh	1408334	1334796	2743130	564962	314974	879936
	Bagmati	945627	1037143	1982770	450301	207440	657741
HLIP & RIP	Gandaki	516845	632231	1149076	244515	152879	397394
	Lumbini	1167196	1322927	2490123	501395	263018	764413
Total		11522602	12429652	23952255	4989649	2667590	7657238
Percentage		**48.11**	**51.89**		**65.16**	**34.84**	

Source: Women's' ownership of Agriculture land in Nepal: National Statistics Office, Kathmandu Nepal November 2023.

44. Overall, agricultural land ownership is associated with lower poverty rates. The fourth Nepal Living Standard Survey (NLSS) -2023 highlighted that in rural areas, land ownership is negatively correlated with poverty rates – poverty headcount decreases as the area of land owned increases. In urban areas, however, poverty headcount is higher in households with less than one hectare of agricultural land compared to households with no land **Table-13**.

Table 13. Poverty and Land Ownership

Land ownership status	Incidence			Distribution:	
	Headcount rate	Poverty gap	Squared Poverty gap	Of the poor	Of the population
No Land	20.15	4.63	1.49	34.34	34.56
<0.2 ha.	23.32	5.22	1.76	22.62	19.66
0.2-1 ha.	20.36	4.27	1.37	35.16	34.98
1-2 ha.	16.14	4.25	1.51	6.18	7.76
2+ ha	11.38	2.2	0.65	1.7	3.04
Rural					
No Land	33.41	8.82	3.28	22.54	16.62
<0.2 ha.	27.13	6.56	2.23	22.34	20.3
0.2-1 ha.	23.48	4.97	1.61	46.3	48.62
1-2 ha.	16.88	3.23	0.95	7.36	10.74
2+ ha	9.91	2.11	0.53	1.5	3.7
Urban					
No Land	17.86	3.91	1.19	41.32	42.42
<0.2 ha.	21.57	4.6	1.54	22.78	19.38
0.2-1 ha.	18.07	3.76	1.19	28.56	29
1-2 ha.	15.61	4.99	1.92	5.48	6.44
2+ ha	12.25	2.25	0.71	1.84	2.76

Source: Nepal living standard survey 2023, Summary report: National Statistics office, Office of the Prime Minister, and Council of Ministers: February 2024.

45. **Poverty:** The national poverty line is the aggregate of the food and the non-food poverty lines. The revised official poverty line in 2022-23 is estimated at NRs. 72,908 per person per year. In 2010-11, poverty line was set at NRs. 19,261 per person per year, which when adjusted

for inflation over the 2010-11 to 2022-23 period - stands at NRs. 42,845 per person per year. (**Table-14**)

Table 14. Poverty Lines (NRs., in 2023 prices)

	2010-11	2022-23
National Poverty Line	42,845	72,908
Food Poverty Line	26,936	35,029
Non-Food Poverty Line	15,909	37,879

Source Summary Report Nepal Living Standard Survey 2022/2023, National Statistics Office, Office of the Prime Minister, and Council of Ministers: February 2024

46. According to the 2022-23 official poverty line, an individual in Nepal is classified as poor if their annual per capita total consumption expenditure is less than NRs. 72,908. Based on the new poverty line, 20.27 percent of the population in Nepal lives below the poverty line (**Table-15**). The incidence of poverty is higher in rural areas (24.66%) than in urban areas (18.34 %).

Table 15. Poverty profile of Nepal

Region	Headcount rate	Poverty gap (percent)	Poverty gap squared (percent)	Gini Index	Distribution	
					of the poor	of the population
Nepal	20.27	4.52	1.48	0.3		
Urban	18.34	4.03	1.29	0.303	62.86	69.48
Rural	24.66	5.64	1.91	0.287	37.14	30.52

Source: Nepal living standard survey 2023, Summary report: National Statistics office, Office of the Prime Minister, and Council of Ministers: February 2024

47. The poverty rates are higher than the national rate in four of the seven provinces (Table-15). The poverty rate is highest in Sudurpashchim (34.16 percent), followed by Karnali (26.69 percent), Lumbini (24.35 percent) and Madhesh (22.53 percent). Gandaki, Bagmati and Koshi, however, have a lower than national rate at 11.88, 12.59 and 17.19 percent, respectively. The poverty depth and severity are also higher in provinces with a higher poverty headcount.

Table 16. Poverty by Province

Province	Poverty Incidence			Distribution	
	Headcount rate	Poverty gap (x100)	Poverty gap squared (x100)	of the poor	of the population
Koshi	17.19	3.84	1.25	13.80	16.26
Madhesh	22.53	4.62	1.36	25.08	22.56
Bagmati	12.59	2.64	0.89	12.68	20.42
Gandaki	11.88	2.33	0.71	4.88	8.34
Lumbini	24.35	5.80	1.99	22.76	18.96
Karnali	26.69	6.25	2.16	6.74	5.12
Sudurpashchim	34.16	8.41	2.87	14.02	8.32

Source: Nepal living standard survey 2023, Summary report: National Statistics office, Office of the Prime Minister, and Council of Ministers: February 2024

48. Rural domains have higher poverty rates than urban areas within each province, except in Lumbini and Gandaki (**Table 17**). Gandaki Urban has slightly higher poverty than Gandaki Rural, whereas the incidence of poverty is similar across Lumbini Rural and Urban. Poverty rates in Bagmati Rural are higher than the national average, with a quarter of its population below the poverty line.

Table 17. Poverty in Rural/Urban Area by Provinces

Domain	Headcount rate	Remarks
Koshi Urban	15.9	
Koshi Rural	19.67	
Madhesh Urban	21.71	
Madhesh Rural	24.96	
Kathmandu Valley Urban	7.38	
Bagmati Urban (excl. KTM Valley)	14.15	
Bagmati Rural	25.61	
Gandaki Urban	12.63	
Gandaki Rural	10.27	
Lumbini Urban	24.08	
Lumbini Rural	24.73	
Karnali Urban	23.16	
Karnali Rural	30.86	
Sudurpashchim Urban	30.86	
Sudurpashchim Rural	40.21	

Source: Nepal living standard survey 2023, Summary report: National Statistics office, Office of the Prime Minister, and Council of Ministers: February 2024

B. Meaningful Consultation

49. Consultations were undertaken in line with the requirements pertaining to social and environmental considerations. Prior to consultation meetings with local stakeholders, advance notification was circulated, and coordination was established with stakeholders through the project office. Additionally, the consultations were focused to seek stakeholder's opinion, especially the local government's views on potential physical and economic impacts, key risks including the mitigation measures and many more. As an integral part of the compliance with project requirement, indicative Grievance redressal mechanism was shared during the meetings. A total of 18 meetings were conducted covering all three project components.

50. Together with CPMO, the TA consultant organized a virtual meeting with the WRIDD staff members of Koshi, Bagmati and Madhesh province and explained the consultation requirements. The safeguard team provided the key information to be delivered to WUA representative and other stakeholder before the subproject get approved form the project appraisal committee.

51. A total of 467participants attended the meetings of with 99 were women. Out of the total participants around 210 (44.96%) were from indigenous communities which is instrumental in reflecting their needs, priorities, interests and perspectives in project planning and implementation The summary of consultation is highlighted in **Table 18.** The detail of consultation is presented in Appendix 2.

Table 18. Summary of Public Consultation

S.No	Date, Place of Meeting	Persons Consulted	Number of Participants	Key Points Discussed and Findings
1	Rajapur Irrigation Project 12-13 February 2024 (3 meetings)	- Mayor/Deputy Mayor and other elected government representatives of Rajapur and Geruwa municipalities - WUA members and beneficiaries of RIP - Staff member of	Total Participants = 81 Women = 15 Men = 66 Janjati (IP) = 61	▪ ADB safeguard requirements on land acquisition, involuntary resettlement, GRM procedures etc. were shared with Municipal authorities and Water User Association (WUA). ▪ Local government and community support was noticed in Favor of the proposed intervention. ▪ Canal sections proposed for improvement

S.No	Date, Place of Meeting	Persons Consulted	Number of Participants	Key Points Discussed and Findings
		Rajapur irrigation management office		were observed and confirmed that intervention will not entail IR and IP impacts
2	Hill Lift Irrigation Schemes *15-17 February* (7 Meetings)	- Mayor/Deputy Mayor and other elected representatives of Rampur municipality Palpa. - WUA representatives, and beneficiaries of proposed system - WUA representatives, beneficiaries of proposed system	Total Participants = 153 Women = 35 Men = 108 Janjati (IP) = 44	▪ ADB safeguard requirements on land acquisition, involuntary resettlement, GRM procedures etc. were shared with Municipal authorities and WUA. ▪ The locations proposed for reservoir tanks (forest and public land) were observed and found free from any use. ▪ The municipal authority authorizes to conduct series of consolation with proposed beneficiaries to share the likely O&M cost
3	FMIS 5-12 February *(8 meetings)*	WUA executive committee member, ward chairperson and beneficiary farmer	Participants = 233 Women = 49 Men = 184 Janjati (IP) =105	▪ ADB safeguard requirements on land acquisition, involuntary resettlement, GRM procedures etc. were shared with Municipal authorities and WUA.
Total			Participants = 467 Women = 99 (21.19%) Men = 368 Janjati (IP) =210 (44.96%)	

C. Consultation and Community Participation Framework

52. The consultation will be continued throughout the project period. In the project initiation phase, the Association organizer from each WRIDDs, Rajapur irrigation management office and offices responsible for the implementation of hill lift will be responsible to inform the community about the project along with the program information/details. Together with Senior/Association Organizer, PIMS social development consultant and field-based community organizer will be entrusted with the task of consultations and public awareness during project implementation. This task will be carried out in coordination with the CPMO, CAMO, RIMO, AKC and other institutions designated for the implementation of agriculture component and contractors to ensure the communities are made fully aware of project activities in all stages of project development. The consultation and participation activities to be followed for each subproject are summarized below.

Table 19. Proposed Community Participation at Various Stages of Project Implementation

Project Stage	Activities	Responsible Person/Agency	Remark
PLANNING/PREPARATION STAGE			
Project Identification	• Provide project information to key stakeholders (WUA/province/Local government). • Focus on the purpose of the Project, nature of irrigation system improvement envisaged, and responsibility of the WUAs and other stakeholders in project preparation and implementation	• CPMO staff member • CAMO/AKC • Association Organizer	The identification activities are completed
Walk through survey	• Plan the date, time and route of walkthrough and organize. • Explain the objective of the walkthrough and subsequent consultation will be conducted. • Map the critical areas of the proposed alignment with the community people and listen to the issues and concerns raised; provide suggestions to be incorporated in the canal design such as issues relating to critical section having water leakage,	• WRIDD/PIU staff member (technical) • Association organizer • WUA/ SMC, consultant	Completed in FMIS and Rajapur, one additional round of consultation may require in hill lift schemes

Project Stage	Activities	Responsible Person/Agency	Remark
	village road and slab construction, water courses, etc. • Assess the concerns of women and inform how these are incorporated in design		
Consent Letter for Voluntary Land Donation	• Undertake consultations with landowners on both sides of the canal and get consent if additional land is required for system modernization. • Get self-declaration from the WRIDD that no additional land is required for canal rehabilitation/improvement. • Get consent from local government for the use of public land (Hill lift case) • Initiate process to obtain the right to use of public and forest land following legal provisions. (hill lift case)	WUA/ SMC, consultant DWRI/CPMO	
Stakeholders Meeting	• Organize subproject management unit (SMC) meeting and endorse subproject investment plan. • Establishment of GRCs	WRIDD, AKC and WUA and PIMS consultant	
IMPLEMENTATION			
Consultations and capacity support	• Awareness generation about the project activities and share subproject implementation plan. • Establishment of disaggregated socio-economic database of each subproject • Dissemination of project related technical and other information to representatives of all key stakeholders (at one platform), disclosure of summary of project scope with GRM in local languages, roles and responsibilities of stakeholders. • Ensure the representation of IPs and women and other ethnic minority in consultation and capacity support program (GESI-AP and IP benefit enhancement plan)	WUASMC, community mobilizer, , Agriculture technician from PIMS consultant	
Information Disclosure	• Disclosure of construction schedule, potential temporary disturbances and GRM procedures	WUA/ SMC, Community mobilizer, PIMS consultant	
Facilitation in civil works	• Constant coordination with beneficiaries and information to the irrigation users during construction • Establish and implement the project grievance redressal mechanism to resolve the grievances of local people. • Update periodically to WUA if implementation timeframe (contractor's work plan) is changed	WUA/ SMC, Community Mobilizer, Agriculture technician from PIMS consultant	
Facilitation in Agriculture program implementation	• Awareness on agriculture support program proposed for subproject. • Explain the implementation modalities. • Facilitate the formation of target groups with wiser consent among beneficiaries. • Ensure that activities and targets of GESI action plan and IP benefit enhancement plan are properly followed	WUA/AKC/RIMO PIMS consultant	

AO: Association Organizer: AKC: Agriculture Knowledge center; CAMO: Central agriculture management office; CO: Community Organizer, CPMO: Central project Management Unit; PIMS: Project Implementation and management support consultant; RIMO: Rajapur Irrigation Management office Project; SMC: Subproject management Committee; WUA: Water User Association; WUC: water User Cooperatives

V. FINDINGS OF THE DUE DILIGENCE

A. Rajapur Irrigation Project

53. Rehabilitation measures proposed in RIP are mostly accommodated within the existing canals/riverbed, hence no additional land will be required. Additionally, the proposed project has been screened against the standard checklist to ascertain the level of impacts for safeguard categorization (**Appendix-3: Involuntary resettlement screening results**). The results are summarized in the following table.

Table 20. RIP Components and their Land Acquisition and Resettlement Impacts

S. N	Name of the Components	Permanent Impact on Land Acquisition and Resettlement	Temporary Impact	Ownership	IR categorization	Remarks
1	Upgrading of Budhi Khola Approach Channel	No	No	GON	C	The entire Budhi kulo approach channel repair and improvement work and construction of ramp and track deflector will be limited within the Karnali River course. The construction/improvement activities will not entail any involuntary resettlement.
2	Upgrading of Budhikulo Intake	No	No	GON	C	The upgrading works, mainly fixing gates, will be carried out in existing intake structure.
3	Karnali & Geruwa River Protection	No	No	GON	C	River protection work will be carried out on the riverbank of both Karnali and Geruwa. The work will protect and safeguard local from flood resulting positive impacts.
4	Main canal structures (intake and silting structure)	No	No	GON	C	All intervention will be carried out either in the river course, existing structure or within the existing canal sections.
5	Branch canal structures (Regulator, Escape silting basins and minor structures)	No	No	GON	C	All intervention will be carried out either in the existing structure or within the existing canal sections.
6	Rehabilitation of Geruwa Kulo Intakes	No	No	GON	C	The upgrading works will be carried out in existing intake structure of Kharichandan and Manau.

B. Hill Lift Irrigation Systems

54. The tube wells will be drilled along river floodplains in each system. The number of tube wells in each system will depend on discharge of tubewell essential to provide water to entire command area meeting crop water requirements. The number of tubewell and locations of drilling points are yet to be determined.

Table 21: HLIP Components and their Land Acquisition and Resettlement Impacts

S. N	Name of the Components	Permanent Impact on Land Acquisition and Resettlement	Temporary Impact	Ownership	IR categorization	Remarks
1	Tubewell	No	No	River flood which generally belongs to GON	C	▪ The tube well will be installed in the riverbank/flood plain. The number of tubewell in each system will depends on the discharge obtained after investigation tubewell installed. ▪ All tubewell will be installed in river flood plan, hence increasing the number will not have any IR impacts.
2	Pipe from tubewell to storage tank and pipelines for distribution network	No	Yes	Private land Right of way of existing road	B	▪ Temporary IR impacts due to income loss (standing crops) are anticipated. ▪ Pipeline alignment will be finalized after reassessment of command rea and detail design. ▪ During field assessment almost all farmlands having no alternative irrigation facilities were fallow. A real time assessment of the existence of standing crops in pipelaying alignment will have to be carried out to confirm the level of impacts.
3	Storage Tank	No	No	▪ In 5 schemes, forest land. (GON) ▪ 6 schemes in public land (GON) ▪ One scheme in private land (individual)	C	▪ The project authorities should initiate to find alternative land instead of forest land. ▪ Voluntary land donation consent has to be obtained from the person offering the land for reservoir in one scheme

Source: design report and field verification 2024

C. Farmer Managed Irrigation system

Table 22. FMIS Project Components and their Land Acquisition and Resettlement Impacts

S. N	Name of the Components	Permanent Impact on Land Acquisition and Resettlement	Temporary Impact	Ownership	IR Categorization	Remarks
1	Intake structure (Guide and Afflux Bund, Head / Cross Regulator)	No	No	GON/CPR	**C**	▪ These irrigation systems were built by farmers long before some are even more than 100 years. ▪ These FMIS are treated as
2	Sides escape /spillway	No	No	GON/CPR		
3	Lining (running meter)	No	No	GON/CPR		

S. N	Name of the Components	Permanent Impact on Land Acquisition and Resettlement	Temporary Impact	Ownership	IR Categorization	Remarks
4	Pipe laying	No	No	GON/CPR		community property resources having right established by use. ▪ In Nepal all land, if not registered in the name of individual/ institution, is regarded as government property. ▪ All intervention will be limited within the Existing intake and canal system
5	Masonry /gabion retaining wall	No	No	GON/CPR		
6	Other structures (division box, outlet, footbridge, VRBs)	No	No	GON/CPR		

D. Modern Agriculture and Value Chain Facilities

55. The location for rehabilitation or construction of agriculture facilities like marketing, storage, and processing units will be finalized after loan approval. After finalization of locations, the IR and IP impact will be assessed following the process outlined in resettlement Framework prepared for this project.

E. Impacts on Indigenous Peoples

56. According to National Population and Housing Census 2021, there are 142 castes/ethnic groups living in Nepal. In Nepal the term Indigenous People (IP) denote to *Aadivasi, Janajati* or ethnic groups with distinct identity in terms of their culture, language, and social association from the prevalent dominant culture. National Foundation for Development of Indigenous Nationalities (NFDIN) Act, 2002 defines "nationalities" (*Aadivasi*) and indigenous people (*Janajati*) as people having their own mother tongue, distinct separate traditional cultural identities, and social structure. This definition apparently is very close to the ADB definitions of the Indigenous People.

57. There are disparities in terms of socio-economic standing in IP groups across the country. The National Foundation of Indigenous Nationalities has declared 60 groups *(59 initially and one "Rana Tharu" is added in marginalized category)* as ethnic nationalities and classified them into five categories based on their population size and other socio-economic variable s such as literacy, housing, land holdings, occupation, language, and area of residence. The national wide distribution of IP population with their marginalization is presented in **Table-23**.

Table 23. National wide distribution of IP population with their marginalization

Total population	IP Population	IP population by Marginalization					
		Endangered	Highly Marginalized	Marginalized	Disadvantaged	Advantaged	Total
29164578	10208543	24197	640130	4213786	3977326	1353104	10208543
Percentage	35.00	0.24	6.27	41.28	38.96	13.25	100.00

Source: https://censusnepal.cbs.gov.np/results/downloads/caste-ethnicity

58. Out of the total population of Nepal, about 10,330,274 **(**35.00%) belongs to indigenous/nationalities. While disaggregating the indigenous population by their marginalization, around 41.28% lies in the marginalized category whereas 38.96% falls in disadvantaged category. Likewise, 13.25% belong to the advanced class (Newar & Thakali), 6.27% highly marginalized and 0.24 % of IP population is rated as endangered category (**Table 23**).

59. **Indigenous Peoples in Project Area**. In the project area, the population of Indigenous People (IPs) constitute slightly above the half (51.72%) of total population which is higher than the share of IPs in national population (35%). Presentation of IPs by project component shows that overarching majority (87%) of project beneficiaries are from IP community in RIP followed by 58.72% in hill lift schemes. Likewise, around 30.51% of beneficiaries of farmer managed irrigation system belong to various indigenous communities.

Table 24. Population of Indigenous Peoples in Project Area

Project Component	Beneficiary Households	Beneficiary Population	IP Households	IP Population
FMIS	26406	141390	8528	43133
Percentage			**32.30**	**30.51**
HLIP	5329	18612	3007	10929
Percentage			**56.44**	**58.72**
RIP	14501	81206	12625	70702
Percentage			**87.07**	**87.07**
Grand Total	**46236**	**241208**	**24161**	**124764**
Overall Percentage			**52.26**	**51.72**

Source: Subproject preparation reports and DDRs 2022/23

60. The IPs live with the general population in the same project location. The IP communities have their own social and cultural practices blended with different religious/cultural/ideologies/practices. However, they respect and are engaged in culture of mainstream society collaborating with non-IP communities like Brahmin and Chhetri. Each IP community have distinct cultural practices and language, however all of them also speaks and understand Nepali language. These IP communities are organized, maintained, and regulated through their social institutions. During the consultation observation of irrigation system, assessment did not identify any impact on cultural heritage sites such as built shrine structures, sacred places, monasteries, crematory sites etc. owned by IP communities.

61. In case of the Rajapur – where the majority of project beneficiaries are the Tharus – and are not in a disadvantaged position in terms of their participation in the current governance structure of the irrigation systems as they are more than 95% of Water User Association functionaries. According to indigenous management structure, the system has been headed by a Kulopani Chaudhary, a supreme authority to deal with the managerial tasks related to the operation and management of irrigation system in Tharu community. During the management of canal system, the Chaudharies are supported by some village based traditional Tharu institutions. In order to manage the irrigation tasks at Mauja (settlement) level, "Barghar" are the second most important positions having key roles in the implementation of the decision of Chaudharies for the management of canal system for equitable distribution of irrigation water. The Badghar is an elected chief of a village or settlement for the period of one year and responsible for the welfare of the village. Additionally, institutions like “Chiragis" (village messenger), "Guruwa" (Tharu priest responsible for conducting rituals both before initiating and after completing the canal maintenance work) still exist and functioning for the management of irrigation System. This indicates that the common issues of exclusion and low level of participation from indigenous group does not exist in the WUA governance of Rajapur Irrigation system.

62. The presence of IP farmer during project request and consultation have shown great interest towards the project and expressed their felt need and urgency for the improvement of the canal system.

63. The project neither directly or indirectly will affect indigenous people's dignity, human rights, livelihood systems, or culture nor affect their territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain. The project or its consequence will not impoverish any indigenous people or their families. There is not any noted anticipation of getting worse conditions of indigenous people by the project intervention. As the IP communities of project area has been utilizing the irrigation facilities since a century or more, improvement of the irrigation facilities does not cause any impact in the cultural practice, livelihood strategy and economic activities of those communities. The improved irrigation facilities coupled with the knowledge on advanced agriculture practices will enhance their existing agro based livelihood capacities. Additionally, (IPs) will be provided with skill development training under the project-financed agriculture development program and activities planned under the Gender Equality and Social Inclusion Action Plan. This is to ensure that they receive equal and proportional benefits from the modernization of irrigation facilities and technology/equipment to support increased productivity and market access. Moreover, an Indigenous Peoples Plan (IPP) or a combined RIPP will be prepared to ensure the inclusion of IP communities in project activities and that they enjoy equal benefits.

VI. GRIEVANCE REDRESS MECHANISM

A. Common Grievance Redress Mechanism

64. Grievance Redress Mechanism. A common GRM will be in place to redress environmental and social safeguards concerns about the project. Grievance is defined as any issues/concerns that resulted to non-performance of obligations of any of the parties involved in project processes, particularly in safeguards implementation. The GRM described below has been developed in consultation with the stakeholders and will be applicable to all subprojects implemented by DWRI and CAMO under the IMEP. The GRM is anchored on the five principles, underpinning the grievance redress processes and the arrangements envisaged to implement these:

Transparency. The GRM encourages comments and feedback (negative and positive) to improve the Project. The community must be aware of all complaints, grievances and problems reported; must be involved in their redress; and must be kept informed on progress made in resolving grievances. Public awareness campaign will be conducted to ensure that awareness on the project and its grievance redress procedures is generated. The campaign will ensure that the poor, women, IPs, the vulnerable and the disadvantaged groups are made aware of grievance redress procedures and CPMO (the central office of the DWRI) and the CAMO (the central agriculture management office of DOA) will ensure that their grievances are addressed according to the time schedule, and feedback will be provided to the affected person or the complainant.

Socially Inclusive. The whole community, and even those outside, are given the opportunity to raise concerns and the right to receive a response. The GRM provides an accessible, inclusive, gender-sensitive, and culturally appropriate platform for receiving and facilitating resolution of affected persons' grievances related to the project.

Simple and Accessible. Procedures to file complaints and seek redress are kept simple and easy to understand by the affected people, most especially the non-literate, and their communities. Affected persons will have the flexibility of conveying

grievances/suggestions through verbal narration from walk-in affected person, by dropping grievance redress/suggestion forms in complaints/suggestion boxes put up at accessible locations, through telephone hotlines, by e-mail, by post, or by writing in a complaint register at project site, SMC (Subproject Management Committee), and CPMO offices.

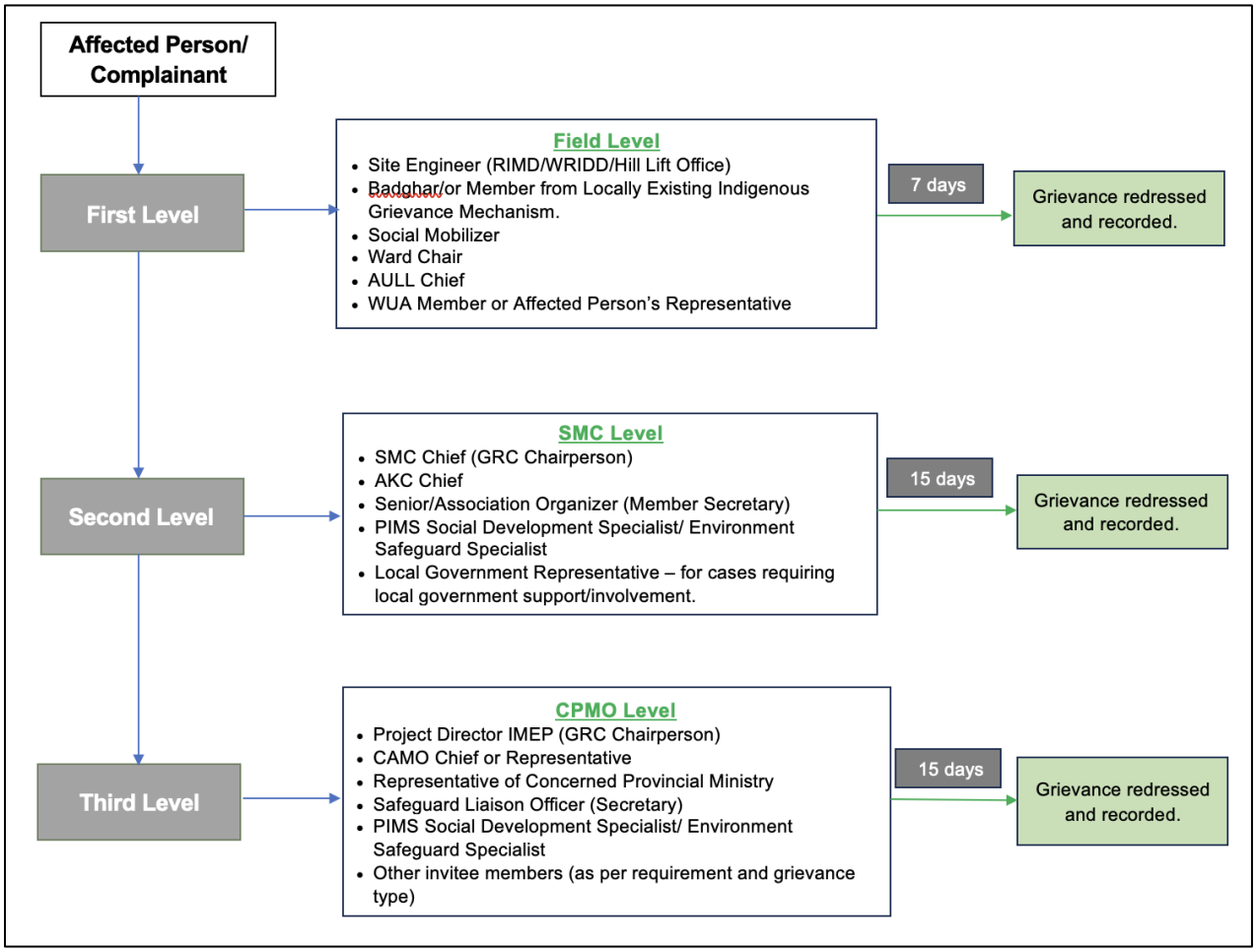
Anonymity and Security. To remain accessible, open, and trusted, the GRM ensures that the identities of those complaining are kept confidential. This encourages people to openly participate and file grievances. Careful documentation of the name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area and the grievance detail will be maintained by the project. The project will ensure a system for grievance tracking and monitoring, response accorded, its resolution status and closure. SMC together with CPMO's Social Development Specialists will have the joint responsibility for timely grievance redressal on safeguards and gender issues and for registration of grievances, related disclosure, and communication with the aggrieved party.

Institutional Capacity Building. Through the GRM, the SMC and CPMO will strengthen channels of communication and mechanisms for grievance redress at the community/project area level.

B. Grievance Redress Arrangements and Role Functions

65. The GRM is a three-tier arrangement that facilitates time -bound grievance resolution at each level. Responsible persons and agencies/offices are identified to address grievances and seek appropriate advice at each stage, as required. Institutional arrangements, including constitution of grievance redress committees (GRC) at various levels, will be ensured to function throughout the project duration. The CPMO shall ensure the constitution of these committees and oversee the implementation of grievance redress processes, including adherence to time limits, record keeping, and documentation at each level.

Figure 3. Grievance Redress Mechanism



66. **Field Level:** The first level of the GRM will function at the project location/site (Field Level). The field-level arrangement will consist of ground implementation staff led by the project's Site Engineer, contractor's engineer/representative a Community Organizer, a Baghar[8] or a member from a locally existing indigenous grievance settlement mechanism, or a representative from local community and a representative of the affected persons. All minor issues and those perceived as immediate and urgent by the complainant will be resolved at the field level itself (within 7 days). For cases requiring input and involvement of local bodies, the field-level grievance cell will be strengthened by including a Ward Chair. The cell will consist of at least one female member and one representative from the local indigenous community. In cases of larger issues that cannot be resolved at the field level, the matter will be escalated to the CMC level GRC, the second level arrangement. The Community Organizer will be responsible for documentation and record-keeping. A summary of grievance records and resolution status will be submitted to the CPMO monthly. The province-based PIMS Social Development Specialist will both monitor and provide guidance and support to the field staff in grievance redress and its record-keeping.

[8] The Barghar is an elected/selected chief of a Mauja/village or settlement for the period of one year and responsible for the wider range of activities such as organization and management of cultural traditions of the community, mobilization of villagers for repair and maintenance of canal and development work, resolve all social conflicts etc. The Badghar system only exists in Rajapur area and may not be applicable to another project component

67. **SMC Level:** A GRC will be established at the SMC level, headed by the SMC chief. The Senior/Association Organizer of the Institutional Development section of WRIDD/SD/RIMD will function as the member secretary of the GRC, supported by the PIMS Social Development Specialist/Environmental Safeguard Specialist. The committee will include a representative from concerned local government, AKC Chief, as per the nature of the grievance. All grievances that cannot be resolved at the field level and those directly registered at this level will be addressed by this body within 15 days of complaint receipt. Proper documentation of grievances (including records of grievances redressed at the field level) will be maintained by the Institutional Development unit of WRIDD/RIMO and offices responsible for hill lift schemes. In cases where the GRC at this level is unable to resolve a grievance within the stipulated period, the case will be escalated to a CPMO level GRC for resolution. The SMC level will also maintain follow-up for each grievance, periodically disseminate information to complainants on the status of their grievance and record their feedback (satisfaction/dissatisfaction and suggestions).

68. **CPMO Level**: The arrangement at the highest level will involve the constitution of a project-level committee headed by the CPMO PD as the chairperson. The committee will receive support from the Social Development Specialist/Environmental Safeguard Specialist or technical experts relevant to grievances, CAMO Chief or representative, representative, or senior officer from the concerned provincial ministry, and other members as required based on the type of grievance[9]. All grievances that cannot be resolved by the SMC level GRC will be brought to the attention of this body, seeking its advice or referral for resolution at this level. Grievances received or referred to this committee will be resolved within 15 days. Periodic information will be provided to complainants on the resolution status of their grievance. The Safeguard Liaison Officer will act as the secretary for the CPMO level committee and will also be responsible for compiling grievance redress records, including project-level documentation and reporting.

69. The affected person/complainant shall have access to the country's legal system at any stage. Furthermore, accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

70. **ADB Accountability Mechanism.** At any point during the project cycle, any affected person can directly write to the Complaint Receiving Officer of ADB's Accountability Mechanism at ADB headquarters. However, before submitting a complaint to the Accountability Mechanism, affected/aggrieved person/s should make a good faith efforts to resolve their problems by working with the concerned ADB operations department and/or Nepal Resident Misson (NRM). If they are still dissatisfied only after doing so, the Accountability Mechanism considers the processing of the complaints .[1] The complaint can be submitted in any of the official languages of ADB's developing member countries. Information on ADB Accountability Mechanism will be included in the project-relevant information to be distributed to the affected communities.

71. **Consultation arrangements and information dissemination**. The GRM will adopt a consultative and participatory approach to grievance resolution, which may, in some cases, require one-to-one consultation with individual complainants or the aggrieved community. Furthermore, the CPMO with support from the PIMS Social Development Specialist/Environmental Safeguard Specialist will be responsible for disseminating information to affected persons on the grievance redressal procedure, ensuring that the affected communities and other concerned stakeholders understands the grievance redress mechanism and process. Adequate consultations, meetings, and public awareness campaigns will be conducted in this process. Information on grievances

[9] In case of complaints related to IPs, the CPMO level GRC will include representative from the affected indigenous people's community or group.

received and responses provided will be documented and reported back to the affected persons. All grievances will be treated with utmost confidentiality, and the identity of the complainant will not be disclosed without their written consent. A sample grievance registration form is provided in **Appendix 5.**

72. **Record Keeping.** Records of all grievances received, including contact details of complainant, date the complaint was received, nature of grievance, agreed actions and the date these were taken, and outcome will be maintained by the CPMO (with the support of PIMS Social Development Specialist/Environmental Safeguard Specialist). As part of record-keeping and reporting practices, information on grievance tracking will also be maintained. Grievance reporting by SMC and CPMO at their respective levels will include information for the reporting period and the cumulative data on select parameters such as total grievances received, redressed, pending, etc., since the project's inception. A summarized information will be included as part of periodic reporting by the CPMO, with support from PIMS, to ADB.

73. **Periodic review and documentation of lessons learned**. The CPMO will periodically review the functioning of the GRM and record information on the mechanism's effectiveness, particularly in preventing and addressing grievances within the project.

74. **Costs**. All costs involved in resolving the complaints (meetings, consultations, communication, and reporting/information dissemination) will be borne by the project.

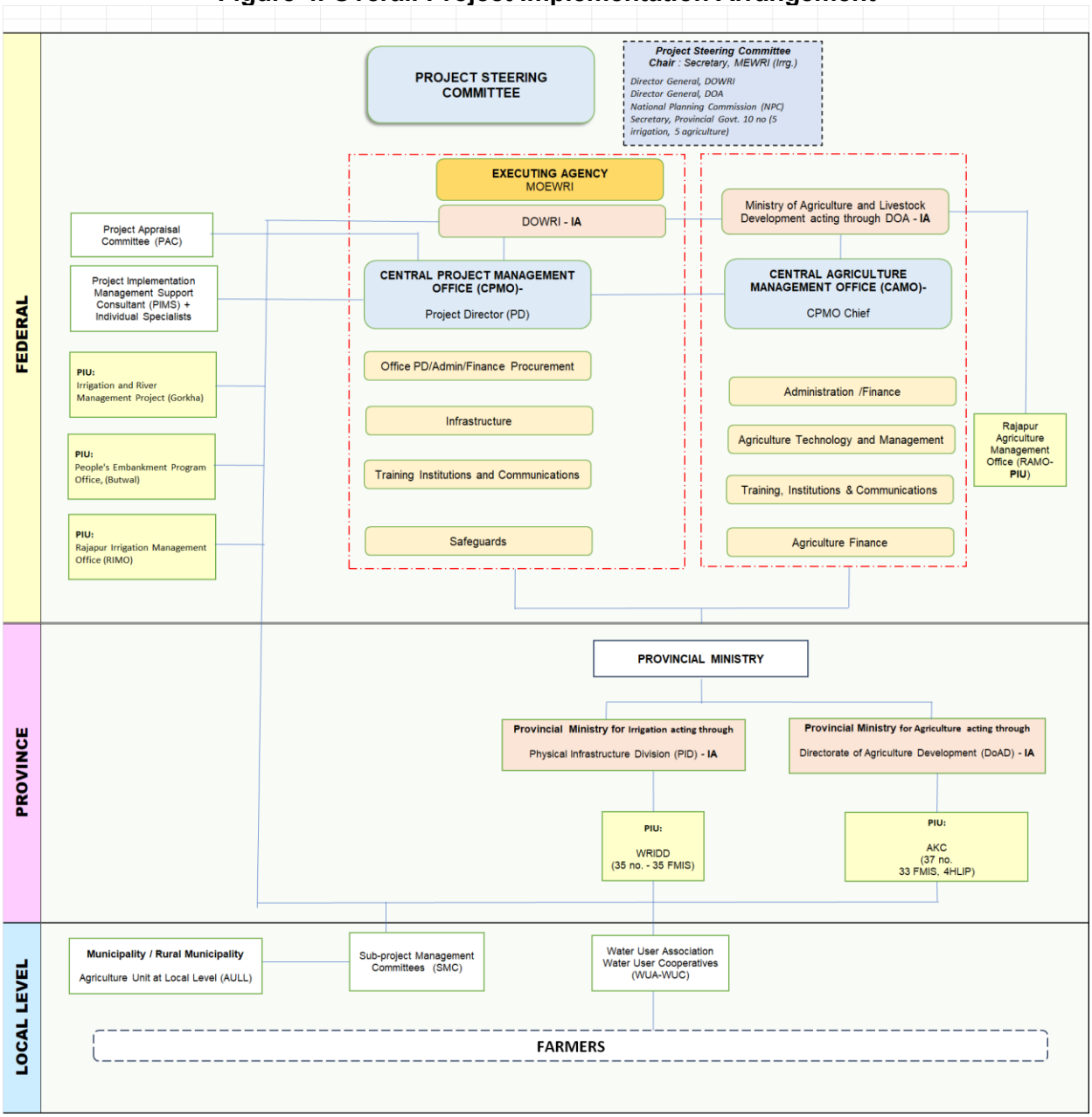
VII. INFORMATION DISSEMINATION

75. The IR-DDR will be made available in the offices of the WRIDDs, Rajanpur Irrigation project office and hill lift implementation offices. Additionally, the document will also be posted on IMEP and ADB website for easy access to all stakeholders including the local communities of the project area. In addition to this, periodic consultation and information sharing will be continued following the information and communication strategy of the project.

VIII. IMPLEMENTATION ARRANGEMENT

76. The executing agency of the project is the Federal Ministry of Energy, Water Resources, and Irrigation (MOEWRI) through the Department of Water Resources and Irrigation (DWRI). The overall safeguard activities will be implemented and monitored by Central Project Management Office at DWRI, District based Water Resource and Irrigation Development Divisions under Provincial Government; Irrigation and River Basin Management Office Gorkha and People's Embankment Program Office Butwal for HLIP and Rajapur Irrigation Management Office for RIP. The agriculture component will be implemented by the central agriculture management office and AKCs under provincial government. These project management units will also be responsible for the implementation of RP activities.

Figure 4. Overall Project Implementation Arrangement



77. **Social Safeguards Roles and Responsibilities.** The CPMO will engage a Safeguard Liaison Officer (SLO), who will be responsible for overall safeguards coordination across the project. The SLO will be supported by six Social Development Specialist of the PIMS. The project will also engage 122 Community Organizers to facilitate social mobilization, consultation, and capacity support at the subproject level for a period of two years.

78. **Safeguards Liaison Officer**

(i) Design and organize capacity building and training programs for safeguards staff as well as the other project staff at all levels.

(ii) Lead the preparation of annual safeguard implementation program and include in CPMOs' annual program and budget.

(iii) Organize formal communications required for awareness campaigns, consultations and participation programs and participate in all consultations/meetings.
(iv) Ensure adoption and compliance of resettlement framework in all project activities.
(v) Endorse all RP, IPP and corrective action plan, if any, prepared under the project to ADB and obtain timely approvals.
(vi) Submit semi-annual social safeguards monitoring reports (SMRs) to ADB and obtain timely approvals.
(vii) Monitor the overall implementation of RP and IPP.
(viii) Ensure payment to all affected persons is completed before commencement of civil works.
(ix) Ensure timely resolution of complaints and maintain an updated record of complaints.
(x) Monitor implementation of GESI-AP.
(xi) Ensure that RP implementation and monitoring are integrated in the Project's information and technology monitoring system.
(xii) Disclose the RF, RP, IPP, IR-DDR and social safeguards monitoring reports.
(xiii) Ensure that the land donation process is verified and certified by an independent third-party.

79. **PIMS Social Development Specialist – (1 position in CPMO)**

(i) Prepare and update the RP and IPP based on detailed designs and RF prepared for the project.
(ii) Ensure the timely disclosure of draft and final RP and IPP in locations and formats accessible and understandable to the public and affected persons.
(iii) Guide the CPMO to coordinate across the project components in the overall management, implementation, monitoring and reporting of social safeguards compliance.
(iv) Provide oversight on the social safeguard management aspects of projects and ensure that RP and IPP and impact avoidance measures outlined in the RF are implemented by project implementation offices and contractors.
(v) Review, monitor, and evaluate the effectiveness of the implementation of RP and IPP, and recommend necessary corrective actions.
(vi) Facilitate as a resource person in social safeguards training activities conducted by CPMO for the project implementation offices, contractors, and WUAs for capacity building to implement the RP and IPP.
(vii) Guide the CPMO and other project implementation offices in addressing any grievances brought about through the grievance redress mechanism in a timely manner.
(viii) Consolidate monthly and quarterly social safeguard monitoring reports (including specific activities proposed under IPP) from FMIS, HLIP and RIP and submit quarterly and semi-annual social safeguard monitoring reports to ADB through CPMO.
(ix) Guide the CPMO to prepare and implement a community awareness and participation plan and support in preparing other information and campaign materials.
(x) Lead implementation, monitoring and reporting IPP and prepare monitoring reports against the indicators outlined in IPP
(xi) Identify any non-compliances and assist in preparing time-bound corrective action plans, if and as required.

80. **PIMS Social Development Specialist – (3 positions in FMIS)**

(i) Assist WRIDD/AKC in overall management, implementation, monitoring, and reporting of social safeguards compliance.
(ii) Ensure that information on safeguard planning and implementation is updated and submitted to CPMO with the support of WRIDD and the contractor.
(iii) Hold consultations with beneficiary farmers, update IR-DDR (if required), and submit it to CPMO for review and approval, then further submission to ADB.
(iv) Be responsible for the day-to-day implementation and monitoring of IPP.
(v) Conduct continuous public consultations and information disclosure with the support of Community Organizers.
(vi) Ensure timely submission of monthly and quarterly progress reports, as well as semi-annual social monitoring reports to CPMO, with the support of WRIDDs.
(vii) Facilitate the establishment of project-GRM at the subproject and SMC level, ensuring it is fully functional prior to or during the award of the first contract, or within three months of loan effectiveness, whichever is earlier. Address any grievances brought about through the grievance redress mechanism in a timely manner as per the RF.
(viii) Identify any non-compliances and assist in preparing time-bound corrective action plans, if and when required.
(ix) Maintain and update a subproject-wise database of grievance-related issues and report to CPMO for timely actions.
(x) Lead implementation, monitoring and reporting of IPP and prepare monitoring reports against the indicators outlined in IPP
(xi) Support WRIDDs/AKC/WUA in all awareness, training, and capacity-building activities related to social safeguards and GESI-AP implementation.

81. **PIMS Social Development Specialists – (1 position in HLIP)**

(i) Update sample RP of HLIP in Baireni based on detailed designs and prepare new RPs for remaining HLIPs in accordance with the RF prepared for the project.
(ii) Ensure that all conditions in the RP and IPP are implemented and/or complied with before the execution of project works.
(iii) Supervise voluntary land donation and temporary economic impacts with crop compensation and provide any assistance required for conducting independent third-party verification.
(iv) Support HLIP implementation offices in supervising voluntary land donation and compensation-related surveys, including: (a) census/inventory of loss surveys for permanent and temporary land use/impacts; and (b) socio-economic surveys of affected landowners donating lands for the reservoir tank if required.
(v) Assist implementation offices in the implementation of the community awareness and participation plan in the HLIP area.
(vi) Conduct continuous meaningful consultations and information disclosure with the support of the Community Organizer. e courses for training contractors, preparing them for resettlement RP implementation, social safeguard monitoring requirements, and taking immediate action to mitigate IR impacts during RP implementation.
(vii) Ensure timely submission of monthly, quarterly progress reports, and semi-annual social safeguards monitoring reports to CPMO, with the support of implementation offices.
(viii) Facilitate the establishment of project-GRM at the subproject and SMC levels and ensure it is fully functional prior to or during the award of the first contract or within

three months of loan effectiveness, whichever is earlier. Address any grievances brought about through the grievance redress mechanism in a timely manner as per the RF.

(ix) Identify any non-compliances and assist in preparing time-bound corrective action plans, if and when required.

(x) Lead implementation, monitoring and reporting of IPP and prepare monitoring reports against the indicators outlined in IPP

(xi) Maintain and update project component-wise database of resettlement/grievance-related issues and inform implementation offices for timely actions.

(xii) Support CPMO/CAMO/HLIP implementation offices/AKC/WUA in all awareness, training, and capacity-building activities related to social safeguards and GESI-AP.

82. **PIMS Social Development Specialists – (1 position in RIP)**

(i) Assist the Rajapur Irrigation Management Office (RIMO) in overall management, implementation, monitoring, and reporting of social safeguards compliance.

(ii) Ensure that information on safeguard planning and implementation is updated and submitted to CPMO with the support of RIMO and contractors.

(iii) Hold consultations with beneficiary farmers, update IR-DDR (if required), and submit it to CPMO for review, approval, and further submission to ADB.

(iv) Be responsible for the day-to-day implementation and monitoring of IPP.

(v) Conduct continuous public consultations and information disclosure with the support of Community Organizer

(vi) Ensure timely submission of monthly, quarterly progress reports, and semi-annual social monitoring reports to CPMO, with the support of RIMO.

(vii) Facilitate the establishment of project-GRM at the project and SMC levels and ensure it is fully functional prior to or during the award of the first contract, or within one month of loan effectiveness, whichever is earlier. Address any grievances brought about through the grievance redress mechanism in a timely manner as per the RF.

(viii) Identify any non-compliances and assist in preparing time-bound corrective action plans, if and when required.

83. **Community Organizer (122 Positions: 100 FMIS, 12 HLIP and 10 in RIP)**

84. The Community Organizers will work closely with the WUA, beneficiary farmers, and implement as instructed by the Social Development Specialist, especially in consultation, training, awareness, institutional development, and coordinating various activities at the subproject level. A total of 122 positions of community organizer will be deployed by concerned project implementation offices. The main duties include:

(i) Assist the Social Development Specialist in organizing public consultations to disseminate project information and GRM, ensuring the participation of women, the poor, Dalit, and IP beneficiary households at the subproject level.

(ii) Assist the Social Development Specialist in identifying vulnerable households (marginal farmers, female-headed households, and landless sharecroppers) and conducting separate meetings to ensure their needs are fully incorporated into project-supported activities.

(iii) Support the implementation of training, ensuring the representation of women, IPs, Dalit, and marginal farmers, and maintaining records disaggregated by sex, and caste.

(iv) Facilitate CAMO/AKC in the implementation of agriculture development programs, ensuring that women, small and marginal farmers are consulted in the process, and

data on farmer group composition are collected and maintained, disaggregated by sex, caste.

(v) Support WUAs in their works related to WUA formation/reorganization and mobilization, conduct meetings, WUA contribution, monitoring of construction works, and mobilization of farmers, linking them to AKC and AULL.

(vi) Support the Social Development Specialist in conducting safeguard and gender capacity and sensitization training for WUA executives at the community level.

(vii) Support the Social Development Specialist in identifying the need for voluntary land donation for irrigation subproject rehabilitation and discussing arrangements with beneficiaries for such land donation.

(viii) Collect and maintain disaggregated socioeconomic data in close coordination with WUA and facilitate WUA in attaining equitable representation of Dalit, IPs, and marginal farmers in the WUA executive committee.

85. **PIU Safeguard Desk**. The Chief of the PIU or Engineer designated as site in-charge will act as safeguard focal person (SFP) at PIUs. The SFP will be supported by the Senior/Association Organizers of PIU and community organizer deployed at subproject level. The contractor will appoint a safeguard and safety assurance officer in each contract package, as provisioned in the contract. PIMS provincial social development specialist and environment monitors will provide technical assistance while implementing safeguard related activities. The safeguard desk at PIU will be responsible for:

(i) Lead implementation of IPP/RIP/EMP and monitor compliance with project safeguard requirements on day-to-day basis, provide timely corrective measures to address the issues, if any.

(ii) Support PIMS social development consultant by providing field level information to consolidate safeguard monitoring report.

(iii) Organize or support organizing periodic consultation with beneficiaries/affected persons.

(iv) Institutionalize GRM at PIU (SMC level), support/facilitate beneficiary farmer in registration grievance, if any.

(v) Collect/ maintain project induced beneficial impacts (training participants by social category, disaggregated information on benefits generated by employment opportunities

86. **Contractor**

(i) In close coordination with the project implementation offices and the PIMS Social Development Specialist/Environmental Safeguard Specialist, finalize detailed designs while adhering to the social safeguard principles adopted for the project.

(ii) With the assistance of the PIMS Social Development Specialist/Environmental Safeguard Specialist, ensure that all design-related measures (e.g., special considerations for vulnerable populations related to project locations or design, mitigation measures for affected persons, etc.) are integrated into project designs.

(iii) Conduct joint walk-throughs with design engineers from project implementation offices and the PIMS Social Development Specialist/Environmental Safeguard Specialist at sites/sections ready for implementation. Assist in identifying the need for detailed measurement surveys and support PIMS in jointly conducting/updating detailed measurement surveys and census surveys to arrive at the final inventory of loss.

(iv) Support PIMS Social Development Specialist in updating the draft RP, IRDDR and IPP for submission to CPMO and to ADB for review and approval.

(v) Ensure strict adherence to agreed impact avoidance and mitigation measures

outlined in the RP and IPP during implementation.

(vi) Assist with grievance redressal and ensure recording, reporting, and follow-up for resolution of all grievances received.

(vii) Submit monthly progress reports including safeguards, health and safety, and sex-disaggregated data as required for monitoring.

IX. CONCLUSION

87. Findings from field visit, consultations, initial screening of impacts on involuntary resettlement and IPs, and review of project documents confirm that the project is not anticipated to result any physical displacement (relocation, loss of residential land, or loss of shelter) or economic displacement, except for the likelihood of temporary income loss while laying distribution pipelines in farm fields under HLIP. The component-wise summary, along with the need for additional safeguards document, is presented in Table 25, while conclusions are discussed in subsequent paragraphs.

Table 25. Summary of IR and IP Impacts with Further Actions

S. N	Project component	IR Impacts	Further Actions/ Social safeguard document requirements	IP impacts
1	RIP	None	This IR-DDR has been prepared to confirm the absence of IR impacts under RIP. However, meaningful consultations will continue, and if unanticipated impacts arise, an RP or RIPP will be prepared.	The project will have no adverse impacts on IPs. IP farmers will benefit from all project components, and an IPP has been prepared to ensure their inclusion in project activities and benefits from the project activities.
2	HLIP	The land proposed for the construction of 11 reservoirs is government-owned. The land for one reservoir is voluntarily offered by the user; hence, land acquisition is not required. Tube well drilling points are yet to be identified; therefore, they will be assessed at a later stage. Pipelaying may result in the loss of standing crops, thus triggering temporary IR impacts. This will require real-time assessment of the losses of standing crops to measure the temporary IR impacts once the detailed design has been finalized.	An RF has been prepared to guide DWRI in assessing IR impacts for the components and 11 HLIP locations that are to be finalized or if locations change during implementation. An RP for Baireni HLIP has been prepared. This will be updated and finalized once the detailed design is completed.	
3	FMIS	None	This IR-DDR has been prepared to confirm the absence of IR impacts under FMIS. However, meaningful consultations will continue, and if unanticipated impacts arise, a resettlement plan will be prepared.	

A. Rajapur Irrigation Project

88. The design and intervention footprint are clear in RIP. All proposed interventions will be

limited to the existing canal system of the RIP, as project components are owned by the government or donated voluntarily by the beneficiaries of the system. Hence, it is confirmed that the intervention will not result in any IR impacts.

89. An overarching majority (87%) of project beneficiaries comprised of IP communities. The project is anticipated to have beneficial impacts on IPs through improved water supply services and advanced agriculture technologies. Additionally, the IPP will ensure the participation and inclusion of IPs, ensuring they receive project benefits in a culturally appropriate manner.

B. Hill Lift Irrigation Project

90. In 11 out of the 12 systems, all land required for the construction of storage tanks and tubewell drilling is proposed on public land. In one system, the construction of a reservoir tank, (50 m^2) will be on land voluntarily donated by the owner, who is also a beneficiary of the system. The doner is also the beneficiary of the system. Hence, the project will not require permanent land acquisition.

91. Distribution pipelines will be laid underground in the project area, which is predominantly rural. The possibility of having standing crops during pipe laying could have some temporary impacts. Although during the field visit almost all proposed command area (except the four-system having surface irrigation services) was fallow. However, the possibility of standing crops in pipelaying alignments cannot fully be ignored. This will require the project to conduct real time assessment of losses of standing crops to measure the temporary involuntary resettlement impacts due to pipelaying works.

92. Because of the uncertainty related to the assessment of farmer's acceptability, location of the tubewell, need for reassessing the land for overhead tank, construction of hill lift schemes has been scheduled in priority 1b. (none of the activities of hill lift system are included in the scope of advance procurement). For IR assessment, an RF has been prepared to guide the project in safeguard assessment and planning at a later stage, once the schemes qualify after the acceptance assessment.

93. The team observed that the command area proposed is being served by farmer managed irrigation systems which may require to revisit the overall system design as well as to identify the location for reservoir technically suitable in changed context. In such cases, further assessment of the land availability will be essential.

94. Around 54% of the beneficiaries of the hill lift schemes belong to IP communities. Based on the review of the documents, field visit and assessment of the likely impacts it is envisioned that IP population will have beneficial impacts due to access to irrigation facilities in their dry land. In addition to irrigation services, IPP has been prepared to enhance participation and inclusion of indigenous people in project activities. It has been confirmed that no direct or indirect impacts to the dignity, human rights, livelihood systems or territories or natural or cultural resources that are used, owned, occupied, or claimed by indigenous peoples as their ancestral domain or asset, is anticipated.

95. The local governments across the country are providing public land for the construction/development of hospitals schools and other public utilities like drinking water, irrigation etc. Considering the positive impacts to and welfare of the entire society, disturbance on development/construction activities by local communities has not appeared and the decision process seems largely been accepted by all. However, for long term sustainability and ownership over the infrastructure, the project should initiate to obtain the right to use of both public and forest

land.

96. The implementation of the HLIP is scheduled in priority 1b which may take longer time to initiate. If the actual field implementation and design are changed, the impacts of the project will have to be reassessed upon finalization and approval of detailed design in view of facilities, scope of work including the ground situation of that particular time.

C. Farmers Managed Irrigation System

97. The design and intervention footprint are clear in FMIS. All proposed interventions will be limited to the existing canal system. Hence, the project will not require land acquisition.

98. The review of the document, field visit and assessment of the likely impacts indicate that the IP population will benefit from access to irrigation facilities coupled with knowledge of improved agriculture practices.

D. Indigenous Peoples

99. Around 52% of the beneficiaries belongs to indigenous communities (87% in Rajapur; 54% in Hill left and 32% in FMIS). The project intervention in RIP and FMIS will be limited to the modernizing/upgrading of the existing canal systems which are being utilized by the beneficiaries for a long time. The intervention will not result in any adverse impacts. In proposed HLIP the interventions are limited to drilling the tubewell and construction of reservoir in GON land which is not claimed or used by IP as their ancestral domain. The availability of irrigation services in their dry land will help advance agriculture practices for better livelihood. The review of the document, field visit and assessment of the likely impacts envision that the IP population will experience beneficial impacts such as:

(i) The project will have beneficial impacts on the recipient communities, including Janajatis/IPs, through access to improved irrigation facilities, reduced annual labour contribution requirements resulted from system modernization, and benefits from the inclusive provisions proposed under GESI AP.
(ii) The project's inclusive policy will ensure the representation of IPs in WUA and WUC governance structure and farmer's groups created for the implementation and dissemination of improved agriculture practices. Benefit will also be realized form the inclusive provisions proposed under GESI AP
(iii) The project beneficiaries, including IPs, will gain improved knowledge of agricultural technologies through farmer field schools, on-farm irrigation infrastructure (e.g., sprinkler, drip irrigation) and agricultural infrastructure

100. Moreover, an IPP has been prepared to ensure the inclusion of IP communities in project activities and they receive culturally appropriate social and economic benefits.

E. Modern Agriculture and Value Chain Facilities

101. The location for rehabilitation or construction of agriculture facilities like marketing, storage, and processing units will be finalized after loan approval. After finalization of locations, the IR and IP impact will be assessed following the process outlined in resettlement Framework prepared for this project.

F. Project categorization

102. Due diligence confirms that the project intervention in RIP and FMIS will not involve land acquisition as they are proposed on existing canal systems; hence, this IR-DDR has been prepared. In hill lift component, the tubewell drilling and reservoir construction are proposed on government land and will not entail land acquisition. However, the pipeline laying work may result in temporary income loss due to the impact on standing crops. Therefore, RP has been prepared for Baireni HLIP.

103. The project is anticipated to have positive impacts on IPs due to access to improved irrigation facilities, reduced annual labour contribution requirements resulted from system modernization, benefits from built-in training and capacity support for agriculture advancement and, benefit from the inclusive provisions proposed under GESI AP.

104. Thus, the project safeguard classification is confirmed as **category B** for both IR (due to the likelihood of temporary income loss from pipe laying work in hill lift irrigation schemes) and IP (due to positive impacts to IPs) safeguards.

X. RECOMMENDATION

105. Considering the readiness status of the hill lift irrigation component, such as the unknown precise location of tubewell drilling points, the need for real-time assessment of standing crops, and the assessment of farmers' acceptability, it is recommended to use the RF in preparing the RP or RIPP.

106. The pipeline laying work under the HLIP component is likely to involve temporary income loss due to the loss of standing crops; thus, an RP or RIPP must be prepared to mitigate these temporary IR impacts and disclosed before concluding the procurement of civil works.

107. Further meaningful consultation and due diligence in the HLIP must continue until the project footprints (number and location of tubewells in each scheme, size of the reservoir tank, distribution network, etc.) are finalized. All legal documents related to land ownership or pertinent documents of project components financed under the ADB loan must be obtained from GON offices and included in the updated IR-DDR.

108. The project should assess farmers' acceptability, the location of the tubewell, reassess the land for the reservoir tank, and reassess the command area of the system with surface irrigation facilities to list qualifying schemes for further safeguards assessment. All subprojects, including agriculture facilities, will be screened using the IR and IP impact categorization checklists prepared for the project.

APPENDIX 1: LIST OF IRRIGATION SYSTEMS

S. No	Project Component	Province	Ecological Belt	District	Rural/Municipality	Wards	Name of ISP	Implementation priority	CCA
1	FMIS	Madhesh	Terai	Bara	Mahagadhimai Municipality	5	Jokaha Dora ISP	Priotity 1a:	300
2	FMIS	Madhesh	Terai	Bara	Karaiyamai RM	1	Bhaluhi Suklaiya Patti	Priotity 1a:	360
3	FMIS	Madhesh	Terai	Mahottari	Balawa Municipality	11	Rato Bhagwatipur ISP	Priotity 1b	515
4	FMIS	Madhesh	Terai	Mahottari	Bhangaha	7	Ladakawa ISP	Priotity 1a:	345
5	FMIS	Madhesh	Terai	Mahottari	Balawa Municipality	8	Chakkargh atta ISP	Priotity 1a:	670
6	FMIS	Madhesh	Terai	Mahottari	Loharpattei and Jaleshwor NP	9	Rato Kokila ISP	Priotity 1b	1120
7	FMIS	Madhesh	Terai	Sirha	Sukhipur-8,10, 6 & 4	8,10, 6 & 4	Gagan ISP	Priotity 1a:	835
8	FMIS	Madhesh	Terai	Sirha	Laxmipur patari	4	Baburam	Priotity 1b	400
9	FMIS	Madhesh	Terai	Sirha	Laxmipur patari	2	Saraswati	Priotity 1b	276
10	FMIS	Madhesh	Terai	Sarlahi	Haripurwa	6	Haripurwa ISP	Priotity 1a:	414
11	FMIS	Madhesh	Terai	Sarlahi	Bansbariya RM	4 & 5	Laukat Dhangada ISP	Priotity 1a:	375
12	FMIS	Madhesh	Terai	Rauthat	Garuda	9	Dorapaini Raghunathpur ISP	Priotity 1a:	255
13	FMIS	Madhesh	Terai	Rauthat	Phatuwa, Bijayapur	11	Aruwa Khola ISP	Priotity 1a:	430
14	FMIS	Madhesh	Terai	Rauthat	Fatuwa Bijaypur	11	Aruwa Aknowa ISP	Priotity 1b	264
15	FMIS	Madhesh	Terai	Dhanusha	Bideha	2	Soharna ISP	Priotity 1a:	430
16	FMIS	Madhesh	Terai	Dhanusha	Bideha	1 & 4	Bachharaja ISP	Priotity 1a:	325
17	FMIS	Madhesh	Terai	Dhanusha	Kamla	2	Let ISP	Priotity 1b	250
18	FMIS	Madhesh	Terai	Parsa	Jagarnathpur RM	4	Hadahi ISP	Priotity 1a:	275
19	FMIS	Madhesh	Terai	Parsa	Paterwa sugauli RM	2	Gadi ISP	Priotity 1a:	280
20	FMIS	Madhesh	Terai	Parsa	Jagarnathpur	1	Oriya	Priotity 1b	145
21	FMIS	Madhesh	Terai	Parsa	Parsagadhi	6	Megha	Priotity 1b	200
22	FMIS	Madhesh	Terai	Saptari	Dakneswari	9	Kajra ISP	Priotity 1a:	400
23	FMIS	Madhesh	Terai	Saptari	Mahadeva RM	2	Jita Khola ISP	Priotity 1a:	227
24	FMIS	Bagmati	Mountain	Dhading	Thakre RM	8	Sopyang Khola Gatta Ko Kulo ISP	Priotity 1a:	50
25	FMIS	Bagmati	Mountain	Dhading	Dhunibesi Municipality	9	Jhagadiya Sikre ISP	Priotity 1a:	45
26	FMIS	Bagmati	Mountain	Dhading	Gajuri Rural Municipality	8	Parbang ISP	Priotity 1b	100

S. No	Project Component	Province	Ecological Belt	District	Rural/Municipality	Wards	Name of ISP	Implementation priority	CCA
27	FMIS	Bagmati	Mountain	Dhading	Thakre RM	4&5	Liti ISP	Priotity 1b	110
28	FMIS	Bagmati	Mountain	Dhading	Gajuri Rural Municipality	3	Dharmasala ISP	Priotity 1b	120
29	FMIS	Bagmati	Mountain	Dolkha	Baiteshwor	5&6	Nimkot Besi ISP	Priotity 1a:	50
30	FMIS	Bagmati	Mountain	Dolkha	Melung RM	4&5	Nause Besi Kulo ISP	Priotity 1a:	72
31	FMIS	Bagmati	Mountain	Dolkha	Melung Rural Municipality	1	Ghyang Khola ISP	Priotity 1b	301
32	FMIS	Bagmati	Hill	Kavre	Panchkhal	6	Barasai Saathi ISP	Priotity 1a:	58
33	FMIS	Bagmati	Hill	Kavre	Bhumlu RM	2	Salleni Khola Pahari Basti ISP	Priotity 1b	50
34	FMIS	Bagmati	Hill	Kavre	Mandan Deupur	6	Muhane Mul Kulo ISP	Priotity 1a:	65
35	FMIS	Bagmati	Hill	Kavre	Panchkhal Municipality	3,5	Kumaitaar ISP	Priotity 1b	25
36	FMIS	Bagmati	Hill	Sindhuli	Dudhauli Municipality	5	Purwari Pachiyari ISP	Priotity 1a:	170
37	FMIS	Bagmati	Hill	Sindhuli	Tinpatan	2	Sakhamadi Chadaha ISP	Priotity 1a:	90
38	FMIS	Bagmati	Mountain	Sindhupalchowk	Chautara Sangachowgadi	4	Pokhre Tipling Khola Siran Kulo ISP	Priotity 1a:	65
39	FMIS	Bagmati	Mountain	Sindhupalchowk	Paanchpokhari Thaangpal	6	Mahadev Khola Sisneghari Dittiya ISP	Priotity 1a:	76
40	FMIS	Bagmati	Mountain	Sindhupalchowk	Melamchi	3	Bimreni Dhunge ISP	Priotity 1b	66
41	FMIS	Bagmati	Hill	Lalitpur	Godawari	1 & 2	Godavari (Right) Rajkulo ISP	Priotity 1a:	80
42	FMIS	Bagmati	Hill	Lalitpur	Paanchpokhari Thaangpal	4	Chimti	Priotity 1b	105
43	FMIS	Bagmati	Hill	Makwanpur	Bakaiya RM	6	Chyau Chyau ISP	Priotity 1a:	80
44	FMIS	Bagmati	Hill	Makwanpur	Bagmati RM	4	Bagmati ISP	Priotity 1a:	75
45	FMIS	Bagmati	Terai	Chitwan	Kalika Municipality	8	Majuwa ISP	Priotity 1a:	45
46	FMIS	Bagmati	Terai	Chitwan	Ratnanagar	5	Tarauli ISP	Priotity 1b	80
47	FMIS	Bagmati	Mountain	Rasuwa	Naukunda RM	1	Dhuple Khola ISP	Priotity 1a:	35
48	FMIS	Bagmati	Hill	Nuwakot	Bidur	8	Samari ISP	Priotity 1a:	25
49	FMIS	Bagmati	Hill	Nuwakot	Tadi RM	5	Dorkhu Khola ISP	Priotity 1a:	40
50	FMIS	Bagmati	Hill	Kathmandu	Dakshinkali	8	Phaku Khola	Priotity 1b	30

S. No	Project Component	Province	Ecological Belt	District	Rural/Municipality	Wards	Name of ISP	Implementation priority	CCA
51	FMIS	Bagmati	Hill	Kathmandu	Shankharapur	5	Bishombhar	Priotity 1a:	90
52	FMIS	Bagmati	Hill	Kathmandu	Sankharapur	1	Chisapani Laharedevi ISP	Priotity 1a:	30
53	FMIS	Koshi	Hill	Bhojpur	Bhojpur Municipality	12	Simle Ghatte ISP	Priotity 1a:	25
54	FMIS	Koshi	Hill	Bhojpur	Temkemaiyung RM	2	Yangtang Khola Mailung Kulo ISP	Priotity 1a:	45
55	FMIS	Koshi	Hill	Bhojpur	Temkemaiyung	2	Hinkuwa Khola ISP	Priotity 1b	30
56	FMIS	Koshi	Hill	Dhankuta	Mahalaxmi Municipality	3 & 4	Birendra ISP	Priotity 1a:	106
57	FMIS	Koshi	Hill	Dhankuta	Dhankuta Muncipality	2	Tin Dovane Kerabari ISP	Priotity 1a:	98
58	FMIS	Koshi	Hill	Dhankuta	Mahalaxmi Municipality	2	Chayalu Laktang ISP	Priotity 1b	188
59	FMIS	Koshi	Hill	Dhankuta	Mahalaxmi Municipality	3	Leguwa Khola ISP	Priotity 1b	250
60	FMIS	Koshi	Hill	Ilam	Rong Rural Municipality	2	Mangaltar Dhansar ISP	Priotity 1a:	95
61	FMIS	Koshi	Hill	Ilam	Fakfokathum RM	1	Satake ISP	Priotity 1b	121
62	FMIS	Koshi	Hill	Ilam	Chulachuli RM	6	Nunsari ISP	Priotity 1a:	91
63	FMIS	Koshi	Hill	Ilam	Deumai Municipality	8	Lewa Khola ISP	Priotity 1a:	70
64	FMIS	Koshi	Hill	Ilam	Suryodaya Municipality	3	Runsung ISP	Priotity 1b	70
65	FMIS	Koshi	Terai	Morang	Sunbarshi Municipality	1	Sita Dans Kerkha ISP	Priotity 1a:	370
66	FMIS	Koshi	Terai	Morang	Kerabari RM	6&7	Sira Jimdari ISP	Priotity 1b	300
67	FMIS	Koshi	Terai	Morang	Pathri Sanischare	5,6&7	Adarsa Paini ISP	Priotity 1a:	230
68	FMIS	Koshi	Terai	Morang	Letang Municipality	5,6	Bhuwa ISP	Priotity 1b	225
69	FMIS	Koshi	Terai	Morang	Pathari Sanischare Municipality	2,3 & 7	Indreni ISP	Priotity 1b	200
70	FMIS	Koshi	Hill	Okhaldhunga	Champadevi RM	7	Dhuseni Khola Kangrange Kolchaur Besi ISP	Priotity 1a:	53
71	FMIS	Koshi	Hill	Okhaldhunga	Molung RM	4	Kul Khola ISP	Priotity 1a:	50
72	FMIS	Koshi	Hill	Okhaldhunga	Champadevi RM	9	Thotneri ISP	Priotity 1b	54
73	FMIS	Koshi	Hill	Panchthar	Phidim	11	Khang Khola Tetire	Priotity 1a:	110

S. No	Project Component	Province	Ecological Belt	District	Rural/Municipality	Wards	Name of ISP	Implementation priority	CCA
							Bibire Falate Kulo ISP		
74	FMIS	Koshi	Hill	Panchthar	Miklajung RM	2	Naya Kulo ISP (3.86)	Priotity 1a:	115
75	FMIS	Koshi	Mountain	Sankhuwasabha	Khandbari Municipality	7&8	Pangma Khola Badreni ISP	Priotity 1a:	41
76	FMIS	Koshi	Mountain	Sankhuwasabha	Dharmadevi Municipality	9	Kenwa Khola Fituwa Malibheg ISP	Priotity 1a:	55
77	FMIS	Koshi	Mountain	Sankhuwasabha	Panchakhapan Municipality	2	Thado Khola	Priotity 1b	44
78	FMIS	Koshi	Mountain	Sankhuwasabha	Savapokhari RM	6	Sang Khola	Priotity 1b	38
79	FMIS	Koshi	Mountain	Taplejung	Sirijangha RM	1	Nebu Khola ISP	Priotity 1a:	87
80	FMIS	Koshi	Mountain	Taplejung	Pathibhara Yangbarak RM	1	Khokse Nangkholyang ISP	Priotity 1a:	63
81	FMIS	Koshi	Mountain	Taplejung	Sirijangha RM	1	Major Singh ISP	Priotity 1b	67
82	FMIS	Koshi	Mountain	Taplejung	Aatharai Tribeni Gaunpalika	3	Chuwa ISP	Priotity 1b	90
83	FMIS	Koshi	Hill	Terhathum	Laliguras RM	6&7	Lambu Kulo ISP	Priotity 1a:	300
84	FMIS	Koshi	Hill	Terhathum	Menchhayayem RM	5&6	Maynkhuwa Khola ISP	Priotity 1b	135
85	FMIS	Koshi	Hill	Terhathum	Chhathar RM	1	Teliya Khola ISP	Priotity 1b	150
86	FMIS	Koshi	Hill	Terhathum	Menchhayayem RM	3&4	Guranse ISP	Priotity 1b	85
87	FMIS	Koshi	Hill	Terhathum	Myanglung Municipality	4	Karange ISP	Priotity 1a:	85
88	FMIS	Koshi	Hill	Khotang	Sakela Rural Municipality	1	Sabju Khola Bhalu Khola ISP (4.19)	Priotity 1a:	86
89	FMIS	Koshi	Hill	Khotang	Diprung Chuichumma RM	3	Kharuwa Khola Aek Chhahe ISP (4.69)	Priotity 1a:	234
90	FMIS	Koshi	Hill	Khotang	Diktel Rupakot Majhuwagadi	10	ChimChima Khola ISP	Priotity 1b	53
91	FMIS	Koshi	Hill	Khotang	BarahaPokhari RM	4	Lapuwa Khola ISP	Priotity 1b	85
92	FMIS	Koshi	Terai	Sunsari	Ramdhuni	6 & 7	Kajara Khola Kataghara Bandh ISP	Priotity 1a:	131
93	FMIS	Koshi	Terai	Sunsari	Ramdhuni	7	Shankar	Priotity 1b	72

S. No	Project Component	Province	Ecological Belt	District	Rural/Municipality	Wards	Name of ISP	Implementation priority	CCA
							Beli		
94	FMIS	Koshi	Terai	Sunsari	Itahari	10 & 11	Tengra Khola Sera Bandh ISP	Priotity 1a:	220
95	FMIS	Koshi	Hill	Udaypur	Katari	5	Beladaha ISP	Priotity 1a:	105
96	FMIS	Koshi	Hill	Udaypur	Triyuga N.P.	10	Upper Baruwa ISP	Priotity 1a:	215
97	FMIS	Koshi	Hill	Udaypur	Triyuga N.P	2	Bablya Khola ISP	Priotity 1b	116
98	FMIS	Koshi	Terai	Jhapa	Arjundhara Municipality	2 & 3	Haldar Paini ISP	Priotity 1a:	250
99	FMIS	Koshi	Terai	Jhapa	Mechinagar Municipality	11,12	Hadiya Khola Abi Nahar ISP	Priotity 1a:	265
100	FMIS	Koshi	Terai	Jhapa	Mechinagar Municipality	13 & 14	Pathivara Krishi Kulo (NOT IN SPPR)	Priotity 1b	165
101	Rajapur	Lumbini	Terai	Bardiya	Rajapur Municipality and Gewa RM	All	Rajapur Irrigation Project	Priotity 1a:	14500
102	Hil lift	Gandaki	Hill	Tanahun	Vyas Municipality	10	Baireini Hill lift	Priotity 1b:	49.35
103	Hil lift	Gandaki	Hill	Tanahun	Vyas Municipality	10	Dumsi Hill left	Priotity 1b:	102.2
104	Hil lift	Gandaki	Hill	Lamjung	Madhya Nepal	4	Duipiple hill lift	Priotity 1b:	124.96
105	Hil lift	Gandaki	Hill	Lamjung	Madhya Nepal	4	Sirshaghat Hill left	Priotity 1b:	50.4
106	Hil lift	Lumbini	Hill	Palpa	Rampur Municipality	6	Tilakpur Hill left	Priotity 1b:	105.53
107	Hil lift	Lumbini	Hill	Palpa	Rampur Municipality	6	Pyakluk Hill left	Priotity 1b:	109.73
108	Hil lift	Lumbini	Hill	Palpa	Rampur Municipality	8	Alketar Hill left	Priotity 1b:	157.97
109	Hil lift	Lumbini	Hill	Palpa	Rampur Municipality	10	Ramtar-Kumalgaun	Priotity 1b:	90.55
110	Hil lift	Lumbini	Hill	Palpa	Rambha Rural Municipality	1	Majhigaun Hill left	Priotity 1b:	60.93
111	Hil lift	Gandaki	Hill	Gorkha	Palungtar Municiaplity	7	Chyanglitar Hill Left	Priotity 1b:	415
112	Hil lift	Gandaki	Hill	Tanahun	Byas Municipality	7	Kalesti Hill left	Priotity 1b:	135
113	Hil lift	Lumbini	Hill	Palpa	Rampur Municipality	10	Siko Danda hIll left	Priotity 1b:	14
							Total		33,367

APPENDIX 2: CONSULTATION DETAIL

Rajapur Irrigation System

Table-1: Rajapur Irrigation System - Summary of Public consultation

S. No.	Date and Place	Persons Consulted	Number of Participants		
			Male	Female	Janjati (IP)
1	Rajanpur Municipality office Bardiya, 12 February 2024	- Mayor /deputy mayor and other elected government representatives of Rajapur and Geruwa municipalities - WUA members and beneficiaries of RIP - Staff member of Rajapur irrigation management office - TA social and environment consultant.	10	2	5
2	Geruwa Rural Municipality office Geruwa. 12 February 2024		5	1	3
2	13 February 2024, WUA Main canal committee office, Rajapur		51	12	53
Total			**66**	**15**	**61**

Source: Focus group discussion, February 2024

Key Point Discussed and Findings:

- ADB safeguard requirements on land acquisition, involuntary resettlement, GRM procedures etc. were shared with Municipal authorities and Water User Association (WUA).

- The key intervention sites were visited and confirmed that canal rehabilitation and improvement works will be limited within the existing irrigation canal systems, the intervention will not result in any IR and IP impacts. Likewise, the sections proposed for improvements are free of encumbrances, having no formal or informal use or occupation.

- For further confirmation on the legal status of land, the team requested Rajapur Irrigation Management office to obtain the legal status of the land of the particular sections where interventions are proposed. (even it has existed in canal section)

- Local government and community support was noticed in favor of the proposed intervention.

Rajapur irrigation System- Photographs of consultation and field activities

Consultation with Mayor of Rajapur Municipality

Consultation with Mayor of Geruwa Rural Municipality

Consultation with Bardiya National Park authorities.

Consultation with Rajapur WUA central Committee

Separate Meeting with women WUA member and beneficiaries

Consultation with WUA at headwork site

Existing Intake site – proposed for water regulating gate

Existing approach canal: proposed for improvement

Canal section proposed for cross regulater

River bank near intake: proposed for protection work

Existing Intake of Khairichandan Canal system - Proposed repair and maintenance

Hill Lift Irrigation system

Table 2: Hill lift Irrigation System - Summary of Public consultation

S. N	Date and Place	Persons Consulted	Number of Participants			
			Male	Female	Total	Janjati (IP)
1	15 February 2024 Rampur Municipality	Mayor /deputy mayor and other elected representatives	11	3	14	3
2	15 February 2024 Tilakpur & Pyakluk hill lift scheme Ward -6, Pyakluk	Ward member and beneficiaries of proposed system	5	2	7	2
3	15 February 2024 Akletar Irrigation system Ward -8 Ramtar	Ward member and beneficiaries of proposed system	22	7	29	6
4	16 February 2024 Majhigaun Lift system Ward -1 Rambha RM, Hungi	Ward member and beneficiaries of proposed system	8	3	11	0
5	16 February 2024 Ramtar-Kumal Gaun 2and Siko Danda schemes Ward -8 Rampur	Ward member and beneficiaries of proposed system	29	2	31	9
7	17 February 2024 Sirsaghat scheme Ward -4 Madhya Nepal Municipality	WUA representatives, beneficiaries of proposed system	26	18	54	24
7	17 February 2024 Baireni & Dumsi scheme Byas Municipality - 10	WUA representatives, beneficiaries of proposed system	7	0	7	0
Total			**108**	**35**	**153**	**44**

Source: Focus group discussion, February 2024

Key Points Discussed and Findings.

a) Rampur Municipality, Tilakpur and Pyakluk schemes: Rampur Municipality Ward no 6

- ADB safeguard requirements on land acquisition, involuntary resettlement, GRM procedures, etc. were shared with Municipal authorities and beneficiaries of proposed hill lift systems.
- The mayor of Rampur municipality suggested organizing a series of discussion/consultations to assess the acceptability of the system. The municipal authority advises to confirm whether the farmers will be ready to accept the system having higher O&M cost when they have access to surface irrigation?

- Two proposed hill lift schemes lie in the existing command area of Rampurphant irrigation system. In addition to this, four small FMIS are also operational in the same area. The project needs to revisit the scope of both Hill lift schemes.

- A small portion of the proposed area (*Kumal gaun of Tilakpur system*) seems not to have access to water from Rampurphant, hence a small system to be designed for about 5 ha could enough instead of entire system.

- The land proposed for reservoir of Tilakpur is public land, being managed by *Talpokhara*

Conservation Committee. *(a committee formed to manage the natural pond redeveloped for recreational purposes)*. A consent or agreement with the conservation committee and Rampur Municipality is required to use the land for reservoir.

- Similarly, the the proposed location of reservoir of Pyakluk schemes lies on public land, during the field visit the land was barren having no use. The project has to initiate the process to obtain the right to use public land.

- The local people also requesting to provide a connection to recharge the *Talpokhara pond.* This may require to be negotiated with the committee as they will have to provide the land. In this context, the water requirement may need to be recalculated addressing the community demand.

- In the proposed area of both systems, above 75% of land was covered by winter crops, hence distribution pipeline laying work may require compensating the standing crops.

b) Akletar hill lift system, Rampur Municipality - 8

- The construction of reservoir is proposed in Public Land. The land is not being used for any purpose; hence no IR and IP issues were envisioned. However, the project needs to initiate the process to obtain the right to use the public land.

- In the proposed area of Ekletar hill scheme, there is a defunct hill lift scheme developed by the provincial government. Pipelines for lifting water to reservoir and distribution network were already installed, however due to technical issues in tubewell, the system is nonfunctional.

- As informed during consultation, the government has allocated some resources for the repair and maintenance of defunct system. The operation of the system after repair and maintenance will reduce the proposed command area which will require revising the entire scope of the scheme.

- Around 30 percent of the proposed area was found to have winter crops, this may require assessing the real time data of standing crops before initiating the pipeline laying work.

c) Ramtar-Kumalgaun & Siko Danda

- The command area proposed under Ramtar-Kumalgaun is being served by an old Farmer Managed Irrigation System, *"Helkung Fanth Sinchai Aayojana."* The farmers were found reluctant to accept the proposed hill lift irrigation.

- A lift scheme "*Chahare Lift irrigation Project"* was developed but was not functional due to issue in water pumping. The farmer did not follow with concerned agency for repair and fixing of the pumping issues mainly because, the O&M cost of the lift irrigation was considered too high. This indicates the need for in-depth assessment of farmer's willingness to pay for O&M cost.

- During consultation the farmer and ward representatives enquired about their share of contribution for system development and likely O&M cost. The project needs to analysis the cost (beneficiary's contribution in system development and O&M cost) and the mode of system development and inform during immediate next consultation.

- The proposed *Siko Danda Hill lift Irrigation system* is well accepted by the farmer as there is no other source of irrigation.

- For Siko Danda scheme, the proposed location of reservoir lies on the private land of Mr. Ramchandra Chapagain. It was reported that the owner of the proposed land was ready for voluntary donation of the land, Although, the team could not meet him during the field visit. A consent letter may need to be obtained from the owner with third party certification.

- The consultant's team observed that around 10 percent of command area was covered with winter crops using the water from small streams available nearby the field, hence assessment of the real time data of standing crops will be required before initiating the pipeline laying work.

d) Ramgha-1, Kumalgaun Hill lift, Rambha Rural Municipality - 1

- The proposed location for reservoir construction is on public land, hence the project needs to initiate the process to obtain the right to use of public land. The proposed land is free of encumbrances, having no formal or informal use or occupation. The local government was found supportive to provide the land essential for reservoir construction.

- The municipal team showed one defunct lift irrigation system which was designed and constructed for 35 ha. (same area proposed under IMEP). The local people were requested to explore the possibilities of utilizing the distribution network, overhead tank and all structures developed and existed.

- If the local request discussed above is accepted, the scope of the project will be limited to constructing the tubewell in the river and expansion of pipelines.

e) Sishaghat and Duipiple Scheme: Madhya Nepal Municipality - 4

- The proposed location of reservoirs in both systems in national forest managed by communities. The proposed locations are free of encumbrances, having no formal or informal use or occupation; hence no IR and IP impacts are envisioned. However, the project needs to be initiated to obtain the right to use of the forest land following the process detailed in Forest Regulation 2022.

- The major portion of command area (above 60%) of Duipiple schemes lies in the command area of *"Ramghatar Irrigation project*." Hence, the design of the system may need to be revised to limit its use within the area which has no irrigation facilities at present.

f) Bays Kalesti, Dumsi and Bairaini schemes: Byas

- The proposed location of reservoir in Kalesti lies in forest land. Similarly, out of the two reservoirs proposed in Baireni one lies in national forest managed by communities and one in public land. The proposed locations are free of any kind of uses, however in both cases the right to use the land has to be obtained from the concerned government authorities.

- The reservoir in Dumse is proposed in public land, not being utilized for any purposes. The proposed land is free of encumbrances, having no formal or informal use or occupation,

hence no IR or IP issues are assessed.

- In Dumse, *"Parewa Raha Dumsi Darai Gaun Lift Irrigation system"* for 25 ha is already developed. A review of the command area to identify the remaining irrigation requirements need to be assessed. This will result in a change in the size of the reservoir and other components.

- A farmer's share of contribution with likely O&M cost has to be analyzed and discussed with farmer prior to detailed design. This will be the key factor whether the farmer will accept the system or not.

g) Chyanglitar Hill lift, Palungtar Municipality -7 Gorkha

- The proposed location of reservoir is on national forest managed by communities. The proposed land is free of encumbrances, having no formal or informal use or occupation.

Figure 4: Hill lift irrigation System- Photographs of consultation and field activities.

Meeting with Mayor and Municipal Team- Rampur Municipality

Consultation with Ward -6 Rampur Municipality – Palpa

Consultation with Beneficiaries of Akletar system- Rampur -8 Palpa

Observation of poposed reservoir location Rambha Rural Municipality – 8 Palpa

Observation of existing system - Rambha Rural Municipality 8 Palpa

Consultation with the benefacaries of Ramtar and Siko danda schemes – Rampur-8 Palpa

Consultation with the benefacaries of Sirshaghat schemes – Madhyanepal-Lamjung

Discussion with the benefacaries of Kalesthi scheme Byas – 7 Tanahun

Discussion with WUA member of Bairaini scheme, Byas 10 Tanahun

Discussion with Ward Chairperson about the project and observation of proposed location of Changlitar hill lift cscheme, Palungtar-7, Gorkha

Farmer Managed Irrigation systems

Table-3: Farmer Managed Irrigation systems - Summary of Public consultation

S. N	Date and Place	Persons Consulted	Number of Participants			
			Male	Female	Total	Janjati (IP)
1	12 February 2024 Munsari Khola Irrigation Subproject Ilam	WUA representatives /local elected leaders	14	7	21	13
2	13 February 2024 Mangal tar Irrigation Subproject Ilam	WUA representatives ward chairperson, beneficiary farmer	18	8	26	20
3	12 February 2024 Maebashi Irrigation Subproject Dolkha	WUA representatives, elected ward chairperson, beneficiary farmer	29	11	40	23
4	5 February 2024 Nimkotbesi Subproject Dolkha	WUA representatives, elected ward chairperson, beneficiary farmer	37	8	45	3
5	5 February 2024 Karange Kulo Irrigation subproject, Tehrathum	WUA representatives and beneficiary farmer	11	3	14	2
6	12 February 2024 Munsari Khola Irrigation Subproject Ilam	WUA representatives, elected ward chairperson, beneficiary farmer	22	5	27	6
7	9 February 2022 Lewa Khola ISP Ilam (Hill)	elected ward chairperson, beneficiary farmer	19	7	26	23
8	6 February 2024 Gagan Irrigation subproject Siraha (Terai)	WUA representatives, elected ward chairperson, beneficiary farmer	34	0	34	0
Total			**184**	**49**	**233**	**90**

FMIS- Photographs of public consultation.

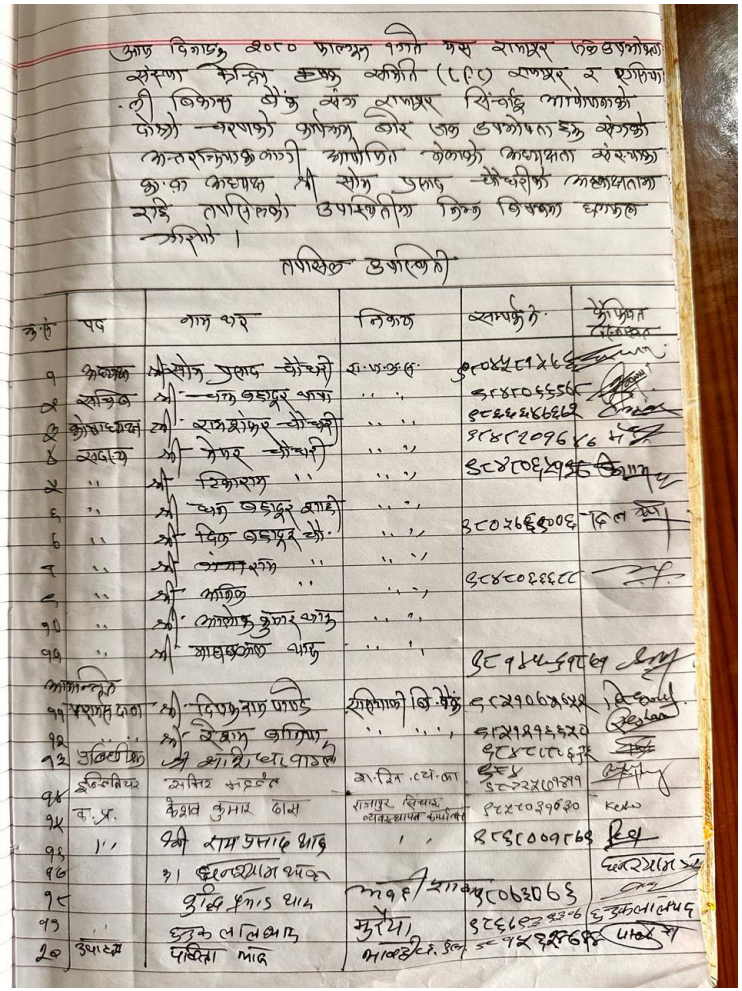

Public consolations in Ilam

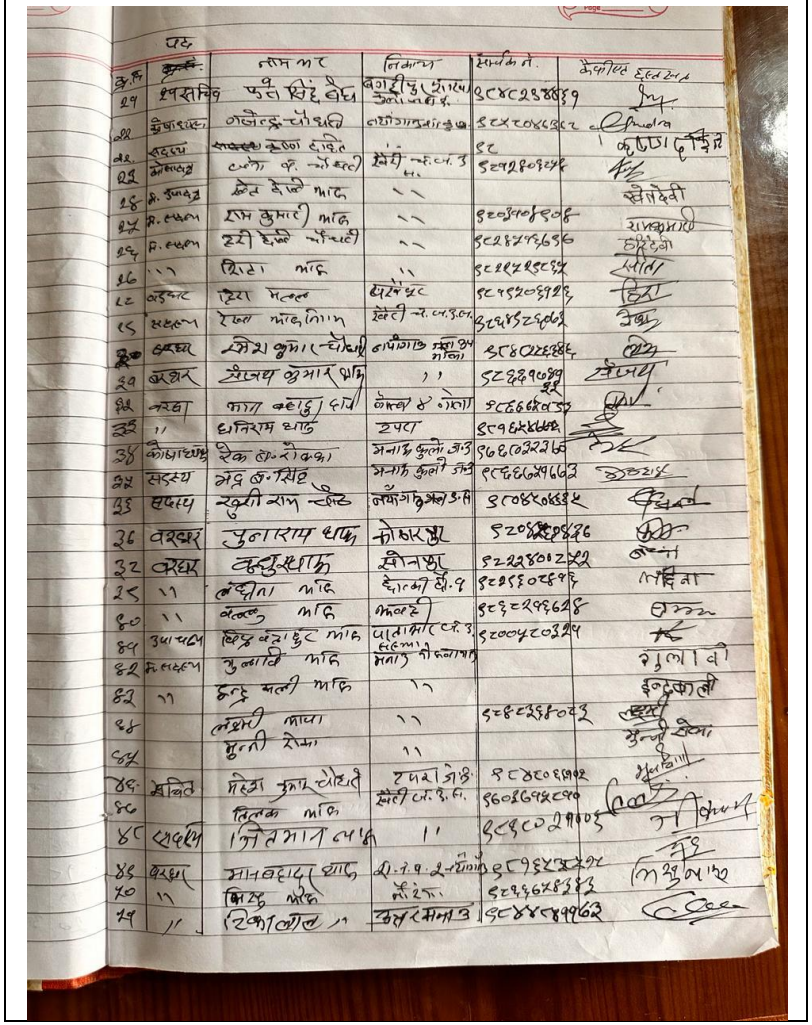

Consultation and observation of command area in Dolkha

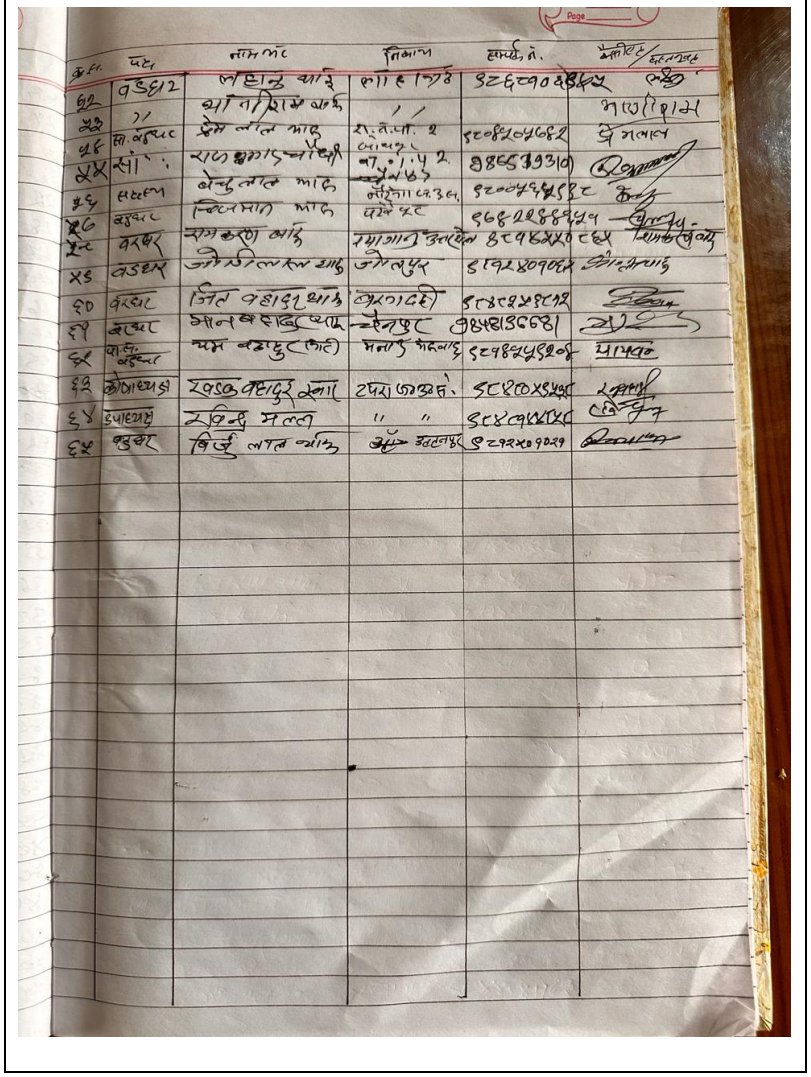

Consultation with beneficiaries and snapshot canal observation: Gagan ISP Siraha

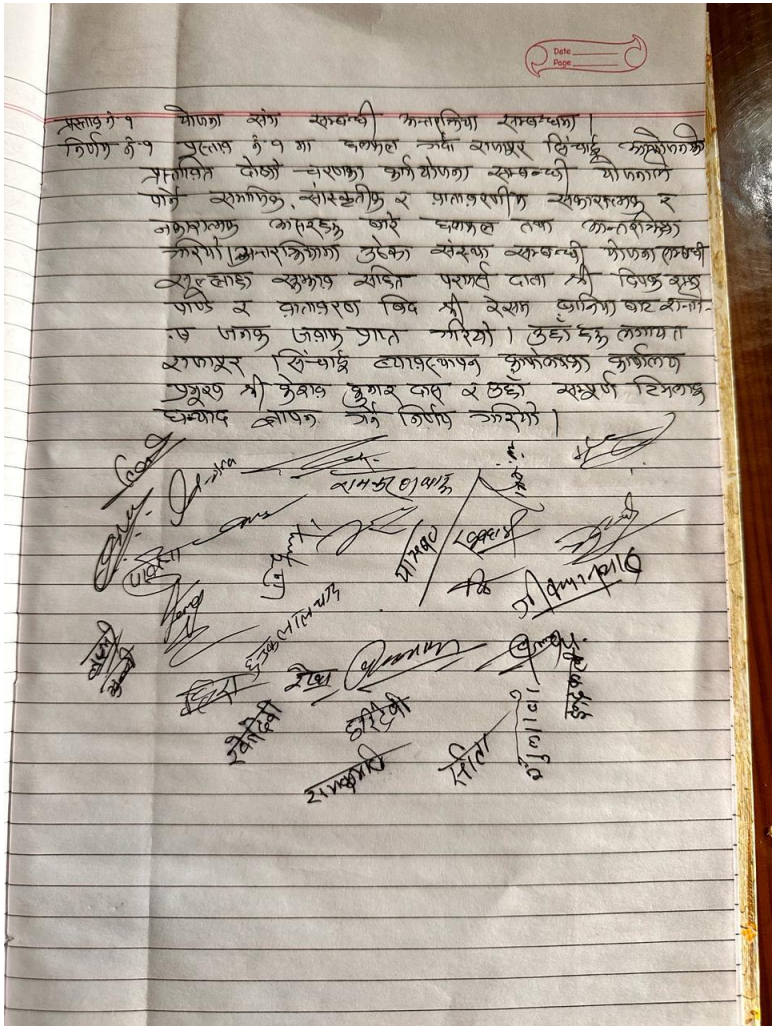

Consultation and observation of command area in Therathum

Rajapur Irrigation Project - Attendance sheet with signature

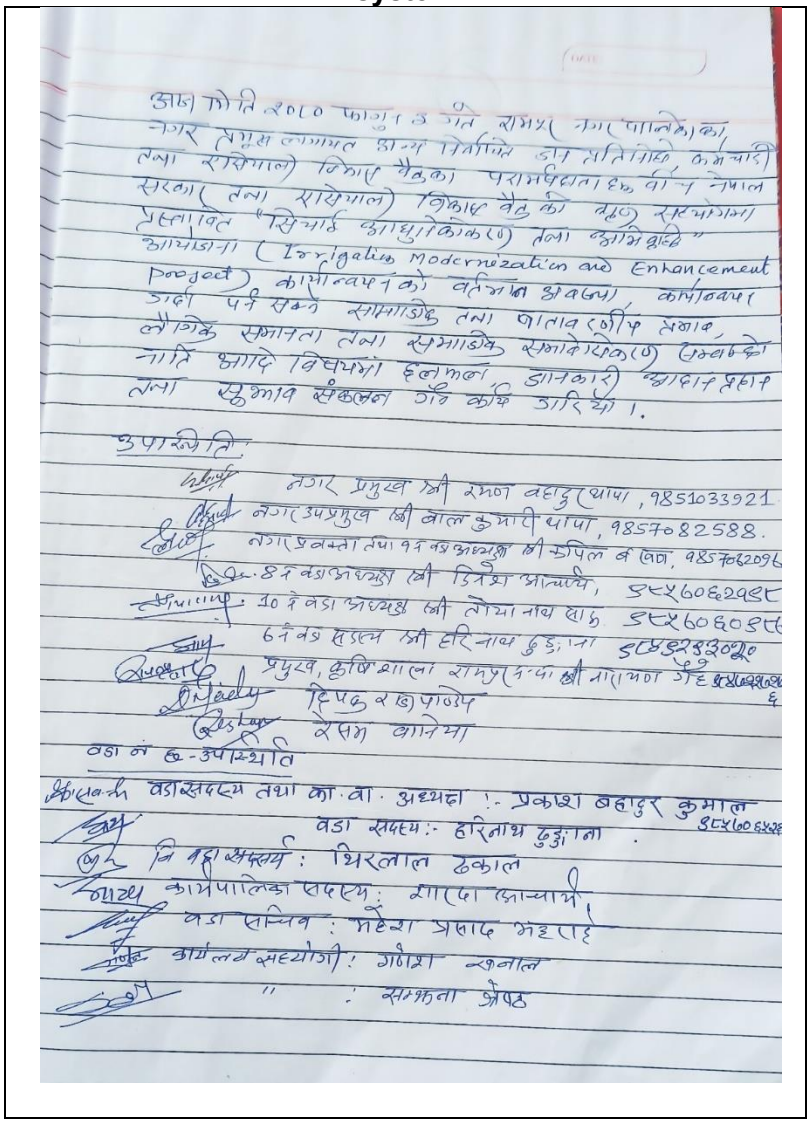


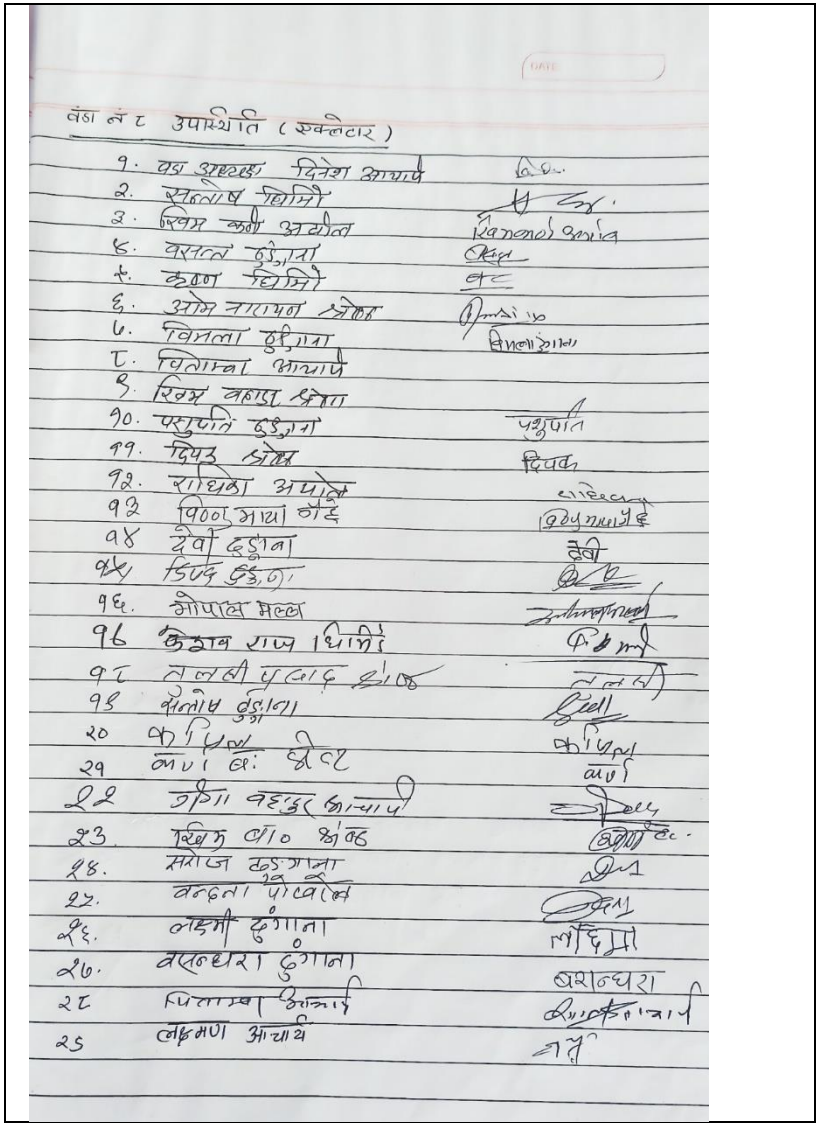


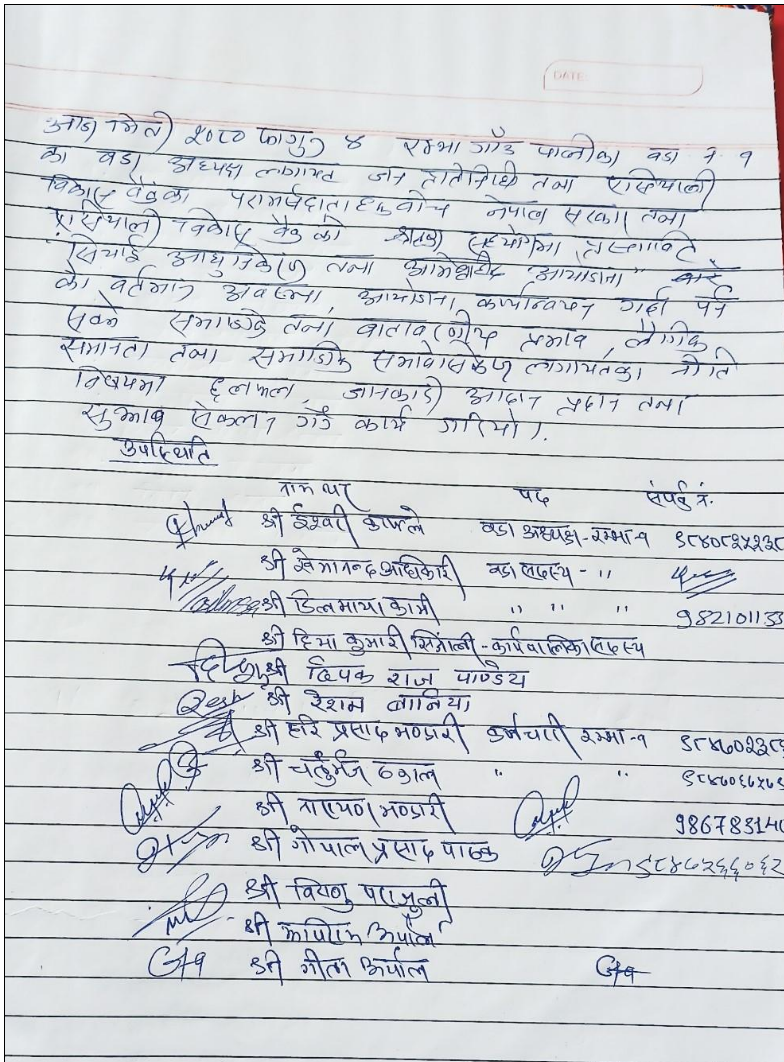




Attendance sheet with signature - Hill lift Irrigation system



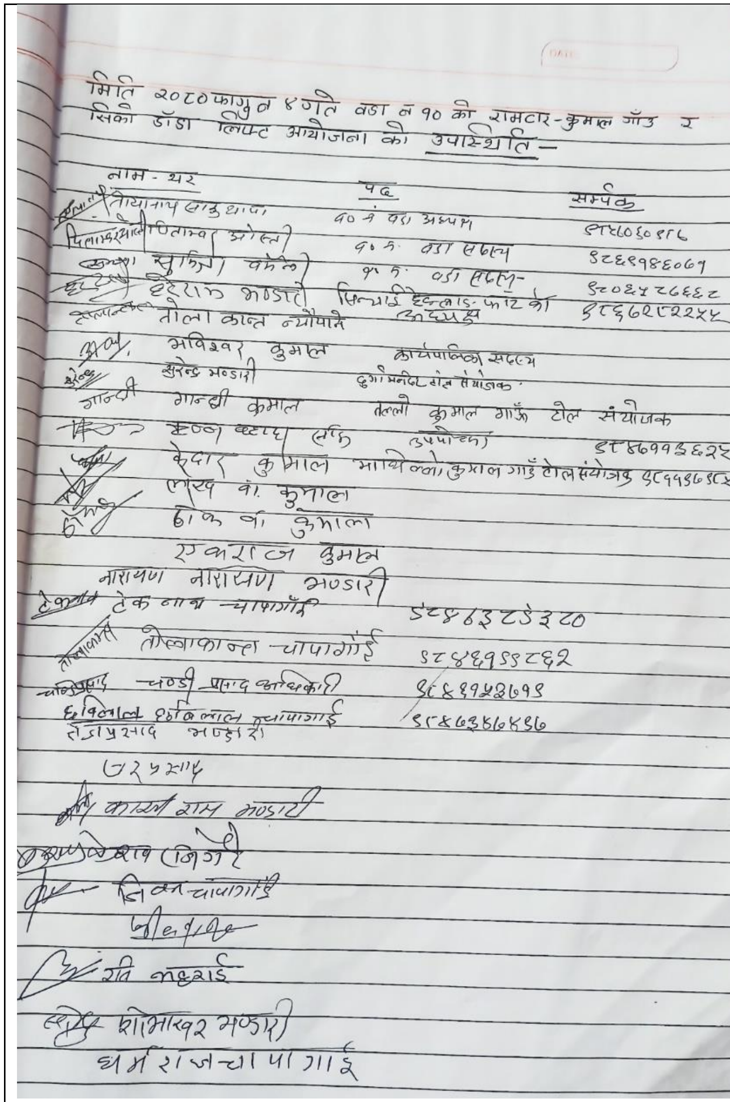




आज मिति २०८० फागुन ४ रम्भा गाउँपालिका वडा नं १ का वडा अध्यक्ष लगायत जन प्रतिनिधि तथा एसियाली विकास बैंकका परामर्शदाता इन्डवोच नेपाल सरकार तथा एसियाली विकास बैंकको संयुक्त सहयोगमा सञ्चालित "सिंचाई आधुनिकरण तथा आयोजना" बारे को वर्तमान अवस्था, आयोजना कार्यान्वयन गर्दा पर्न सक्ने सामाजिक तथा वातावरणीय प्रभाव, लैंगिक समानता तथा सामाजिक समावेशीकरण लगायतका नीति विषयमा छलफल, जानकारी आदान प्रदान तथा सुझाव संकलन गर्ने कार्य गरियो।

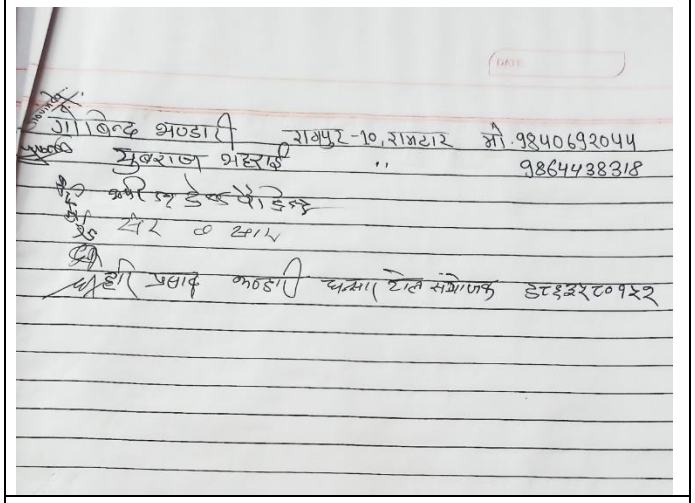
उपस्थिति

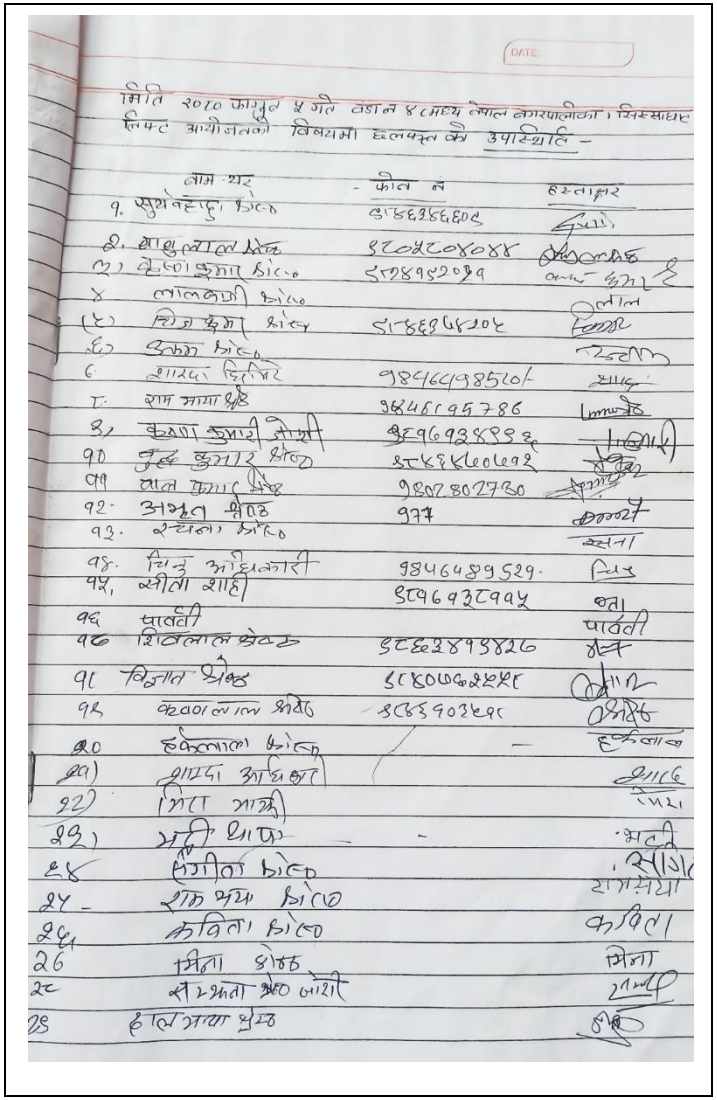
नाम थर	पद	संपर्क नं.
श्री ईश्वरी कोइराले	वडा अध्यक्ष - रम्भा-१	९८४०८२४२३८
श्री खेमानन्द अधिकारी	वडा सदस्य - "	
श्री डिलमाया कामी	" " "	९८२१०११३...
श्री हिमा कुमारी सिंजाली	कार्यपालिका सदस्य	
श्री दिपक राज पाण्डेय		
श्री रेशम वानिया		
श्री हरि प्रसाद भण्डारी	कर्मचारी रम्भा-१	९८४६०२३८...
श्री चतुर्भुज ढकाल	" "	९८४६०६६४६...
श्री नारायण भण्डारी		९८६७८३१४०
श्री गोपाल प्रसाद पाण्डे		९८४८२४६०६२
श्री विष्णु पराजुली		
श्री कपिल अर्याल		
श्री गीता अर्याल		

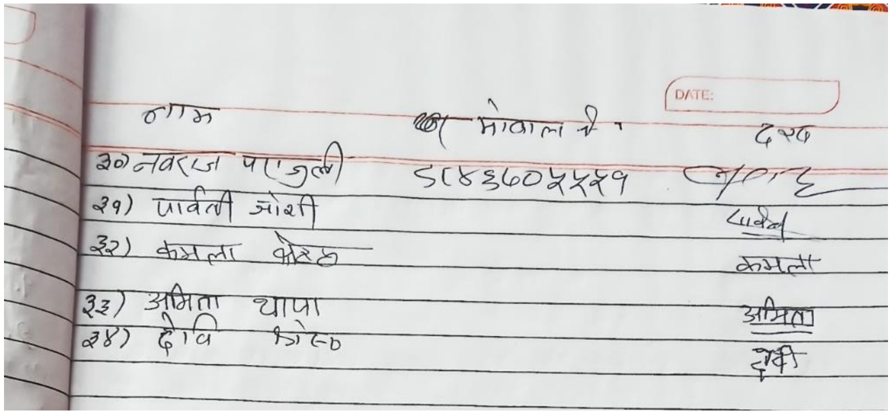


मिति २०८० फागुन ४ गते वडा नं १० को रामटार-कुमाल गाँउ र सिको डाँडा लिफ्ट आयोजना को उपस्थिति –

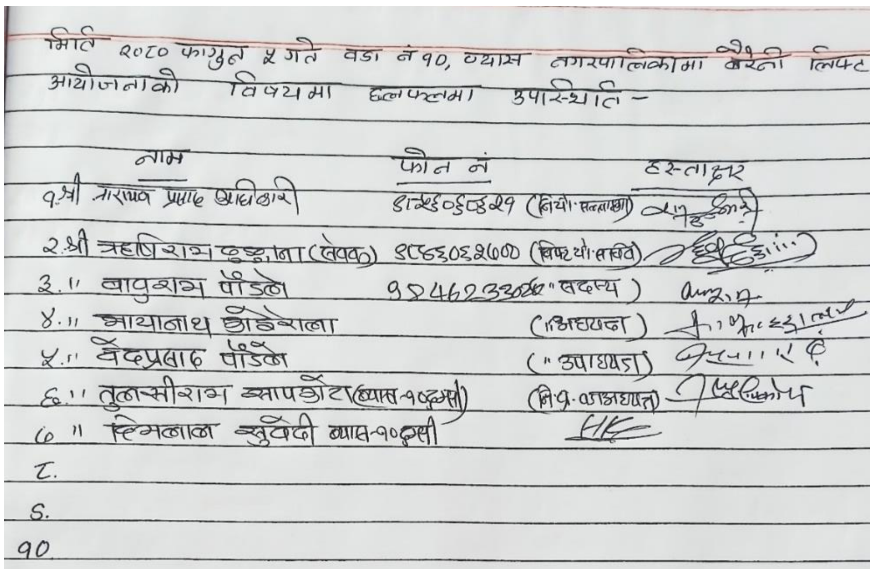
नाम - थर	पद	सम्पर्क
तीर्थनाथ साउँ थापा	१० नं वडा अध्यक्ष	९८४६०६०९८६
पिताम्बर अर्याल	१० नं वडा सदस्य	९८६९१८६०६१
सुमित्रा थकाली	१० नं वडा सदस्य	९८०६४८६६६८
हरिराम भण्डारी	सिंचाई इन्टेक फाँट को अध्यक्ष	९८६६८८२२४४
तोलाकान्त न्यौपाने		
भविश्वर कुमाल	कार्यपालिका सदस्य	
सुरेन्द्र भण्डारी	दुर्गा मन्दिर टोल संयोजक	
गान्धी कुमाल	तल्लो कुमाल गाऊँ टोल संयोजक	
कृष्ण बहादुर लिङ्गि	उपभोक्ता	९८४६९१३६२२
केदार कुमाल	माथिल्लो कुमाल गाउँ टोल संयोजक	९८११३६७९८...
लोक ब. कुमाल		
ठाक ब. कुमाल		
एकराज कुमाल		
नारायण भण्डारी		
टेक नाथ चापागाँई		९८४६३८३३८०
तोयाकान्त चापागाँई		९८४६१३३८६२
चण्डी प्रसाद अधिकारी		९८४३१५२७९१
छविलाल चापागाँई		९८४६३४६४३६
तेजप्रसाद भण्डारी		
काशी राम भण्डारी		
खेम जिगे		
दिवस चापागाँई		
रवि नेउपाने		
सोमभाख्र भण्डारी		
धर्मराज चापागाँई		







नाम	मोबाइल नं.	दस्तखत
३० नवराज पाङ्गाली	९८४३६०५५५९	
३१) पार्वती जोशी		पार्वती
३२) कमला खरेल		कमला
३३) अमिता थापा		अमिता
३४) देवि [illegible]		देवी



मिति २०८० फागुन ५ गते वडा नं १०, व्यास नगरपालिकामा बैरेनी लिफ्ट आयोजनाको विषयमा छलफलमा उपस्थिति –

नाम	फोन नं	हस्ताक्षर
१. श्री नारायण प्रसाद अधिकारी	९८५६०६०४२१ (नियो. सल्लाहकार)	
२. श्री ऋषिराम ढुङ्गाना (सेवक)	९८६६०६२७०० (बिफ. यो. सचिव)	
३. " बाबुराम पौडेल	९८४६२३३०८० " सदस्य)	
४. " मायानाथ कोइराला	(" अध्यक्ष)	
५. " वेदप्रसाद पौडेल	(" उपाध्यक्ष)	
६. " तुलसीराम खापर्कोटा (ब्यास-१० दमौली)	(नि.पू. वडाध्यक्ष)	
७. " हिमलाल सुवेदी ब्यास-१० दमौली		
८.		
९.		
१०.		

APPENDIX 3: INVOLUNTARY RESETTLEMENT IMPACT CATEGORIZATION CHECKLIST

A. Introduction

Each component needs to be screened for any involuntary resettlement impacts which will occur or have already occurred. This screening determines the necessary action to be taken by the project team.

B. Information on subsection/section:

(i) District/Province:_____
(ii) Municipality:_____
(iii) Civil work dates (proposed): _____
(iv) Technical description: _____

C. Involuntary Resettlement Impact Assessment Results – Rajapur Irrigation Projects

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?		√		The project intervention will not involve land acquisition as entire project activities will be limited in existing canal systems.
2. Is the site for land acquisition known?				Not applicable
3. Is the ownership status and current usage of land to be acquired known?				Not applicable
4. Will easement be utilized within an existing Right of Way (ROW)?				Not applicable -
5. Will there be loss of shelter and residential land due to land acquisition?				Not applicable, as no land acquisition is envisaged.
6. Will there be loss of agricultural and other productive assets due to land acquisition?				Not applicable, as no land acquisition is envisaged
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				Not applicable, as no land acquisition is envisaged
8. Will there be loss of businesses or enterprises due to land acquisition?				Not applicable, as no land acquisition is envisaged
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				Not applicable, as no land acquisition is envisaged
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:				
Any estimate of the likely number of persons that will be displaced by the Project? If yes, approximately how many? _____				*[√] No [] Yes*
Are any of them poor, female-heads of households, or vulnerable to poverty risks?				***[√]** No [x] Yes*
Are any displaced persons from indigenous or ethnic minority groups?				*[√] No **[ ]** Yes*

D. Involuntary Resettlement Impact Assessment Results – Hill Lift Project

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?		√		The project intervention will not involve land acquisition. The tubewell will be drilled in the river flood plain area and the reservoirs are proposed in GON land, the distribution system will be buried pipe system. None of the work under the hill lift will involve land acquisition. In case technically feasible GON land is not available, VLD or negotiated settlement will be adopted as applicable.
2. Is the site for land acquisition known?				Not applicable
3. Is the ownership status and current usage of land to be acquired known?				Not applicable
4. Will easement be utilized within an existing Right of Way (ROW)?	√			For distribution pipeline alignment of Hill lift scheme
5. Will there be loss of shelter and residential land due to land acquisition?				Not applicable, as no land acquisition is envisaged.
6. Will there be loss of agricultural and other productive assets due to land acquisition?				Not applicable, as no land acquisition is envisaged
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?	√			The pipe laying wok may result in loss of standing crops, the pipelaying work will be scheduled in the dry (no or minimal crops) season to avoid impact to standing crops.
8. Will there be loss of businesses or enterprises due to land acquisition?				Not applicable, as no land acquisition is envisaged
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				Not applicable, as no land acquisition is envisaged
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:				
Any estimate of the likely number of persons that will be displaced by the Project? If yes, approximately how many? _____				*[√] No [] Yes*
Are any of them poor, female-heads of households, or vulnerable to poverty risks?				*[√] No [x] Yes*
Are any displaced persons from indigenous or ethnic minority groups?				*[√] No [ ] Yes*

E. Involuntary Resettlement Impact Assessment Results – Farmer Managed Irrigation System

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land				
1. Will there be land acquisition?		√		The project intervention will not involve land acquisition as entire project activities will be limited to existing canal systems.
2. Is the site for land acquisition known?				Not applicable
3. Is the ownership status and current usage of land to be acquired known?				Not applicable

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
4. Will easement be utilized within an existing Right of Way (ROW)?				Not applicable -
5. Will there be loss of shelter and residential land due to land acquisition?				Not applicable, as no land acquisition is envisaged.
6. Will there be loss of agricultural and other productive assets due to land acquisition?				Not applicable, as no land acquisition is envisaged
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				Not applicable, as no land acquisition is envisaged
8. Will there be loss of businesses or enterprises due to land acquisition?				Not applicable, as no land acquisition is envisaged
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				Not applicable, as no land acquisition is envisaged
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:				
Any estimate of the likely number of persons that will be displaced by the Project? If yes, approximately how many? _____				*[√] No [] Yes*
Are any of them poor, female-heads of households, or vulnerable to poverty risks?				***[√]*** *No [x] Yes*
Are any displaced persons from indigenous or ethnic minority groups?				*[√] No* ***[ ]*** *Yes*

APPENDIX 4: INDIGENOUS PEOPLES IMPACT CATEGORIZATION CHECKLIST

A. Introduction

Each project component needs to be screened for any indigenous people impacts which will occur or have already occurred. This screening determines the necessary action to be taken by the project team.

B. Information on project//component:

(i) District/Province:_____
(ii) Municipality:_____
(iii) Civil work dates (proposed): _____
(iv) Technical description: _____

C. Indigenous Peoples Impact Assessment Results – IMEP

KEY CONCERNS	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples Identification				
2. Are there national or local laws or policies as well as anthropological research/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?	√			In the project area, the population of indigenous people constitute slightly above the half (52.26%) of total population. Presentation of IP by project component shows that overarching majority (87%) of project beneficiaries are from IP community in Rajapur followed by 56.44% in hill lift schemes. Likewise, around 32.3% of beneficiaries of FMIS belongs to various indigenous communities
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?	√			The indigenous peoples group speak a distinct dialect, but they also understand and speak Nepali language.
7. Has such groups been historically, socially, and economically marginalized, disempowered, excluded, and/or discriminated against?		√		

KEY CONCERNS	YES	NO	NOT KNOWN	Remarks
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?	√			Indigenous peoples' groups are represented in the municipal councils, ward council a decision-making body at local government through reservations by country's law
B. Identification of Potential Impacts				
9. Will the project directly or indirectly benefit or target Indigenous Peoples?	√			The project is anticipated to have beneficial impacts on indigenous peoples due to access to improved irrigation facilities, reduced annual labour contribution requirements resulted from system modernization, benefits from built-in training and capacity support for agriculture advancement and, benefit from the inclusive provisions proposed under GESI AP.
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 *Will the project activities include:*				
13. Commercial development of the cultural resources and knowledge of Indigenous Peoples?		√		
14. Physical displacement from traditional or customary lands?		√		
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
Output 1: Irrigation Infrastructure Modernized	The project will have beneficial/positive impacts on the recipient communities including janajatis/indigenous peoples through the access to improved irrigation facilities, reduced annual labour contribution requirements resulted from system modernization, benefits from built-in training and capacity support for agriculture advancement and, benefit from the inclusive provisions proposed under GESI AP.	No negative impact to indigenous peoples' groups/communities anticipated.
Output 2: Irrigation Management Strengthened	The project inclusive policy will ensure the representatio of IP in WUA and WUC governance structure and farmer's groups created for the implementation and dissemination of improved agriculture practices.	None.
Output 3: Agriculture and Irrigation practices Modernized.	The project beneficiaries including IPs will benefit with improved knowledge on agriculture technologies through farmer field school, on-farm irrigation infrastructure (springle, drip irrigation etc.) agriculture infrastructure	None.

APPENDIX 5: SAMPLE GRIEVANCE REGISTRATION FORM

The _____Project welcomes complaints, suggestions, queries and comments regarding project implementation.
Aggravated persons may provide grievance with their name and contact information to enable us to get in touch for clarification and feedback.
In case someone chooses not to include personal details and wants the information provided to remain confidential, please indicate by writing/typing *(CONFIDENTIAL)* above Grievance Format.

Thank you.

Date		**Place of registration**			
Contact Information/Personal Details					
Name		**Gender**	* Male *Female	**Age**	
Home Address					
Place					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below: If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered by: (Name of Official registering grievance)	
Mode of communication: Note/Letter E-mail Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	Yes No
Means of Disclosure:	

गुनासो दर्ता फारम

सिँचाई आधुनिकरण अभिवृद्धि आयोजना सम्पूर्ण सरोकारवाला ब्यक्ति/संस्थाहरुलाई आयोजना कार्यान्वयन सम्बन्धमा कुनै गुनासा/जिज्ञासा/सल्लाह/सुझाव भए सो बारे जानकारी गराउन अनुरोध गर्दछ । तपाईले दर्ता गर्नु भएका गुनासा, जिज्ञासा, सल्लाह, सुझाव उपर गरिएका निर्णय बारे जानकारी गराउन सहज होस् भन्नका लागि आफ्नो नाम तथा ठेगाना प्रदान गर्न अनुरोध गर्दछौ । यदि तपाई आफ्नो व्यक्तिगत विवरण गोप्य राख्न चाहनुहुन्छ भने आफ्नो नाम को माथि "गोप्य" अंकित गर्नु होला ।

मिति:	दर्ता गरिएको स्थान:	आयोजनाको नाम:
सम्पर्क विवरण		
नाम:		
ठेगाना	गा.पा/न.पा: वार्ड: गाउ /टोल:	फोन: इमेल:
गुनासा, जिज्ञासा, सल्लाह, सुझाव: गुनासो सम्बन्धित बिषय, स्थान, कारण तथा सो मा संलग्न व्यक्ति आदि बारे बिस्तृत विवरण उल्लेख गर्नुहोला ।		
दर्ता भएका गुनासा/जिज्ञासा/सल्लाह/सुझाव उपर गरिएको छानविन / निर्णय बारे तपाईलाई जानकारी गराउने उपयुक्त माध्यम		
कार्यालय प्रयोजनका लागि		
दर्ता गर्ने व्यक्तिको नाम: पद:		
संचार को माध्यम: (क) चिट्ठी (ख) इमेल (ग) मौखिक (घ) अन्य		
प्राप्त गुनासो सम्बोधनमा संलाग्न पदाधिकारी: नाम: पद:		
प्राप्त गुनासो सम्बोधन गर्न लिईएका निर्णय कार्यान्वायनको अवस्था:		
प्राप्त गुनासो सम्बोधन गर्न लिएका/कार्यान्वयन गरिएका निर्णय सार्वजनिकीकरण : (क) भएको (ख) भएको छैन		
सार्वजनिकीकरण गर्न उपयोग गरिएको माध्यम:		