

Punjab Irrigation Department, Government of the Punjab

TA-9458 PAK: Greater Thal Canal Irrigation Project

Due Diligence Review and Corrective Action Plan

GTC Phase-II Chaubara Branch Canal

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GTC Phase- II Project Punjab Irrigation Department, Government of Punjab Report submitted by

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This Due Diligence Report on Rakhs and Pastoral Communities in the GTC-Phase–II project area was prepared at the request and with the financial support of the Asian Development Bank (ADB).

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GTC Project-Phase II Chaubara Branch Canal System

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GLOSSARY OF TERMS

Term	Meaning			
Compensation	Payment in cash or in kind for an asset or resource acquired or affected by the Project.			
Cut-off date	The date used to determine if persons without legal or recognizable rights on the affected land will be eligible for resettlement assistance. For GTC II Project, the cut-off date is set 29 February 2020 at the conclusion of DMS as well as the recommendation of ADB's Fact Finding Mission to initiate Due Diligence Review of 3690 acres of Land already acquired. The cut-off date will apply to the persons who occupy or build structures in the project alignment after the cut-off date will not be eligible for compensation for their affected assets or income and will not be provided with compensation or rehabilitation assistance.			
Disclosure	Make information openly available for public review. This should be proactive and targeted to ensure that the right stakeholders have access to pertinent information.			
Displaced persons (DPs)	All persons or entities (legal and illegal) who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. For this project, DPs are those who will be displaced by the clearing of the existing right-of-way needed for the implementation of the GTC II Project.			
Displaced Persons for BOR purposes	The term Displaced Persons (BOR) is used for the persons/shareholders registered in the revenue record. For any transfer of land to other party the price of land is paid to each DP as per his/her share in the total parcel of land. The DP may also be owner cultivator and others with inherited share in land but absent from the land.			
Economic displacement	Loss of assets or access to assets that leads to loss of income sources or other means of livelihood (see 'livelihood' below).			
Entitlements	The sum total of compensation and other forms of assistance provided to displaced persons in the respective eligibility category.			
 Full replacement Replacement cost involves replacing an asset at a cost prevailing at time of its acquisition. This includes fair market value, transaction cost interest accrued, transitional and restoration costs, and any of applicable payments, if any. Depreciation of assets and structures shound be taken into account for replacement cost. Where there are active market conditions, replacement cost is equivalent to delivered of all building materials, labor cost for construction, and any transactor relocation costs. For land the value determined to be fair compensation for land based or productive potential. The replacement cost of houses and structures (cur fair market price of building materials and labor without depreciation deduction of salvage building material) and the market value of materialand, crops trees and other commodities. 				
Grievance Redress Mechanism	A process by which DPs and other stakeholders can raise their concerns and grievances to project authorities.			

Term	Meaning					
Household	old A group of persons living together in a single social unit, who share the same cooking and eating facilities, and form a basic socio-economic and decision making unit. One or more households may occupy a house.					
Implementing Agency	The agency that is responsible for planning, design and implementation of a development project, in this case PID					
Income Restoration Assistance	To restore and/or improve the incomes of displaced persons through allowances and provision of alternative means of income generation.					
Land Acquisition	The process whereby a person is compelled by a public agency to alienate all or part of the land she/he owns or possesses, to the ownership and possession of that agency, for public purposes in return for fair compensation.					
Affected Households The term Affected Households (AHs) is used for the persons/familie effectively present/living and/or possessing rightful ownership/use of land the project area at the time of census/assessment facing direct impact of th project implementation through economic or physical displacement as owner cultivator, sharecropper, renter, any legal or illegal user of land wh experience loss of income/livelihood, crops, trees and residentia commercial structures and other assets in the project's ROW. The househo was the unit for census/surveys in the project. The total number of affected persons (APs) is calculated for all affected households						
Livelihood	Refers to the full range of means that individuals and families utilise to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.					
Meaningful consultation	A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to displaced persons; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of displaced persons and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.					
Relocation	ation Means physical movement to an alternative location of the assets an infrastructure permanently lost due to the Project impact. It may include houses; public service facilities; religious and other buildings.					
Relocation Assistance	Support provided to people who are physically displaced by a project. Relocation assistance may include transportation, food, shelter, and social services that are provided to the displaced persons during their relocation. It may also include cash allowances that compensate displaced persons for the inconvenience associated with resettlement and defray the expenses of a transition to a new locale, such as moving expenses and lost work days.					
Resettlement Assistance	Resettlement assistance refers to relevant entitlements/provisions in the matrix for physical and economic rehabilitation in post-resettlement period.					
Stakeholders	Include displaced persons, proponents, private businesses, NGOs, host communities, local administration and other relevant local departments.					
Severely Affected HHs	Severely affected APs are those who will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their (income generating) productive assets. That includes loss of land and loss of income/livelihood from any source due to project.					
Vulnerable	These are marginalized or those distinct households or people who might					

Term	Meaning
groups	face the risk of marginalization and suffer disproportionally from displacement. These may include households with income below the poverty line, the landless, households headed by the elderly, female headed households, women and children, indigenous peoples, and those without legal title to land.

EXECUTIVE SUMMARY

Project History and Legacy

1. The Greater Thal Canal (GTC) Project was conceived in 1960 to irrigate 1.738 million acres in the eastern Thal Doab falling within the limit of Bhakkar, Layyah, Khushab, Jhang and Muzaffargarh Districts in Punjab, Pakistan. The project was designed to be completed in three phases. During Phase I (Main Canal and Mankera Branch Canal) construction, the Federal Government directed the Punjab Government to finance the remaining phases from provincial resources. Accordingly, the land required for GTC – Phase II (Chaubara Branch Canal System or CBCS) was acquired in 2006-2008 without any anticipation of external project financing. However, years later, during GTC II Project preparation under ADB TA (9458-PAK), many safeguard related issues surfaced with regard to assessment and valuation of land acquired and paid through to 2011, with outstanding claims up until now. In February 2020, ADB Fact Finding Mission noted the legacy issues resulting from the long history of the project and wanted to find proper and pragmatic solutions to the legacy issues.

DDR, Responses by GOP and the CAP

- 2. Moving forward and as a step toward better safeguard planning for the project, the TA Team conducted (i) a due diligence review (DDR) of the status of land acquisition and payments of compensation; (ii) a land market survey (LMS); and (iii) stakeholder consultation and information disclosure campaign. The DDR Report identified many issues for instance, (i) the valuation of land and compensation awarded under LAA provisions was at 2006 rates; (ii) land price thus determined were lower than the full replacement value; (iii) only land compensation was paid; other assets such as structures, trees, crops etc. were not considered. These, among others, constitute major gaps with SPS 2009 requirements. The DDR recommended a series of measures to address the gaps and to make the project compliant for ADB approval and financing. The recommendations were well received by the project owner the Punjab Irrigation Department (PID) and the Government of Punjab (GOP). The government moved swiftly in removing the bottlenecks and streamlining the land acquisition issues to meet ADB safeguard requirements.
- 3. This Corrective Action Plan (CAP) is based on the DDR, policy responses by PID and GOP and a comprehensive review of the GTC II Project impacts. The CAP is divided into two parts: Part I (Chapters 1 to 3) focuses on the DDR and compliance audit about awarded and paid compensation under LAA 1894 provisions, including policy responses and steps taken by PID and GOP, and Part II (Chapters 4-12) describes GTC -Phase II safeguards planning activities for instance, land acquisition and resettlement (LA&R) impacts, the census/socio-economic surveys, stakeholders consultation/disclosure, gap analysis, current land market survey, and confirms safeguard measures such as compensation and relocation plans, livelihoods, grievances redress mechanisms, cost/budget, CAP implementation plan, and M&E to comply with SPS 2009 requirements.

GTC II Project Description, Impacts and Socioeconomic Profiles

4. The project works include construction of a 74 km long main canal, 250 km long 11 distributaries and 125 km long 11 minor canals. The project will provide seasonal irrigation for 298,000 acres of agriculture land. Around 86,000 households with small and medium land holding in main

Mankera and Chaubara Canal Command areas will receive direct benefits from sustained irrigation while the population at large will have indirect benefit due to improved agriculture and productivity. However, the impacts discussed in this report are related to the construction of the CBCS systems only, and that will have significant adverse social and resettlement impacts.

5. The project impact assessment was made through a structured Census and DM survey questionnaires. All households on the ROW, irrespective of ownership/titles on the land they cultivate, reside or use for livestock rearing or other commercial activity, were covered by the surveys. The Census and DMS Surveys identified/assessed two types of impacts: (a) Land, and (b) non-land. The land related impacts include acquisition of 5615 acres of land from two main sources – private land (4410 acres), forest land (1205 acres), with direct livelihood related impact on 4662 AHs. The project will also cause loss of 5473 acres of crops, cause uprooting of 122,620 trees, relocation/demolition of 137 residential, agriculture or commercial structures and 151 household will lose current source of income. Table 1 provides a summary of the project impacts that are further described and analyzed in Chapter 4.

Description	Unit	Quantity/ Number	Remarks
Affected Households (AHs)			
Total Affected household	Household/ (APs)	4662 / (29370 APs)	AHs effectively cultivating land including titled land owners/valid
Number of Owner Cultivators	Household/ /(APs)	4020(25326 APs)	lease holders, living in the project area or identified as absentee owners of land and facing livelihood impacts
Sharecroppers	Household/ /(APs)	461(2904 APs)	AHs cultivating acquired land on share cropping arrangement with titled land owners.
Contesting Lease holding rights on Govt.Land	Household/ /(APs)	138 (869 APs)	The AHs who are contesting their claims as leaseholders on acquired government land but not confirmed by the BOR in awards.
Encroacher on forest land in Rakh areas	Household/ /(APs)	43(271 APs)	AHs cultivating encroached 102 acres land in Rakh area.
Average size of household/family	Person	6.3	
Extent of Land Acquisition			
(a) Private land: i(acquired ROW) ii Additional land required	acre	3660 17.2	3660 acres awarded in 2008-11. 17.2 acres additional land to be acquired ¹ .
(b) Provincial Government Land	Acres	750	30 acres awarded in 2008-11 and pending awards for 720 acres announced in July 2020.
(c) Rakh areas Forest land	acre	1205	Transferred by BOR to PID as canal ROW.
Total	acre	5632.2	
Total DPs (BOR) from Land Take	person	15690	Compensation entitled DPs as per BOR's award.
Total AHs/DP (BOR) of	Household/	24 /(37 DPs)	Land acquisition at primitive stage,

Table 1 Project Impact – Summary

¹ Because of design adjustment at two locations 17.2 acres additional ROW land being acquired for separate LARP is prepared.

Additional LARP	/(DPs)		the DP (BOR) will be confirmed after award.
Structure, Trees and Crops			
Loss of trees (all types)	Number	122,620	
Area of crop losses (all types)	acre	4386.3	
Loss of structures (all types)	Number	222	
Affected businesses (all types)	Number	3	Excluding the Broiler Factory and 3 other structures covered in LARP.
Households requiring Relocation			
Household/affected persons requiring relocation		35/ (217 (DPs))	
Number of structure (all types) requiring relocation		137	
Livelihood and Income Losses			
Affected Vulnerable		151 AHs/(936 APs)	
households/(APs)		persons	
Severely affected households/DPs (excluding those to be physically displaced)	، ۵ ۵ 3 c 2	1570 / (9891 DPs)	

6. In all, the project land acquisition will affect 4662 landowners/users (28904 persons) on the ROW. Physical displacement of current residents on the ROW is limited to 35 households (217 DPs) due to total loss of their residential structure, while other 23 households experiencing partial impacts will restore their structure. The project area is largely rural, remote and depends on rainfed Rabi season (sown in Nov. & moved in Apr.) crops only. People reported multiple sources of income to support their families. Over two-thirds of people are poor and/or under the national poverty line as per the survey data and UNDP 2016 assessment as well. In addition, the census/survey identified 151 vulnerable households (936 APs); only poor and female-headed households were found to work in the field during the Rabi weeding period however, the list of vulnerable will be reviewed and updated following poverty and vulnerability profiling study. The AHs facing 10% and above their productive land are 1570 and 3 AHs will lose non-land livelihood assets who are termed as significantly affected.

Consultation with Stakeholders

7. GTC II Project stakeholders – both primary and secondary – were consulted at various stages of the project preparatory works. A key objective was to ensure meaningful and adequate consultation in the project area. Thus, the approach to consultation and participation in the GTC-II was based on the principle that the affected persons should be fully informed and closely consulted on the project design, impacts, and measures for compensation and resettlement. Accordingly, the PID as well as the census/survey team engaged with the affected villages and communities at various stages of project planning – for instance, census and detailed measurement surveys, socioeconomic survey, due diligence review, and land market surveys – and thus have followed participatory planning processes with local inputs in decision-making, policy development and mitigation measures.

8. The census/detailed measurement survey teams identified a total 4662 AHs because of acquired ROW land. Of total, 4158 AHs (including 4020 AHs in land owner category and 138 AHs contesting Lease rights on government land) experienced loss of 4410² acres of their effectively cultivated titled land. The acquired titled land of affected household is owned jointly by multiple family members who have been compensated as per their shares of land in joint holding of the AHs. Therefore, corresponding number of entitled DPs recorded in acquaintance rolls for payment of compensation against loss of 4410 acres acquired land are 15690 DP(BOR) for 4020 AHs. Whereas, 138 AHs noted as contesting lease holding rights during census were not yet confirmed by the BOR so, they are not counted in the DP BOR category, however in CAP they are included as eligible for land and other applicable compensation costs. The analysis show that each titled AH will lose 1.1 acre land while each titled DPs is losing 0.28 acres as his share in acquired land. Besides there are 461 sharecroppers (formal/informal) households on acquired ROW land and 43 household facing loss of encroached forest land were documented. For ensuring meaningful consultation multiple rounds of consolations were held to approach affected households in different impact categories and disclose project related information through out the project corridor. Table 2 describes the stages, mechanisms and outcome of the approaches to consultation. As evident from the Table, the Team remained in contact with local communities for over a period of two years (Oct/Nov 2019 - Mar/April 2021) dealing with safeguard planning and disclosure issues.

	Stage/Period	Mechanisms	Outcome
1	Census/Detailed Measurement Surveys (Oct 2019 to Feb 2020)	Household-level interaction; info sharing, feedback/responses; checklist for follow up meetings; FGDs with local communities	Complete enumeration of the affected households, and measurement of losses for valuation and compensation
2	Socioeconomic Survey (Nov 2019-Feb 2020)	Interviews with heads of households and sharing of project briefs/ROW impacts; collection detailed socio-economic data and households and community profiles	Detailed household level soc io-economic data for safeguard planning and mitigation
3	Public Consultation and Disclosure (Feb-April 2020)	A major public consultation in terms of door- to-door contacts was planned under the TA for Feb-April 2020. The Team was mobilized in the field, but had to abandon the plan due to Covid-19 pandemic.	Project brochure and other related documents prepared; Consultation and Disclosure meetings resumed (March- April 2021). See #6
4	Due Diligence Review (May - June 2020)	Interviews/FGDs at the village level to understand concerns regarding project impacts, compensation issues, gaps to address legacy issues and legacy issues with regard to land and non-land issues	DDR Report highlighting the gaps and recommendations to address legacies in order for the project to be compliant with SPS 2009
5	Land Market Survey (Dec 2020-Jan 2021)	Land Market survey in the project area to assess the Current Market Rate (CMR) for land already acquired in 2006-2008, but payments remained outstanding; interviews/FGDs with buyers and sellers; review of land deeds, interviews of local	LMS Report confirming CMR for various types of land under acquisition; policy entitlements for CMR for land compensation

Table 2 Consultation During Project Preparation and Outcomes

² 17.2 acres additional ROW land being acquired at two locations (i) head regulator an (ii) Akram poultry farm is included. A spate draft LARP is prepared for acquiring additional ROW land.

		revenue officials
6	Social	The Social Mobilization and Public Affected households and
	Mobilization and	Consultation Team conducted meetings in 35 project beneficiaries were
	Public	villages in the project area. Women were updated on the entitlement
	Consultation	consulted and informed in all 35 villages provisions, project
	Meetings March-	separately. Posters and brochures were implementation schedules and
	April 2021	distributed to all the affected settlements and GRM mechanisms.
		villages during the meetings.

Legal and Policy Framework

- 9. Based on the due diligence review, gap analysis between LA Act (1894) and SPS 2009, and intensive consultations between the ADB and PID/GOP, and Revenue Department, the GOP finally adopted the following resettlement policy and principles for the GTC Phase-II to comply with ADB SPS 2009 requirements. These include:
 - Approval of a supplementary package for settling all outstanding land compensation issues at prevailing/current market rates to equate full replacement cost criterion as of ADB's SPS 2009.
 - (ii) A time-bound Corrective Action Plan (CAP) to deal with land compensation payments, including payments for structures, trees and crops at replacement cost, and provisions for self-relocation and assistance.
 - (iii) Provision of income and livelihood restoration for affected households, including tenants and wage laborers affected by the land acquisition.
 - (iv) Stakeholders consultation and disclose the CAP to the affected communities. In addition, APs will be represented in local committees for CAP implementation to enhance project ownership.
 - (v) CAP entitlement policy will be inclusive in that non-titled person (e.g., informal dwellers/squatters and encroachers) will be compensated for their losses and assisted in relocation and resettlement.
 - (vi) Vulnerable households and severely affected displaced persons will be provided special in kind assistance by the project;
 - (vii) PID to pay compensation and resettlement assistance prior to the construction contractor taking physical acquisition of the land and prior to the commencement of any construction activities; and
 - (viii) Establishment of appropriate institutional, grievance redress, internal and external monitoring and reporting mechanisms.
- 10. The above policy measures have been integrated into the project entitlement matrix (Chapter 7) with cut-off-date and eligibility that form the basis of compensation, relocation and other additional measures undertaken by GTC II Project. For CAP implementation, all households/land owners have been identified and documented in the database. The cut-off date has already been disclosed to the APs through consultative meetings, focus group discussions, and other means of communication including face-to-face communication with communities in close coordination with the heads of the villages. This has also been formalized through documentation of consultation meetings and disclosure reports.

Physical Displacement and Relocation

11. The affected persons in the project have experienced more economic than physical displacement requiring relocation and resettlement. Due to acquisition of a narrow land strip in linear alignment through scarcely populated project area, a total of 137 structures and irrigation systems will require demolition and/or relocation from the ROW. The severity of impacts assessed as 102

fully affected, 32 partly affected and 3 slightly affected. However, all affected structures require demolition and/or relocation from the ROW, while remaining partially affected residential structures will be restored at site the affected structures are constructed on the partially affected agricultural land owned/cultivated by the affected households/persons. During consultation meetings, these affected households expressed their preferences to move back and re-build affected residential structures, livestock shelters and agriculture machinery on their remaining land adjoining the ROW. The owners of commercial structures opted for relocation at new suitable place. Further, because of linear project with limited and scattered impacts, any other resettlement option – for instance, development of resettlement site for relocation of affected households was not considered viable on economic and social considerations.

- 12. Under the situations, the project has adopted an "on-site" self-relocation strategy considered most realistic and best option for the physically displaced households. This will not affect the existing socioeconomic settings and social organization of the affected population, because the resettled households are basically on the same site and/or move only a short distance. As a result, the impact and burdens of resettlement will be limited and those displaced will be able to reconstruct and re-build quickly while they will continue fallowing their remaining land without any restriction. The displaced families will receive all their entitlements and their resettlement will be assisted by the project.
- 13. The impact significance was also assessed from the available impacts and census of 4662 affected households including self cultivating landowners, sharecroppers, lease holders and encroachers in forest land required as ROW. Assessment indicated that 1570 AHs will be losing 10% or above of their productive land which have been presented in Table 1 above. However, the economic displacement in terms of business and employment losses has been significantly reduced by realigning the ROW around the poultry/broiler factory.

Institutional Framework and CAP Implementation Steps

- 14. The PID as the EA is responsible for CAP implementation and supervision through the Project Management Office (PMO) Barrages. As the implementation agency (IA), PMO Barrages will be responsible for implementation of CAP including CAP processes, outcomes, GRCs, other relevant committees, and monitoring, evaluation and reporting and coordination with other agencies/departments as well. The PMO has already established a dedicated Social and Environmental Unit (SEU) within the PMO structure for the preparation, implementation and monitoring of CAP. A Three-Tier GRC system, with members from APs/affected communities, has been established for grievances redressal. The GRCs will deal with grievances and disputes to resolve locally to facilitate smooth implementation of the CAP and other social measures under the project. As a result, the establishment of GRC system will make the project accountable to the affected people. The PMO will also engage an independent external monitoring consultant for the validation of implementation of CAP.
- 15. The CAP Implementation will start with a social preparation plan involving information campaign and community consultations with full details of CAP processes, including compensation delivery, relocation and grievances resolution. TABLE 3 lists the key steps. These steps are further elaborated in Chapter 10 as guidelines to CAP implementation.

	Table 3 Cap Implementation Steps					
Step	Description and Duration of Activity					
Step-1	Disclosure of approved CAP compensation of award by EA. The disclosure will continue till the end of the project for different stages of the project implementation					
Step-2	Payment of all eligible compensation and other livelihood related assistance – will start with the approval of this CAP and will be completed before start of construction activity					
Step-3	Redress of grievances and complaints if any related to compensation for land and othe assets and livelihood / resettlement allowances.					
Step-4	Dispossession of acquired ROW land and removal of structures/ assets is conditional to the prior payment of compensation awarded under law and allowed under CAP at the current market rate.					
Step-5	Sectional handover of the site to the contractor					
Step-6	Monitor civil work activities by the Contract awards against social and environmental safeguards.					

Budget and Financing

- 16. The estimated CAP budget is PKR 2106.9 million (USD. 12.5 million). At this stage, efforts have been made to prepare a realistic cost estimate to reflect fair values and compensation at the current market rates for assets acquired for the project. For unit cost, the existing rates used by various government departments/agencies (e.g., Irrigation, Forest, Revenue, Communication and Works and Agriculture) were considered first; the rates were then capped using market surveys for affected land, crops, trees and structures. Despite this, some adjustments may be necessary at implementation. Any cost adjustments will be provisioned from the contingencies.
- 17. Itemized indicative compensation costs related to land acquisition and resettlement activities are in Chapter 11. The GOP will finance the land acquisition cost (PKR1,384.5 million or 70% of the CAP cost) for the project as counterpart funds while non-land items (PKR 633.4 million or 30% of the CAP cost) will be financed by ADB under the project loan. The GOP part of the project financing is already available with the Revenue Department. The grant-in-aid part of the funds (PKR1.4 billion) is already approved by the Provincial Cabinet.
- 18. PKR 633.4 million is calculated costs for resettlement related activities including monitoring and evaluation and 10% contingencies. Additional contingent cost amounting to PKR 90.0 million is included in the CAP as line item for CDP. The Government of Punjab will finance the entire land acquisition cost (70%) as counterpart funding and the remaining 30% (PKR 633.4 million) as resettlement cost and 71.0 million for social development (refer table 85 above) will be financed by ADB under the project loan/ grant.

TABLE 4: CAP BUDGET SUMMARY

Ref Tab.#		Item Unit	Quantity	Rate (Rs/Unit)	Estimated Cost (PKR)	Estimated Cost (USD)
	1	A: LAND ACQUISITION	N COST		1	
11.3.1	L	and acquired under 96 land awards	4410	Various	1,383,505,21 0	8,235,150
11.3.1	G	overnment land of forest department transferred to PID	1205	free of cost		
	•	B: RESETTLEMEN	NT		·	
11.3.2	Comp	ensation for Crop and	4386.3	Various	171,181,625	1,018,938
11.3.3	Severe	e Agriculture Land Impact allowance	1570	Ref. EM_A.2	141,300,000	841,071
11.3.4	Comp	ensation for Trees	105838	Table 8.6	193,106,330	1,149,442
11.3.5	Comp	ensation for Residential Structures	58	13978 sft	10,570,495	62,920
11.3.6		ation Allowance to residential structures	35	Ref. EM _K	1,050,000	6,250
11.3.7	Sever reloca	Impact allowance for AHs facing physical ation	35	Ref. EM _M	8,400,000	50,000
11.3.8	Livest	ock sheds/shelters	8	2476 sft	474,150	2,822
11.3.9	Comn	nunity Infrastructure	2	750 Sft	1,200,000	7,143
11.3.10		stallation of Agri, Machinery/structures	41	Various	3,570,000	21,250
11.3.11	Small	Commercial Structures	3	750 sft	520,000	3,095
11.3.12	Shiftir	ng/Relocation allowance	3	Ref. EM _K	90,000	536
11.3.13	Busir	ness disturbances Allowances	3	Ref. EM _J	540,000	3,214
11.3.14	Sever sourc	Impact allowance from other than land e.	3	Ref. EM _M	720,000	4,286
11.3.15	Additi	onal Assistance for Vulnerable HHs	151	Ref. EM _M	9060000	53,929
11.3.16	Reloc	ation of Public Utilities –Electric poles		Lump sum	1,000,000	5,952
Sub-tota	al -B				542,782,600	3,230,849
		C: CAP implementation	Monitoring	and Evaluatio	n Costs	
11.3.17		CAP Monitoring and Evaluation			33,000,000	196,429
Sub-Tota	al (B+C	;)			575,782,600	3,427,277
D: Contingency Cost						
11.3.17	CAP Contingencies @ 10% of sub-total (B+C)				57,578,260	342,728
11.3.18	Tentative Cost for preparation, implementation and Monitoring of CDP			Lump sum	90,000,000	535,714
Sub-Tot	al (D)				147,578,260	878,442
Gr	and To	tal Land Acquisition and Resettlement Co	osts (A) + (B	+C+D)	2,106,866,070	12,540,869
		US\$1=PKR 168.02 as on August 15,	2021		USD	12.54 million

Table 80: Budget and Financing -GTC CAP Implementation Plan

Monitoring and Evaluation

- 19. A participatory M&E system has been designed for internal and external monitoring for an informed and better understanding of the CAP operations and to promote good governance, transparency, innovation, responsiveness, and development effectiveness.
- 20. At the implementation stage, CAP monitoring means the collection, analysis and reporting and use of information/data about progress, based on the implementation schedule. A mixed methods approach will be used to allow a wide range of tools and techniques in data collection. The M&E will focus on physical and financial targets, and delivery of entitlements to the affected people, relocation of vulnerable households, on a monthly basis. This is largely considered as internal monitoring to assess both progress and performances. The CAP internal monitoring will be supplemented by periodic review at key points in the project cycle. The external monitoring will commence immediately after project effectiveness. Table 4 lists CAP M&E reporting requirements.

Activity	Content	Timeline	Responsibility
CAP Progress Report (Monthly)	Narrative as per the guidelines; the format must provide details on activity, results, issues affecting performance and variance if any and reason for same and corrections recommended	Submitted within 10 days of the next month	SEU
Bi-annual CAP Monitoring reports	Bi-annual overview of the progress covering compensation, relocation, livelihood, gender etc.; financial statements (expenditure vs. budgeted amount by CAP budget heads); assessment of progress, and remedial measures, if needed.	Submitted within 30 days after each cycle	SEU/CSC
Ex-post Evaluation of CAP	Narrative as per monitoring program on CAP as final Report at the completion of the Project.	Submitted within 60 days of the completion of CAP activities	SEU/CSC
Bi-annual External Monitoring reports &	As per the TOR and narrative in the M&E of CAP with detail results of the evaluation results, including issues affecting performance, bottlenecks, if any and	Submitted within 30 days after each cycle	EMA
Special Reports to Validate full implementation of CAP/LARP in construction ready sections	reason for same and corrections recommended. In addition to bi-annual periodic reports, the External Monitoring Agent will prepare and submit special reports validating full implementation of CAP/LARP in construction ready sections likely to be handed over for construction.	Submitted within 15-20 days upon PMOs request as and when advised during project cycle.	EMA
Final Independent Evaluation Report	A full assessment of CAP achievements, failures and impacts at project completion; lessons learned from CAP implementation.	Submitted within 90 days of end of the project	EMA

PART-I DUE DILIGENCE AND COMPLIANCE AUDIT

CHAPTER 1: THE PROJECT

1.1 Objectives and CAP outlines

- 21. This chapter provides a short narrative on the past project activities, including status of the land acquisition and outstanding issues concerning payments of compensation, for setting the context of the current project preparatory work under the ADB TRTA (9458 PAK) and safeguard documentation for ADB financing of the of the GTC Phase II. The key purpose is to highlight on the legacy issues for the Corrective Action Plan (CAP). The CAP is divided into two parts.
 - (i) Part I (Chapters 1 to 3) focuses on Due Diligence Review (DDR) and compliance audit about awarded compensation under LAA provisions, including policy responses and steps taken by the Punjab Irrigation Department (PID) and the Government of Punjab (GOP).
 - (ii) Part II (Chapters 4-12) describes GTC -Phase II safeguards planning activities for instance, land acquisition and resettlement (LA&R) impacts, the census/socio-economic surveys, stakeholder's consultation/disclosure, gap analysis, current land market survey, and confirms safeguard measures such as compensation and relocation plans, livelihoods, grievances redress mechanisms, cost/budget, CAP implementation plan, and M&E to comply with SPS 2009 requirements.

1.2 A Brief History of the GTC Project

- 22. The Greater Thal Canal Project (GTCP) was conceived in 1960 to irrigate 1.738 million acres (703,345 hectares) in the eastern Thal Doab falling within the limit of Bhakkar, Layyah, Khushab, Jhang and Muzaffargarh Districts. The Head regulator of GTC was constructed at Chashma Jhelum (CJ) link canal to irrigate Thal Doab. To ensure adequate availability of water for the project, an allocation of 1.873 Million Feet Availability for Kharif season was made in the Water Apportionment Accord 1991 out of Punjab's share in the Indus Basin and the project remained included in the federal Government's "Water Vision 2025" and proposed to be undertaken through federal funding. The Federal Government during the construction of first phase, in March 2006 ³ directed the Punjab Government to finance the remaining project from provincial resources.
- 23. The Punjab Government continued its resolve to implement remaining GTC works and mobilized some resources for the preparatory works on GTC-Phase –II (Chaubara Branch) in 2016-17⁴, and updated the design and Market Rate System -2019, GTC –Chaubara also appeared in the Annual Development Plan of Punjab as an ongoing scheme. However, the project could not be launched due to financial constraints.

1.2.1 Feasibility Study of Greater Thal Canal

24. Detailed feasibility study for the scheme was undertaken in 1994 and was approved for construction by the Indus River Systems Authority (IRSA) in May 2002. The feasibility designs were updated in 2002-2008, and detailed engineering design was completed by WAPDA through

³ Government of Pakistan, Planning and Development Division, Minutes of the presentation to Deputy Chairman, Planning Commission on Greater Thal Canal project, held on December 20, 2006, in Islamabad.

⁴ See Government of Punjab, Estimates of Charged expenditures and Demand for Grants (Development) 2016-2017, Vol. II, page 23.

contracted consultants in 2008. The project planning comprised of 11 construction packages (see Figure 1). The project comprised of Main Canal and five Branch Canals viz Mankera, Chaubara, Dhingana, Noorpur and Mahmood sub–branches. The project was scheduled to be completed in three phases.

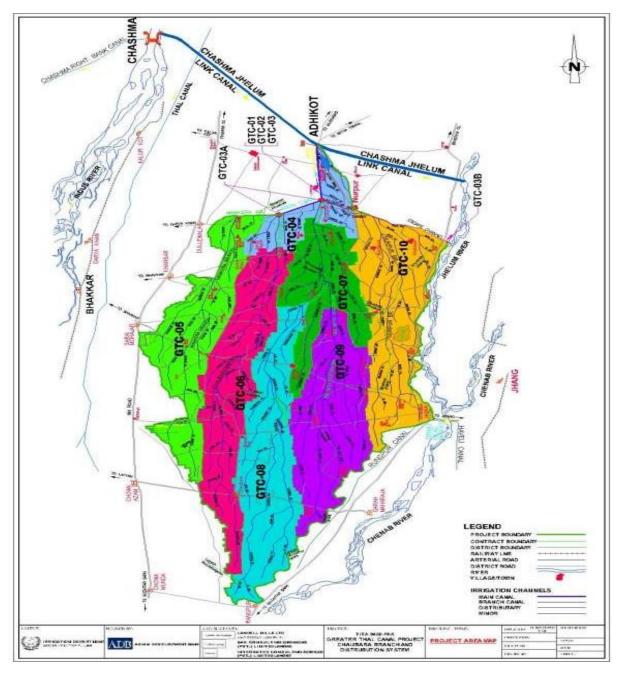


FIGURE 1 Greater Thal Canal Development Project

25. The GTC water conveyance infrastructure includes a main canal (35km) that takes water from the Chashma –Jhelum link Canal (CJ –Link) before it is divided between four branches and one sub-branch as detailed in Table 5 below. The first phase Main Canal and Mankera were constructed by WAPDA in 2002-08 and handed over to Punjab Irrigation Department in 2010. The second phase was planned to construct Chaubara Branch Canal System, while the remaining Dhingana, Mehmood and 'Noorpur' Canals were placed for the third phase. However, second and third phases could not be taken up to-date due to lack of funding.

	Table 5 Greater		leme. Phas		elopment	
Phases	Canal	Command Area	Outlets	Length (km)	Comments	
Phase-I	Main Canal and Mankera	a Branch Cana	d			
GTC-1-4	Main Canal	1,738,000	3533	35	Constructed	
GTC-5	Mankera Canal	257,030	526	68	Constructed	
Phase-II	Phase-II Chaubara Branch Canal System					
GTC-6	Chaubara Branch Canal System	294,115	610	450	Under ADB Project Readiness for financing	
Phase-III	Dhingana Mahmoud and	d Noorpur Ca	nal System			
GTC 7-8	Dhingana Branch	781,080	1590	88	Marked for future ADB financing	
GTC-9	Mahmood Sub-Branch	284,930	575	54	Marked for future ADB financing	
GTC-10	Noorpur Branch	307,810	610	68	Marked for future ADB financing	
GTC-11	Telecommunication and	Supervisory C	ontrol and [Data Acqu	isition System (SCADA)	

Table 5 Greater Thal Canal Scheme: Phases of Development

1.2.2 Three-phased Plan: A Brief Review

Phase-I Planning and Construction of Mankera Branch Canal System

- 26. The Phase-I infrastructure was developed and completed by WAPDA in 2002-08 and handed over to the PID in 2010. The contract packages include construction and lining of Main Canal (MC), interceptor drains and escape channels, direct distribution system from the Main Canal and construction of Mankera Branch Canal. A total 9326 acres of land required for the construction of Main Canal, direct distributaries, Mankera Branch Canal system and escape channels.
- 27. It is learnt that Mankera Branch Canal (MBC) has achieved only partial development targets⁵ (less than 30%) as compared to the original plan. The major reason for short fall in the development targets is attributed to the lack of Command Area Development in the Phase -1 project packages. The operation and maintenance (O&M) of the MC and MBC is the responsibility of PID.
- 28. The WAPDA detailed design phase of the GTC-II Chaubara Branch Project undertook social, environmental and socio-economic studies of the command area for the purpose of the determination of the impacts and addressing remedial measures to be introduced to offset these impacts. The studies carried out in detail have only been summarized in a 23-page section in the main report. Hence Phase-II planning team had limited data to learn and benefit from the past GTC-II activities.

Phase-II Construction of CBCS, DBCS and Staff Colonies

⁵ GTC-IIP Interim Report, Vol.1 Main Report, October 2019, p.31

- 29. The original Phase-II included construction of Chaubara Branch Canal System, Dhingana Branch Canal System and colonies for irrigation staff, with a total target area of 14,039 acres. The I&C Unit Adhikot was entrusted with survey work and preparation of land Acquisition packages (Awards) for the entire land required for the Project.
 - i. The I&C Unit Adhikot completed survey work, revenue record and section (4) for 6484 acres of Land.
 - ii. Beyond this, approval of section 17 (4) 6 warrants availability of funds with acquiring agency, which was not available and the process was shelved.
 - iii. The detailed design and tender documents for the project were prepared by WAPDA in 2006/2008.

Phase-III Construction of MBCS, NBCS and Staff Colonies Chaubara BCS

30. The original Phase-II included construction of Mahmood Sub-Branch Canal System, Noorpur Branch Canal System and Dhingana Branch canal system with a total command area of around 1.28 million (almost 4 time more than Phase-II). Is now rescheduled as Phase –III and is under preparation for ADB financing. GTC Consultants reviewed the layouts and designs of Chaubara Branch Canal and prepared Design Review Report. It was found from the review that the prepared layouts and designs are generally in order, therefore no changes in layout and design were recommended. Design updation was completed in 2020.⁶

1.3 Revised Phase II Chaubara Branch Canal System

1.3.1 Land Acquisition

31. With the intent to acquire this land for "public purpose" the notification under section 4 of the LAA 1894 was issued earlier in 2006 and the price of land was determined through DPAC in 2006. Further land acquisition process was completed by using urgency clause of the Act i.e. 17(4) & 6, that empowered provincial government to take possession of this entire ROW land, free of all encumbrances. However, even the land was acquired under urgency clause and land awards were announced between 2008-11 for acquired ROW for disbursement of compensation, but the affected land owners were not dispossessed from their acquired assets. The compulsory acquisition of land by invoking LAA provisions triggers involuntary resettlement for the owners/users having legal and/or legalize able title and formal/informal users and encroacher on acquired land. As the acquisition of 5615 acres of ROW land for the project involved significant involuntary resettlement impacts, so GTC project is categorized as IR Category A project under the ADB's Social Safeguard Policy Statement 2009.

1.3.2 Design and Detailed Measurement Survey Estimates

32. The detailed design of the project proposed around 5615 acres of land required for the construction of GTC-Phase-II Chaubara Branch Canal System. In order to meet the demand, the PID, acquired 3690 acres (3660 acres private owned and 30 acres government owned) of land in 2008-11 and 720 acres land (leased/allotted government owned land) in July 2020, furthermore

⁶ Technical Note on Impacts of Canal Realignment in Rakh Areas along Chaubara Branch and its Distributary System, by GTC Consultants dated 15-03-21-see annex

the Board of Revenue (BOR) Punjab annexed 1205 acres of Forest land to meet the project requirements⁷ (Table 6).

	Canal System	No	Length (Km)	ROW Width Head to Tail (feet)	Total Area Required by Design
1	Chaubara Branch Canal	1	71.6	365-230	1249
2	Distributaries	11	249.8	220-110	2850
3	Minors	11	124.7	265-115	1516
	Total	23	446.1		5615

Table 6 Length, Row and Total Area Required for CBC System

1.4 Land Acquisition Process: An Update

33. Based on the design parameters and PID ROW requirements for operating the Canal system, the PID estimated the acquisition of a total area of 5616.5 acres, that included 4410.5 acres' land acquired under 96 awards, 1205 acres of forest land transferred to PID by BOR Punjab in 5 Rakh areas. The awarded land is further divided into two main categories a) 3660.2 acres of private owned land and 750. acres of leased/allotted provincial government land. The land acquisition process started in the year 2006 and complemented in May 2021. In order to avoid heavy impact on one private structure (poultry farm) and minor design change at head regulator, an additional of 17.2 acres of land is yet to be acquired ⁸. Thus the total land to be acquired will be 5632.4 acres. Table 7 summarizes land requirements for the construction of Chaubara Branch Canal System by districts.

Districts	Total Land to be Acquired	State Land	Private a	and leased/allo Acquired	otted land	Total
	(Acres)	Acquired (Acres)	During 2008-2011	In July 2020	To be acquired	
Khushab	82.5	-	78	0	4.5	82.5
Bhakkar	3,888	1,198.5	2184.2	508	12.7	3903.4
Layyah	1,646	6.5	1,428	212	0	1646.5
Total:	5,616.5	1,205	3,690.2	720	17.2	5632.4
	5616.5					

Table 7 Land Area Acquisition for CBC Row (Acres)

1.4.1 Determining Price of Land by DPACs

- 34. Using emergency clause of the Land Acquisition Act 1894, the BOR delegated the task to determine the prices of land to the respective District Price Assessment Committees (DPACs). The DPACs were comprised of District Revenue officers, respective Tehsil Revenue officers and Executive Engineer (Irrigation) without any representation from the proposed affected landowners. DPACs (held in 2006), besides meeting the requirement of emergency acquisition of land each category of land, provided 15% as compulsory acquisition surcharge (CAS). However, DPACs adopted two different approaches for their respective districts:
 - (i) DPAC Bhakkar reviewed the average per acre sale price verified by the revenue field staff and decided that the market price of the Barani land be increased by 10%, tube well irrigated by 50% and no increase for Barren (*Banjar Qadeem*) land.

⁷ Forest land was annexed in 2008 and the BOR-P&D Forest and PID meeting held on July 6, 2020 confirmed this annexation

⁸ Subject to change in design at two sites (Head regulator and Poultry Farm) 17.2 acres of additional land will be acquired. The LARP for additional land is in process for approval from ADB.

- (ii) DPAC Layyah adopted a different formula –as "Average price + market price / 2". The price assessment was made on the type of land to be acquired through each award separately.
- 35. Following the price determined by the DPACs, the land acquisition collector calculated the amount of compensation against each category of land and AP. The DPAC assessed per acre price as of 2006 including 15% compulsory land acquisition surcharge (CAS) for acquired land in three different categories is summarized in Table 8 below.

CBCS	T.W Iri	rigated	Barani/	Rainfed	Banjar Qadeem			
	Price/Acre	15% CAS	Price /Acre	15% CAS	Price/Acre	15% CAS		
Chaubara Branch	43968	50564	33114	38081	30704	35010		
11 Distributaries	43598	51518	32773	37793	28395	32835		
11 Minor canals	43440	49956	32620	37513	25835	29713		
Overall Average	43669	50679	32836	37796	28311	32519		

TABLE 8 Summary Table for DPAC Assessed Rate of Land Acquired

1.4.2 Award wise cost of Land as Calculated by LACs

36. Based on the price of land determined by the DPACs, the respective Land Acquisitions Collectors (LACs) further calculated the compensation amount for each AP as per the category of land and the respective shares already recorded in the revenue registers and awarded compensation accordingly. Per acre price of land and awarded compensation varies from villages, canal system and distance from urban localities.

1.4.3 Land Award Funds by PID

37. The acquiring Agency (PID) following the assessment by the DPAC and award wise calculations for the entire land to be acquired (3690 acres in 2008-2011 and 720 acres in 2020) deposited in district treasuries⁹ a total of PKR 169,312,842 in 2008. For 96 awards related to Chaubara Branch Phase–II the total amount required was PKR 153,982, 335. Of the total 96 awards, 69 awards for 3690 acres were approved during 2008-2011 while the remaining 27 awards in July 2020. All 27 awards approved in July 2020 were based on DPAC rates approved in 2006. The acquaintance rolls for 96 awards registered is 15690. LAC wise approval dates and the number of awards and amount of awards are shown in Table 9 below.

	LAC Tehsil &	Awards	No of	Land Acquired	Amount of	No. of	
	District	Approval Date	Awards	(Acres)	Awards	DPs	
						(BOR)	
1	LAC Noorpur -	2008	2	78	4,599,281	75	
2	LAC Darya Khan -	2008	1	2.2	129,753	15	
3	LAC-Mankera –	2008-2011	38	2182	74,911,759	5106	
3	Bhakkar	July 2020	22	508	14,753,185	274	
4	LAC Chaubara –	2008-2011	28	1428	51,920,102	9704	
4	Layyah	July 2020	5	212	7,668,255	516	
	Total		96	4410	153,982,335	15690	
<i>Note:</i> As of June 30, 2021, the PID fully paid the award money to the land revenue department and all 96 awards are functional							

TABLE 9 Land Acquisition Awards Approved Date and Compensation Amount

1.5 Summary of Issues related to Land Acquisition

38. Only those land parcels can be considered acquired "not in anticipation of ADB financing" which were fully paid for by the government as of the time of inclusion of that project into the country operations business plan. The Greater Thal Project appeared in the ADB Business Plan in 2016 (for the 2017 COBP) - which indicates that ADB's intent to finance this project was already discussed. Therefore, any AH who have not received compensation as of inclusion of the project into COBP in 2016 technically constitute a land acquisition case under SPS. In GTC - Phase II, land acquisition was not in anticipation of any ADB finances. As a result, the history of acquisition, assessment and valuation as described above raises several fundamental safeguard related issues. First, the valuation of land by DPAC was at 2006 rates. Second, the land prices thus determined are obviously lower than the full replacement value. Thirdly, PID considered compensation only for land and other assets such as structures, trees, crops etc. were not considered and included in announced land awards. These constitute major gaps with ADB SPS 2009 requirements. In sum, in view of the long history of the project, several legacy issues emerged that required further examination for project preparatory work. Therefore, moving forward and as a step toward better safeguard planning, the TRTA Team conducted (i) a due diligence review (DDR) of the status of land acquisition and payments of compensation; (ii) land market survey (LMS); and (iii) intensive stakeholder's consultation and information dissemination campaign. The results of DDR and other additional surveys are presented in Chapters 2 and 3.

1.6 Due Diligence on Payment Process

A sample copy of payment voucher for the land is attached below. The payment voucher is a prescribed payment advice issued by the land acquisition collector for releasing awarded compensation amount in favour of affected land/assets owners from district treasury deposits against his acquired land/assets. It exhibits - name of treasury and total amount deposited as land acquisition costs, Voucher no, date of issue, allowed compensation amount, name and address of the recipient, and bears sign and seals of the Land Acquisition Collector (LAC) and District account officer to it has to be presented. After receiving payment voucher from LAC, the recipient presents it to the District Accounts Officer who issues the cheque of allowed compensation amount which is debited to district treasury and credited to the recipient's bank account.

The receipt of payment voucher does not mean that compensation has been paid and credited to the recipient. As explained above it is only a payment advice issued by the LAC which has to be presented in district accounts office for issuing cheque for releasing allowed amount from treasury to recipient's bank account. The compensation payment process under law is very transparent but time consuming and costly because of multiple visits required to access land acquisition collector and respective district account office. The collection of any number of Payment vouchers from AHs will only reflect a) number of AHs paid and b) total amount paid by the LAC. It will not help the ESU-PMO or the monitors to calculate the number of paid AHs and compensation for land take on any specific section as well as types of paid and unpaid land etc. Sample Voucher is attached below.

1153 No._____ 78 A and T, 261 JUR 192021 Book No._ Treasury. Month of X VOUCHER No._ List of Payments. Head of Service Chargeable. Deposit. Amount originally = 29 033 7807 Name of Depositor } LAC Date of Deposit. 24 6 2021 OriginalDate of }_2 Received this 7 day of IN3 19 2021 06 EJE 551 the sum of Rupees = 49899=19 - 22 Irien jor inter being the amount payable to _______ مروج مدا المراد المراد on account of the Deposit described above. بابت فيازع تذكره Claimant's با نیوالے کے Signature. Stamp if required. ایکٹ رسید اگر واجب ہو Examined and enter. Passed for payment. Accountant, Treasutry. Inder Acquirine or Collector. Rupees. Treasury Officer. Grater That eal Project sisti. Bhakkar Tettesil Manker

CHAPTER 2: DUE DILIGENCE REVIEW AND RECOMMENDATIONS

2.1 DDR - Objectives and Methodology

- 39. The key objective of the due diligence review was to investigate and confirm all relevant facts regarding land acquisition and compensation for the construction of proposed GTC-Phase II, including assessments of risks, ways to avoid and/or resolve any issues to make the project compliant with SPS 2009. The DDR report presents a comprehensive due diligence study on Chaubara Branch System and provides a synthesis of key findings and recommendations.
- 40. The TRTA consultants, with support from PID staff, GTC-Implementation & Coordination (I&C) Unit Adhikot and the entire Census & Detailed Measurement Survey team, carried out the due diligence work. The I&C Unit Adhikot and sub-contractors team also provided necessary data sets and reported the legacy issues related to land ownership and other ongoing social issues in the project areas. The processes involved include (a) desk review of the project documents; (b) consultation with relevant stakeholders, including the survey team and line department staff; (c) field visits and community-level consultation meetings; (d) additional inquiries and field investigations on land acquisition and resettlement; and (e) use of census and DMS survey data.

2.2 Legacy Issues

- 41. The acquisition of land for the construction of GTC Project was first declared in 2005-2006. The land for the project was acquired invoking urgency clause (i.e. Section 17 (4) and 6) of the Land Acquisition Act of 1894. As noted earlier, GTC- Phase II requested for the acquisition of 5615 acres of land including 1205 acres of forest land and 4410 acres through 96 awards. Of the total 96 awards, 69 awards for 3690 acres were approved for implementation during 2008-2011 and remaining 27¹⁰ awards for 720 acres in mid-2020. The acquisition of 17.2 acres of additional land will finally sum the total acquired land at 5632.2 acres for which a separate LARP is prepared. Chapter 2 presents a detailed review of legacy issues, audit, responses and recommendations for compliances.
- 42. There are also significant gaps evident in acquisition and valuation approaches between the LAA 1894 and the ADB's SPS 2009. The divergence in key areas include (i) lack of screening at the planning stage; (ii) lack of meaningful consultation; (iii) lack of prompt and full compensation for all lost assets at replacement cost; (iv) inclusive compensation principles for all affectees, irrespective of title status; and (v) support and adequate assistance for resettlement and income restoration, at least at pre-project level.
- 43. The ADB Fact Finding Mission (February 2020) noted these gaps and raised concerns on the lower valuation for 3690 acres of acquired land and proposed acquisition of 720 acres through compulsory land acquisition clauses of LAA 1894 as acquisition under urgency clauses is defiant to the ADB SPS 2009 provisions. The land acquisition and compensation were therefore viewed as a major "legacy" issue resulting from previous large-scale acquisition, valuation of land and other assets, outstanding payments, and lack of consultation with and disclosure to the affected people and communities. Accordingly, the TRTA Team conducted a due diligence review to find proper and pragmatic solutions to the legacy issues.

¹⁰ Approval of one award for 23 acres in LAC Chaubara, still pending due to technical reasons.

2.3 Scope of the Due Diligence Review

- 44. The Due Diligence Review focused on the acquired 5615¹¹ acres of land including 4410 acres of acquired private land (3690 acres of land awarded in 2008-11 and 720 acres awarded in July 2020) and 1205 acres' government land (forest department land) acquired for the Chaubara Branch Canal System (CBCS) with a length of 447 km that includes Chaubara Branch canal (72 km), 11 distributaries (250 km) and 11 minors (125 km). The average ROW width of main canal, distys and minor canals varies from 111 to 35 meters from head to tail which is explained in Table 10 below. As a linear project, it required longer strips of ROW involving "Provincial Government", "Forest/ rangeland" and "privately" owned lands.
- 45. The title and ownership of lands in the project area presented a complex picture of land and agricultural development– for example, provincial un-cultivable/cultivable land, provincial land allotted to individual and/or institutions, forest land and private land.
- 46. The acquired 3690 acres of land is carved out of different types of land from three districts (Khushab, Bhakkar and Layyah); the types of land acquired include rainfed/Barani, tube well irrigated and barren lands. The designed hydraulic structures pass through a sizeable number of farmhouses and animal sheds as well as community structures. The spread and distribution of land acquired presented in Table 11 are as follows: Chaubara main canal (22%), 11 distributaries (51%) and 11 minor canals (27%).

Chaubara Canal System anal System	Length	ROW WROW	Private Lan	d Land	SForest Land tate/	Total Area Required equired	
		Widthidt h Head to Tail	Area Acquired (2008- 2011)	Area Acquired (2020)	Forest Land		
	Km	(Meters)	Acres	Acres	Acres	Acres (%)	
A. Chaubara Main Canal (1)	72	111-70	771	101	377	1249 (22%)	
B. Distributaries (11)	250	70-35	1756	455	639	2850 (51%)	
C. Minors (11)	125	67-35	1163	164	189	1516 (27%)	
Total (A+B+C)	447	111-35	3690	720	1205	5615(100%)	

TABLE 10 Distribution of Project Row Land by Length, Width and Area

47. The total number of BOR affected persons (legal title holders) under the CBCS acquisition of 5616 acres of land is 15690. Those affected include titled owners, absentee landlords, besides long-term leaseholders/renters, and unregistered users/encroachers. The entire private land (4410 acres) has already been acquired except additional land required to accommodate design changes at two locations head regulator of the CBC and (Zero to 5 RD) and between RD 189-193 (Akram Control Shed. The actual area to be acquired will be determined after the design change and detailed measurement survey by the TRTA consultants. It is however, decided that the land will be acquired through normal land acquisition process and a separate LARP will be prepared for these two locations.

2.4 Status of 4410 Acres Acquired

48. The current status of private land stands acquired is 4410 that fall in the revenue jurisdiction of three districts and four Tehsils as summarized in Table 11.

¹¹ The project is also acquiring additional 17.2 acres of land to meet the design changes, through two awards at two sites, that will add up the total land acquire as 5632.2 acres.

District Tehsil		No of Awards	No of DPs (BOR) (as per Acquaintance Rolls) ¹²	Total Land Acquired
Khushab	Noorpur	2	75	78
Bhakkar	Darya Khan	1	15	2.2
Bhakkar	Mankera	60	5480	2690
Layyah	Chaubara	33	10220	1640
	Total	96	15690*	4410

TABLE 11	Distribution	of Acquired	Land by	Tehsil and	Awards
		0. / .oqu ou			

15690 is the total shareholders (recipients or beneficiaries) of awarded private land.

- 49. The GTC-Project pursued acquisition of 4410 acres of land through 96 different awards from 4 respective Land Acquisition Collectors (LACs). The approval of these awards started in March 2006. However, 69 awards for 3690 acres were approved in November 2011 and 27 awards for 720 acres were finally approved in July 2020. All awards were announced after securing the costs required for land acquisition. The acquaintance rolls show two major categories of owners of the land i.e. private land owners and provincial government. Of the total 4410 acres provincial government owns 750 acres and the remaining 3660 acres by private owners. The Provincial Government land falls in two tehsils- Tehsil Noorpur (45 Acres) and Tehsil Mankera (705 acres). The land (750 acres) is under cultivation by private persons under different long-term agreements (tender, lease, installments etc.). Although the official number of contested rights holders is not known, the DMS survey identified 130 AH cultivating provincial government land through tender, lease or on instalments. The amount of award against this land will remain with the Revenue Department, until the land title of these contested rights holders (people who have lease agreement etc. but expired) restored (see Annex-5). The acquaintance role identify ownership title as Provincial Government land for the bulk of land under each award. The Provincial Government land falls in a total of 38 out of 96 awards. However there a 6 awards which are exclusively for this category of land.
- 50. The major findings of the review of 96 awards under implementation during the past 10 to 15 years of acquisition are presented in **Error! Reference source not found.** and described in the paragraphs to follow.

LAC	No of Awards	Total Area (Acres)	Categories of Land	Status of Compensation Payments as of May 2011 (all payments made to DPs (BOR) at 2006 DPAC rates)
Noorpur	2	78	1 Award of 33 acres includes 0.3 acres	Total 60 DPs (BOR) 51 paid in 2008, remaining 9 not paid till may 2021.

Table -13 Status of land acquired

¹² The Assistant Commissioner Mankera vide letter no 22/AC/HC dated 8 January 2021, sent detail of Affectees to Deputy Commissioner Bhakkar certified that ;

^{1.}list of village wise affected persons is based upon Revenue Record 1998-2003. Hence change is admissible due to inheritance /legal issues.

^{2.} Affected land measurement has been verified from Gazette Notification U/S 17(4)6 and awards announced by the LAC.

^{3.} Approved / notified tehsil wise valuation table FY 2020-2021 has been incorporated for price assessment This assessment is made for estimation purpose under grant in aid program. The final payment will be made after the decision of District Price Assessment Committee for payment to actual person.

			Provincial government land. 2. Award of 44 acres total land owned by Provincial Government.	Total 45 AHs identified as lease holders, not a single paid till May 2021 as of policy.
Darya Khan	1	2.0	Total land owned by private owners	10 out of 15 AHs paid in 2008-2011, remaining 5 were inheritance cases. Since the remaining amount was negligible, APs opted not to contest.
Mankera	60	2690	1985 acre (74%) private land	Total 5380 APs of which; * 1743 (33%) AHs were paid during 2008-2011. * 3637 (67%) not paid any compensation as of May 2021.
			705 acre (26%) Provincial Government Land	 All cases of transfer of leased land are pending with District revenue Office. Number of AHs is still un decided.
Chaubara	33	1640	All Private Land	 Total 10220 AHs 661 (6.5%) AHs paid 23.5% of amount for land during 2008-2011 2901 AHs paid 68% of total amount during 2020 6658 AHs are not paid any amount as of May 2021.

2.5 Agreed Policy on Compensation Payments and Top-Ups

51. The Due Diligence Report pointed out a) the land prices assessed in 2006 are considerably low as compared to the current market prices; b) this is in violation of ADB's SPS which requires payments at market rates; and c) in addition to land compensation, all affected persons shall be compensated for the lost crops, trees, structures and livelihoods etc. Further the DDR recommended that all such affected persons who were not paid or in respect of whose land award was not announced on the day of arrival of Fact Finding Mission (Feb.5-19,2020) shall be compensated as per current market rate. In the follow up meeting the ADB suggested the following approach to meet the SPS.

a). All unpaid landowners in 3690 and 720 acres shall be paid to fill the gap of the land prices approved in 2006-08, and the current market rate, which is to be calculated at full replacement cost as per SPS.

b). Lands in 3690 acres whose owners have already been paid not in anticipation of their support to the project will be considered as " acquired government land" and the land owners will not be paid as above.

ADB pronounced at this stage, that allaying their above mentioned fears is a pre-requisite for the bank to proceed further with the financing for the project.

52. The chairman P&D Board in the summary to the Chief Minister dated August,13, 2020, recommended that "Additional cost impact to meet the social safeguard policy covenants of ADB to fill the gap of the land prices approved in 2006-08 and the current market rate as worked out by the Board of Revenue (BOR) to extend under Grant-in–Aid mode for affectees of the project in District Bhakkar and Layyah is approximately Rs. 1.4 billion. Keeping in view the significance of

GTC project the BOR proposal (contained at para 11/ante) was endorsed to place before the Provincial Cabinet for decision after consideration of the indicated options by the Cabinet Committee on Finance and Development.

- 53. The 37th Provincial Cabinet meeting held on November 17, 2020, considered and approved the proposal recommended by the ADB and Standing Committee of Cabinet on Finance and Development. The Cabinet further approved Supplementary Grant amounting to Rs. 1.4 billion during CFY 2020/21 for additional payment to affected persons in approximately 4410 acres (less the persons paid in full prior to arrival of Fact Finding Mission) to fill the gap between price paid to them as per earlier assessment and current market price of land (Decision NO.25).
- 54. The BOR also taken another decision to pay compensation for land and top ups to all legalizable AP (cultivating Provincial Government land) List are sorted out for paid all government dues and with liabilities. The persons with liabilities are requested to first clear their liabilities to qualify as legalizeable. All lease holders will be treated as private land owners and paid compensation for land acquired for GTC.
- 55. All above measures will ultimately lead to determine the total number of AHs. The total number of AHs will only be established with the payments and will be further confirmed as part of CAP implementation

2.6 Types of Land Awards

- 56. The entire 4410 acres of land acquired is under cultivation as privately owned and provincial government owned but leased/allotted the farmers with limited title under lease/allotment conditions. For the analysis of performance of land acquisition process for 4410 acres of acquired land, divided into two broad categories private land and provincial government land. cultivated by private persons with contested rights. Of the total 4410 acres of acquired land 750 acres of land falls in this category. The entire provincial government land with contested rights falls in the revenue jurisdiction of LAC Mankera (705 acres) and LAC Noorpur (45 acres).
- 57. The BOR notification No.01-04/2017-2019 dated 13-9-2019, on the other hand, prohibit the land ownership rights for the lease holder under the scheme. The very first condition of the scheme is that " as per this scheme, the lease will not be granted ownership rights if the land is held in reserve for any Permanent project, service grant, reserved for waterways, and religious sites".

2.7 Status of payment of Awarded Compensation under Law

58. A total of 4410 acres of private land was acquired in two different periods, of which 3690 acres through 69 awards in 2008-2011 and 720 acres through 27 awards in July 2020. The post DDR GOP decision removed all impediments in the delivery of compensation to all affected persons, hence paved the way. for moving forward in this direction. The Board of Revenue Punjab directed the respective LACs to treat all awards (2008-2011 and 2020) equally open for payment at the 2006 DPAC rate and calculate the compensation at DC Rate 2020 Plus 15% CAS. This is to be noted that the compensation paid so far, are calculated at 2006 DPAC rates, grant –in –aid

in terms of current market rate will only be paid when the approved grant-in –aid is delivered to the respective LACs.

- 59. The overall payment status is 64.% of the awarded amount is paid to 34.5% of the legal APs, and 36% amount remaining for 65% of the total APs.. The corresponding ratio of compensation payment (as calculated in Table 2.4 and Table 2.5) at different LACs level is as under;
 - LAC Noorpur: The LAC Noorpur, District Khushab with only 2 awards, disbursed 49% of the awarded amount to 68% of the legal APs. The payments to the APs were made in 2008 at the 2006 DPAC price. As the remaining land is owned by the provincial government. The remaining 32% APs are not eligible for compensation for land under law. The LAC will not get any share from the Grant in Aid because the remaining APs in this LAC are cultivating provincial government land and are only entitled for above land benefits.
 - **LAC Darya Khan:** Only 1 award for 2.2 acres of land falls in the ROW of GTC-II Chaubara Branch in the jurisdiction of LAC Darya Khan District Bhakkar.. 10 of the total 15 (67%) of the APs has already been paid, over 68% of the awarded amount in 2008. The remaining PKR 41,296 is pending with LAC as the legal APs facing inheritance issues. .
 - LAC Mankera: LAC Mankera representing as major tehsil by acquiring 61% of private land, 62% of awards and 58% of amount of awards of the GTC Phase-II project. The LAC so far has disbursed 45% of the award amount to 33% of the APs. There still remaining PKR 48.6 million to be disbursed to 3584 APs.
 - LAC Chaubara: LAC Chaubara sharing 34% of the awards worth of PKR 59.6 million, and over 65% of the total AP of the entire GTC-Phase-II project. Of the total amount of compensation for land the LAC has already disbursed around 93% of the award amount to 35% of the total APs. The reason for low turnout of APs is small shareholders at the 2006 DPAC rates.

	LAC/ Tehsil	Awards Approval	No of Awards	Land Acquired	Amount of Awards	Amount Paid	Amount Unpaid
		Date	, mai do	(Acres)		PKR	PKR
1	LAC Noorpur	2008	2	78	4,599,281	2,260,453	2,338,828
2	LAC Darya Khan	2008	1	2.2	129,753	88,457	41,296
2	3 LAC-Mankera	2008-2011	38	2,182	74,911,759	40,655,386	34,256,373
З		Jul-20	22	508	15,218,518	0	15,218,518
4	4 LAC Chaubara	2008-2011	28	1,428	51,920,102	48,587,447	3,332,655
ſ		Jul-20	5	212	7,668,255	7,280,535	387,720
	Total		96	4410	154,447,668	98,872,278	55,575,390

Table 14: Land Acquisition Awards Approved Date and Compensation Amount

Table 15: Awards Approval, No of Awards and Total APs of Land							
LAC/ Tehsil	Awards Approval Date	No of Awards	Land Acquired	Total APs	APs (BOR) Paid Number	APs (BOR) Unpaid Number	

LAC Noorpur	2008	2	78	75	51	24
LAC Darya Khan	2008	1	2.2	15	10	5
LAC-Mankera	2008-2011	38	2182	5106	1796	3310
LAC-Mankera	Jul-20	22	508	274	0	274
LAC Chaubara	2008-2011	28	1428	7997	3050	4947
LAC Chaubara	Jul-20	5	212	2223	512	1711
Total		96	4410	15690	5419	10271

2.7 A Additional Clarifications on AP, AHs and use of Land for All purposes

60. As per census, total number of AHs from acquired 4410 acres land is 4662 of which 4158 household including 4020 (86%) titled owner of acquired private and leased government land with 138 households contesting their lease rights on acquired government land parcels. The acquired titled land of affected household is owned jointly by multiple family members who have been compensated as per their recorded shares of land in joint holding of the AHs. Therefore, corresponding number of entitled DPs (BOR) for 4020 AHs as recorded in acquaintance rolls for payment of compensation against their share in acquired land are 15690 DP(BOR). Whereas, 138 AHs noted as contesting lease holding rights during census were not yet confirmed by the BOR so, they are not counted in the DP BOR category, but for the CAP purpose they are eligible for land and other applicable compensation costs as eligible DPs. The analysis of acquired land show that each titled AH will lose 1.1 acre land while each titled DPs is losing 0.28 acres as his share in acquired jointly owned land parcels. Besides there are 461 sharecroppers (formal/informal) households on acquired ROW land and 43 household facing loss of encroached forest land were documented.

2.7 B Due Diligence on Forest (Rangeland) and Additional Surveys required

61. During the review of land acquisition process, it was noted that 1205 Acres (1199 acres from District Bhakkar and 6 Acres from District Layyah) of Government owned land in reserved and protected range land areas is located in project site and is managed by the Forest Department through its rangeland management division. These rangelands are protected as game reserves under national laws wherein limited grazing rights are allowed to the local peasants and pastoral communities living in surrounding villages of the noted Rakh areas. The government owned land required as ROW in the Rakhs is already transferred to the PID out of which 102 acres is encroached and cultivated by 43 households who have been documented and included in CAP. The table below presents a total land versus required ROW land, and their relative ratio in each Rakh area.

Table 16 ROW land required through government land (Rangeland in Rakh Areas)							
#			Required ROW Land	Ratio of ROW in each Rakh area			
		Acre	Acre	%			
1	Rakh Gauharwala	26428	321	1.21%			
2	Rakh Hundalal	2424	450	18.56%			
3	Rakh Karluwala	2906	69	2.20%			
4	Rakh Chikkan	6879	361	5.25%			
5	Rakh Shergarh	42334	6	0.01%			
Тс	otal	80971	1205	1.48%			

Source: TRAT consultants and EIA report

- 62. The above table shows that the required total ROW land in Rakh Areas is only 1.48% of the total Rakh Areas where the canals traverses. Except for Rakh Hundalal, where ROW will consume maximum Rakh area (18.56%), the ratio of the ROW areas in the other 4 Rakh areas ranges between 0.01 to 5.25% only. The Rakh Gauharwala area is compromised because of previously constructed canal system, whereas due to take of land for construction of a public school "Danish School" (400 acres) and allotment of big chunk of land to Military Land Department, only 500 acres (20%) area is left as range land in Rakh Hundalal. While the Rakh Karluwala is a narrow rectangle with sparse vegetation cover in the centre and plantation carried out by rangeland management authorities on either side. The Rakh Chikkan and Rakh Shergarh are reportedly well maintained and managed by range land management authorities. Basically, all these Rakhs are sandy landscape with limited vegetation cover comprising of shrubs and plantation mainly of desert and rangelands ecology. Even though these protected rangelands are allowed for rotational grazing under permits issued to the local peasants and pastoral communities, but they have a limited potential because of scarce rain fall and dry weather conditions that inhibit growth of seasonal grasses for grazing livestock throughout the year.
- 63. Since, these Rakhs are protected under law, where land use change is prohibited, so no water outlets and tertiary canals are designed to conserve the Rakh areas and its land uses. Taking of 1.48% land from these protected rangelands as ROW is unlikely to cause significant adverse impacts on their productivity and livelihoods of people who use the area as grazing land under prevailing permits system. However, constructed main and secondary level canal system through these protected rangelands may impose some access restrictions including cross canal movements for the local communities and their livestock to graze in different areas across canal system within the rangelands.
- 64. During the social safeguards due diligence surveys, the impact assessment and socio-economic analysis were limited to the households losing their assets due to acquisition of ROW from privately owned land and government owned rangelands in the Rakh areas and the assessment of the adverse social impacts which could be experienced by local peasants and pastoral communities due to the project intervention, especially compromised across canal movement and access to the rangelands for grazing of live-stock have yet to be completed.
- 65. Restricted access could cause adverse socio-economic impacts on the surrounding communities having right to access the protected lands if not mitigated through design solutions and compensated by providing livelihood support. Therefore, an in-depth socio-economic survey of the Rakh Areas and surrounding communities including peasant and pastoral households is envisaged. This assessment will help to document i) adverse impacts due to restricted access, ii)

known paths/routs to herds in rangelands, iii) canal crossing facilities needed for livestock along the canal system in rangeland areas, and iv) livelihood support measures to be ensured for addressing adverse impacts on livestock raising households and local communities. These survey and assessment should be completed preferably before design review and supervision consultant is on board and civil works contract award. The broader TOR for Rakh Areas Survey and Assessment of restricted access related adverse socio-economic impacts are as under:

- Collect and review the information about protected rangelands and grazing rights allowed under applicable laws, rules and regulations
- Assess the existence of outstanding legal contestations related to the land use rights in Rakh areas
- Conduct census of pastorals (individuals/communities/villages) relying on Rakh areas for their livestock grazing
- Assess the types of livestock and types of other livelihood activities those pastorals and farmers are engaged in the Rakh areas
- Conduct meaningful consultations with local communities including the livestock raising households about perceived risks and benefits that could be likely due to construction of canal system in the rangelands
- Conduct walk-through survey along the alignments of canal system to identify the conventional paths/routes used by the livestock for providing canal crossing facilities to ensure hassle free access to the grazing lands.

2.8 GTC Phase-II Mutation Status

66. GTC-Phase II acquired a total of 5615 acres of land (4410 acre private land and 1205 forest land). The acquisition of land followed by mutation of acquired land to the Chaubara Branch Canal Project. Of the total around 94% ((5265 acres) of the acquired land has already been mutated while the mutation process for the remaining 6% (350 acres) is in process. Table 12 presenting the current status of mutation shows that the mutation for the entire forest land (1205 acres) and land acquired from Tehsil Noorpur and Darya Khan has been completed, while the mutation for 304 acres in Tehsil Mankera and 46 acres in Tehsil Chaubara remaining.

Tehsil/District	Total Area Acquired	Area Muted	Mutation Remaining	Forest Land muted
	Acres	Acres	Acres	Acres
Noorpur / Khushab	78	78	0	0
Darya Khan / Bhakkar	2.2	2.2	0	0
Mankera / Bhakkar	3890	3587	304	1198.5
Chaubara/ Layyah	1646	1600	46	6.5

TABLE 12 mutation status of Acquired Land by Tehsil

2.9 Key Findings and Compliance Issues

67. In addition to delays in awards, there are other issues – for instance, lack of titles on government/ leased land, valuation of land, absence of any provisions for compensation other than land such as affected structures, trees, crops and lack of assistance for relocation and resettlement. Table 18 provides a summary of the safeguard due diligence review in the form of a matrix with a list of the key issues – brief descriptions and status of compliance vis-à-vis requirements to comply with ADB SPS (2009) requirements.

TABLE 13 DDR Key Findings and Compliances						
Issues	Description	Status of compliance	SPS Requirements			
Delayed and inadequate compensation	The process of compensation payment for land acquired was valued at 2006-2008 rates, reflecting less than the current market rate.	Unless compensations are paid at market rate, the outstanding payments will remain amount as the liability of the project under the SPS- 2009.	Compensation at market rates based on land market assessments and paid prior to civil works.			
Valuation of land in the project	Valuation of land acquired was done by DPACS in 2006 as per the LAA 1894 whereas the current market rate is four times higher.	Compensation rates fixed are already 15 years old and requires adjustments/indexing.	Valuation of land and other assets acquired must be at market/ replacement rates.			
Lack of provisions for compensation for structures, crops and trees	DPACs considered only land for compensation; other related impacts – for instances, impacts on crops, trees, structures, and economic vulnerabilities were not considered.	The LAA 1894 has provisions for trees, crops, structures, but no measures for income and livelihood restoration.	SPS 2009 requires compensation for <i>all</i> assets acquired and provides support for income losses.			
No provision for resettlement of displaced households	The ROW for CBCS was originally designed to avoid residential areas/settlement; however, in recent years, some households, cattle shed etc. established on ROW.	The LAA 1894 has no provision for relocation or resettlement support or assistance even for the titled households.	Displaced households, irrespective of the title, must be resettled and/or assisted in the relocation process.			
Lack of clarity on entitlements for lease holders and encroachers	Entitlement for users/cultivators of 201 acres of provincial land in the project area through various lease agreements – for instance, donation holders, tender holders, lease holders, and encroachers – are unclear for compensation purposes.	The revenue records recognize titles of these entities with right to compensation except for encroachers (i.e., whose leases have expired). The cases are still pending with respective Deputy Commissioners.	SPS 2009 recognizes leaseholders for compensation. Encroachers must also be assisted if affected, for livelihood and structures.			
Outstanding payments	A total of 96 awards amounting to Rs. 154.5 million was finalized for acquisition of 4410 acres private and provincial government land in 2008-2011 and July 2020; however, only 98.9 million (64%) has been disbursed. About 65.5% of the private landowners are not yet paid compensation for land.	The undisbursed amount (Rs. 55 million) is with District treasury office. The awards are now shelved, because landowners are not interested to forgo their land at 2006 market rates.	Payments of land acquired must be paid before handing over the land for civil works.			
Grievances	The compensation at 2006 market price for payments in 2020 is a source of grievances by the affected farmers, particularly those who are eligible for small amount. The awards were on hold since 2011.	The project's land acquisition history must be viewed in its historical context. It is a major legacy issue that requires a practical and careful consideration.	SPS 2009 requires market rates; alternatively, practices used in ADB projects require satisfactory resolution acceptable to stakeholders involved.In case grievance is not resolved independent valuation may be necessary for resolution of disputes or complaints			
Lack of consultation and disclosure	Project land was acquired using the "emergency" clause (i.e., Section 17 (4) 6 /LAA 1894); no public information	The LAA 1894 requires notification only under Section 4 to property owners; there is provision for dispute by	Consultation and disclosure mandated by SPS 2009 are recently conducted. Public consultation report is			

	and consultation carried out by PID/the project to date.	owners, but no such dispute is possible under emergency acquisition.	annexed with.
Institutional weaknesses for LA and payments of compensation	Despite funds available for acquisition of 4410 acres, only 60% of the total land required for the construction of the entire system was acquired in 12 years due to complex system for payments of compensation, coupled with institutional weaknesses with the LACs and District administrative functionaries.	PID established Adhikot Unit (I&C Unit) with appropriate staff to support District administration. I&C Unit gained enough experience and skills over the years. Moving ahead, PID should establish alternative project- specific framework to speed up land acquisition and payments of compensation and other entitlements.	For better project administration and monitoring, PID should design a dedicated Social Safeguards Unit at the Project-level to be led by a Director and supported by trained field staff.

2.10 Recommendations

- 68. In view of the findings discussed above, it is clear that the project, particularly land acquisition and compensation payments, has major "legacy" issues resulting from previous large-scale acquisition, valuation of land and other assets, and outstanding payments. A key recommendation arising out of the due diligence review has been to address the "unfinished" land compensation and resettlement with proper and pragmatic solutions, including gap filling measures to rectify inadequacies and grievances.
- 69. Since GTC-II CBCS is a "Category A" project, the TRTA team presented the following recommendations moving ahead with respect to land and resettlement safeguard systems for actions by PID and GOP.
 - (i) Revenue Department should establish a system in the LACs office to fast track the outstanding payments and resolve all land related issues, including titles for government/leased land.
 - (ii) All unpaid and outstanding payments are made at current market price, based on a land market survey. The DDR recommendation responded positively by the Government of Punjab by revising the land acquisition rates equal to current market rate.
 - (iii) PID Land acquisition staff during the payments monitors the process to ensure transparency and equality of compensation and payments is made as per the acquaintances rolls.
 - (iv) PID develops a vigilant/participatory monitoring system through the local GRCs to reduce the post payment grievances. Local canal based GRC is proposed for CAP implementation.
 - (v) Compensation for other affected assets for example, structures such as houses, trees, crops, cattle shelters should be paid. This should apply to all APs, including those who received payments as they were only paid for land. Proposed sectional handing over plan will help PID SEU in planning for this activity
 - (vi) All affected households on the ROW already identified by the census/survey must be assisted for self-managed relocation and resettlement. SEU/PID should plan based on the proposed timeline for the Sectional Handing over plan.
 - (vii) Conduct comprehensive stakeholders' consultation and disclosure meetings at the project sites to inform the affected people of the impacts, proposed mitigation measures and their

feedback. Stakeholders consultations has already been conducted, the disclosure will be made after approval of the DDR-CAP.

(viii) Lease holders and encroachers should be eligible to compensation based on their losses as per the ADB SPS 2009; thus, the entitlement matrix must be inclusive. An inclusive entitlement matrix has been prepared and will be implemented after the approval of this DDR-CAP.

CHAPTER-3 GOP RESPONSES AND ACTIONS

3.1 Introduction

- 70. This chapter describes and evaluates the responses and actions taken by the Government of Punjab (GoPb) with regards to DDR recommendations on legacy issues and whether the additional measures on outstanding payments for the 4410 acres of land acquired meet safeguard compliance issues. During project fact finding mission of February 2020, the ADB observed that the land acquisition and compensation for acquired ROW is not fully completed and the land acquisition and resettlement processes followed by GoPb are not in conformity with ADB's requirements. The ADB's views about pending legacy issues, actions required for addressing outstanding compensation issues, top-up required for awarded land compensation to meet replacement cost criterion, measures to be ensured for assessment and payment of compensation for above land assets and applicable resettlement costs to bring the project in conformity with ADB's SPS requirements were made clear to PID, Planning and Development Department and the BOR Punjab. Meanwhile, the GOP agreed that:
 - a) For unpaid landowners in 3,690 and 720 acres, the GOPB will pay to fill the gap of the land prices approved in 2006-08 and the current market rate, which is to be calculated at full replacement cost as per ADB's SPS.
 - b) Lands in 3,690 acres whose owners have already been paid not in anticipation of ADB's support to the GTC irrigation project will be considered as "acquired government land" and the landowners will not be paid to fill the gap of the land prices approved in 2006-08 and the current market rate.
 - c) In addition to land compensation, all affected persons shall be compensated for lost crops, trees, structures and livelihoods etc.
 - d) Those who are not legal owners will also be covered by the projects assistance in line with the entitlement matrix.
 - e)

3.2 GOP Responses

- 71. The DDR Report was well received by PID and the Government of Punjab (GOP). The government moved swiftly in removing the bottlenecks and streamlining the land acquisition issues to meet ADB safeguard requirements. Several steps were immediately taken in accordance with DDR recommendation. These include:
 - (i) The Planning and Development (P&D) Department in consultation with other stakeholders such the Dept of Forests (DOF), Board of Revenue (BOR) and Punjab Irrigation Department (PID) moved quickly to address the land acquisition issues.
 - (ii) The BOR on July 8, 2020 issued instructions to local Land Acquisition Collectors (LACs) to simplify and speed up the payment procedure of already awarded land (3690 acres) and swift announcement of remaining (720 acres) awards.
 - (iii) The Secretary PID and Project Director appraised the Chief Minister (CM) on 10 July 2020. The CM Office directed to take all appropriate actions and place the matter before the Provincial Cabinet for decision and approval.
- 72. For filling the gap between awarded compensation (2006 assessed rates) and current market rates (2020-2021), the BOR in August 2020 launched an assessment through the district revenue authorities of Bhakkar and Layyah districts. After review of updated valuation table rates for 2020-21 and local market rates, it was found that an estimated Rs. 1.4 billion was required to fill the gap between DPAC assessed 2006 land price and current market rate for <u>all</u> acquired land

for the project.¹³ The BOR submitted the estimate to P&D Department for allocation of the necessary funds to pay market prices and other supplementary assistance such as grant-in aid to the affected landowners in order to comply with SPS 2009 requirements and approval of project by ADB. In view of the significance of the GTC project for irrigation and regional economic growth, the Chairman P&D endorsed the grant-in aid proposal on 13 September 2020 for consideration of the Cabinet Committee on Finance and Development as well as the Provincial Cabinet for decision.¹⁴

3.3 Cabinet Decisions on Additional Measures

- 73. As a way forward, the "Summary for Cabinet"¹⁵ recorded that ADB recommended that "(a) all unpaid landowners in 3690 and 720 acres shall be paid to fill the gap of the land prices approved in 2006-08 and the current market rate, which is to be calculated at full replacement cost as per SPS; and (b) landowners of 3690 acres, who were paid may be considered as already acquired government land, and the land owners will not be paid as above; however, payment of any relief or supplementary allowances to fill the land price gap for them to be considered by the Punjab Government." ¹⁶ The Provincial Cabinet, on the recommendation of the Cabinet Committee on Finance & Development (CCFD), finally approved (a) "the way forward proposed by the Asian Development Bank"¹⁷ and (b) payment of current market price of land as a grant."¹⁸ The Cabinet considered and approved the proposal recommended by the Asian Development Bank and Standing Committee of Cabinet on Finance and Development. The Cabinet further approved Supplementary Grant amounting to Rs. 1.4 billion during CFY 2020-21 for additional payment to affected persons in approximately 4413 acres (less the persons paid in full prior to arrival of Fact Finding Mission) to fill the gap between price paid to them as per earlier assessment and current market price of land (Provincial Government Decision No. 25 dated 17-11-2020).
- 74. The Cabinet approved the recommendations and the decisions constitute additional bar measures that comply with the SPS requirements regarding compensation for land for the GTC Project -Phase II. Following the Cabinet decisions, to fill the land price gap for all APs, including those already paid, the district Land Revenue authority instructed the respective LACs to start swift payment process for those <u>unpaid</u> through the 2006-2008 awards with a clear message that they will be paid the gap between the 2006-08 rates and the current market rate. However, LAC Chaubara disbursed around 50 million while the LAC Mankera did not open the account till May 2021. Theoretically the procedures are developed, but in practice only One LAC –Chaubara disbursed some amount in July 2020 and that is at 2006 rates. There is no activity at the remaining 3 LACs. The PID land acquisition unit is not activated waiting for approval of PC-1 from relevant authorities. Status que on land effectively maintained.

75.

The amount of approved Grant-in-Aid (Top-ups) is being transferred from PID to the respective District Revenue Authorities, It is estimated that the LACs may start payments during July 2021 and is likely to be completed in December 2021.

¹³ LAC Chaubara estimated Rs.600 million and LAC Mankera estimated Rs. 800 million (Total 1.4 billion).

¹⁴ Analysis of the Government of Punjab/GOP's recent decision concerning compensation payments in GTC Project and Its compliance with SPS 2009, 03 December 2020.

¹⁵ Summary for Cabinet, GOP, Punjab Irrigation Department, 14 Oct 2020

¹⁶ Same as above, para 3 (a/b) page 2.

¹⁷ Same as above, para 6&7, page 2.

¹⁸ Current market price will be paid as per Punjab Cabinet Decision, dated 16 Nov 2020.

The above land compensations (crops, trees, structures and assistance and livelihood restoration for all paid and unpaid AHs will be covered by ADB loan or grant.

3.4 Valuation of Land by DC and Current Market Rate

- 76. The DC Rates (DCR) for valuation of land are determined by revenue circles after considering recorded land categories and its prevalent uses i.e. agricultural, residential and commercial etc. The agricultural land is further assessed based on its productive potential (cultivated or barren) and its location with respect to the road (off road, link road and main road). All lands acquired agriculture, commercial or residential, are valued at the current DC rate. As the ROW land was acquired under LAA provisions for which compulsory land acquisition surcharge at 15% of assessed market rate was mandatory, so under the instructions of Board of Revenue, the respective District Revenue Officers calculated the additional amount to be paid as to be paid as supplementary grant (grant-in-aid) with 15% Compulsory Acquisition Surcharge (CAS).¹⁹
- 77. The formula used to calculate the supplementary grant (grant-in-aid) was simple: (a) For those paid²⁰ from 3690 acres current market rate plus 15% CAS minus the amount already paid without deduction of land transfer taxes approximately 6-8%; (b) For those unpaid 3690 and 720 acres all will be paid at current market rate plus 15% CAS.

3.5 Land Market Survey and CMR

- 78. Since no independent valuation of land is available other than DC rate, the TRTA Team conducted a rapid Land Market Survey (LMS)²¹ in January 2021 to assess and establish current market rate (CMR) of land by types and locations in GTC Project area. The primary purpose of the LMS was to compare and confirm whether the DCR meets the CMR for various types of land under acquisition for the project and to recommend any actionable steps, if required. The LMS was carried out with support and assistance from the PMO staff in the field. Two sets of questionnaires were designed and pre-tested for collection of field level data from affected landowners, and interviews of field revenue staff and members of the Land Acquisition Collectors (LACs) such as Land Record officials. Available sale deeds were examined and sellers and buyers were interviewed. In addition, five Key Informant Interviews (KIIs) were conducted. The survey covered mainly the villages around the GTC–Chaubara ROW.²²
- 79. The review of the sale deeds, KIIs and interviews with sellers and buyers provide very good basis for comparison of the DC rate with CMR. Table 14 presents a comparison of DC rates with current market rates. At the project-level, the current market rate is 14.3% higher than DC rates. For Mankera, CMR is 14.7% higher than DCR while it is 13.8% higher in Chaubara.

¹⁹ Addendum to the Report submitted on 03 December 2020 <u>re</u> Analysis of the Government of Punjab/GOP's recent decision concerning compensation payments in GTC Project and its compliance with SPD 2009, 18 Dec 2020.

 ²⁰ Paid after announced cut-off date established based on ADB's fact finding mission of February 2020.
 ²¹ GTC II CBCS Land Market Survey Report, 25 January 2021.

²² A list of 35 villages was reviewed with the Land Record Center to identify villages with land transfer cases registered during 2019-2020 and 2020-21. A total of 32 sale deeds were collected (18 from Mankera and 14 from Chaubara) from land record offices. The Revenue Staff further assisted the Team with sale deeds in terms identification of buyers and sellers, type of land, area purchased location of the area, actual value of land declared by the buyer, land transfer tax paid and the applicable DC rate/schedule rate.

	Per Acr	% of CMR		
Area / Tehsil	Current Market DC Rate/Schedule Rate Rate (2020-21) 2020-21		Difference (CMR-DCR)	higher than DCR
Mankera	331944	283111	48,833	14.70%
Chaubara	386250	333167	53,083	13.80%
Overall by GTC	353666	303,133	50,533	14.30%

TABLE 14 A Comparison of DC Rates with Current Market Rate

Source: LMS, Jan 2021.

80. Taken as a whole, as evident from the Table, the current market rate is 14.3% higher than DCR for all types of land. So, the DCR is very close to CMR. This is because the DC rate is revised and updated annually by about 10% every year for the last five years, according to the revenue official interviewed. For some categories of land (e.g., residential and commercial), the schedule rates increased by 15% per year. As a result, the differences between DCR and CMR have reduced significantly due year-on-year updating of the DC rate. Since DCR is the *base* price, the figures presented above do not include the additional 15% compulsory acquisition surcharge (CAS). The current market price for land can be easily matched by the project using the CAS clause at15% of the DCR. In sum, the DCR plus 15% CAS as grant-in-aid meets the CMR and thus complies with SPS 2009 requirements for payment of compensation for land at market rate in this project.

3.6 Implementation Steps

- 81. How will the landowners be paid for compensation for land? The BOR has already directed District Revenue Officers (DCOs) of Bhakkar and Layyah to instruct their respective LACs to:
 - (i) Prepare lists/acquaintance rolls of the affected persons both paid and unpaid for 3690 acres;
 - (ii) Calculate the compensation against each AP by land acquired and type of land as per the 2006-08 District Price Assessment Committees;
 - (iii) Payment of outstanding cases at the 2006-08 rates;
 - Payments for current market prices (i.e., DC rate +15% Compulsory Acquisition Surcharge/CAS) as second instalment only after the grant money (i.e., PKR 1.4 billion) available during FY2020-21; and
 - (v) The current market rate will satisfy the APs; this will be registered as grant-in aid in the payment register (and not as compensation as the fund was approved by the Cabinet as grant-in-aid).
- 82. The Government decisions at all steps for instance, from presentation of the case by the PID to the Planning and Development Department to Finance Department and Board of Revenue and finally to the Chief Minister's Office and presentation to the Cabinet were guided by the recommendations of the DDR. The decision of the Cabinet is in full agreement on the current market rate for all paid and unpaid APs²³ and full support for the payment of allowances for

²³ According Revenue officials, the grant-in-aid (PKR1400 million) calculated at 15% for land required for CTG Phase II. This in effect included all affected landowners (i.e., "*those already paid and remaining*") for approval from the Provincial government. However, the LACs have now decided to exclude those already paid between 2008 and 2011 from the grant-in-aid.

encroachers as well as current market rate for loss of structures and livelihood support. The gap filling measures and particularly the support to address the legacy issues by the Cabinet decision constitute "good practices" in resettlement in the GTC Project. The adopted measures are a step forward to comply with ADB SPS 2009. These measures have been incorporated in the CAP entitlement matrix in Chapter 7.

83. The Detailed measurement survey (DMS) for the entire project was completed in February 2020, the cut-off date was determined in consultation with ADB. The AP paid for land compensation before cut-off date was considered as "APs of acquired land". Even at that stage the AP were considered eligible for assistance and compensation for non-land assets. The 15% CAS is for land compulsory land acquisition, PID always pay assistance and compensation for non-land assets. The APs paid before February 2020, are eligible for non-land assistance.

3.7 GOP Actions - Summary

- 84. Both the PID and the Government of Punjab have taken steps to address the legacy issues and comply with SPS 2009 requirements. These include:
 - (i) Gap bridging measures adopted by GOP/PID
 - (ii) Documentation of impacts on assets other than land such as structures, trees and crops
 - (iii) Provisions adopted to document and compensate non-titled land users
 - (iv) Corrective actions for providing relocation and resettlement assistance and livelihoods
 - (v) Provisions for special assistance to vulnerable groups
- 85. These measures have been incorporated in the CAP. The corrective actions are a reminder to PID/GOP of the "core" of involuntary resettlement principles of the ADB. In the case of GTC II Project, all APs of 3690 and 720 acres of awarded land will be paid land compensation at 2006-08 rates, because the amount of award was already paid to the LACs account. It will be audited separately as award money. The grant-in-aid amount will reach to the LACs in September October 2021 after the provincial budget is approved. In case landowners still have grievances on the amount of compensation for land, Project GRM will review them in coordination with revenue department. If such grievance redress efforts cannot resolve the grievances, PID/GOP will engage an independent valuer to ascertain the full replacement cost of each land plot and provide additional allowance to bridge the gap, if any.

PART-II CORRECTIVE ACTION PLAN

CHAPTER – 4: LAND ACQUISITION AND RESETTLEMENT IMPACTS

4.1 LA&R Impacts and Steps to Minimize Impacts

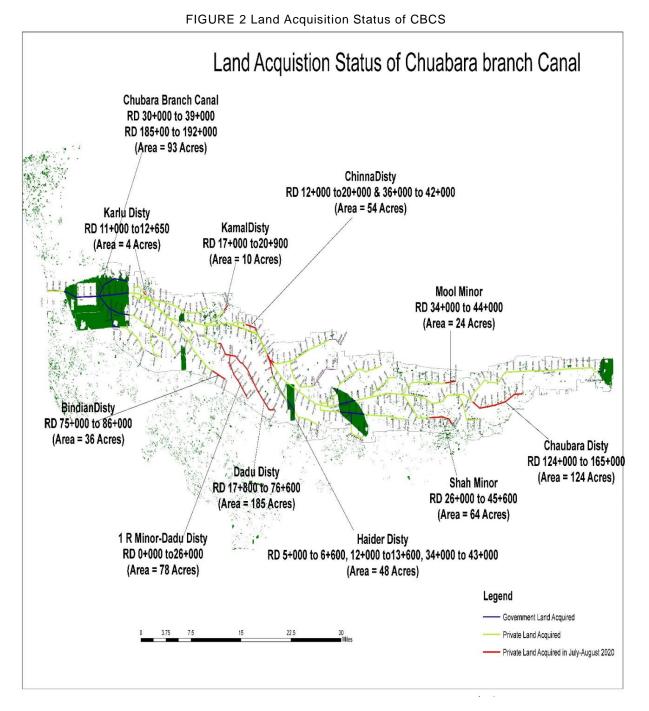
- 86. The TRTA Team conducted Socio Economic and Detailed Measurement Surveys of the right-of-way (ROW) of the GTC Phase-II. The main objective of the surveys was to collect data and information from the households affected by the project ROW to (a) establish a baseline of the impacts (both positive and negative); (b) understand the socio-economic profiles of those affected; (c) description of current status of agriculture and livestock production system and income thereof; and d) estimate cost of involuntary resettlement of the people residing on the ROW, including replacement of assets and provision for livelihood restoration program for the CAP.
- 87. The project impact assessment was made through a structured Census and DMS survey questionnaire. All households on the ROW, irrespective of ownership/titles on the land they cultivate, reside or use for livestock rearing or other commercial activity, were covered by the surveys. The Census and DMS Surveys identified/assessed two types of impacts: (a) Land, and (b) non-land. The land related impacts include acquisition of 5615 acres of land from two main sources agriculture land (4410 acres) and forest land (1205 acres), with direct livelihood related impact on 4662 APs. The project will also cause loss of 5480 acres of crops, cause uprooting of 122620 trees, relocation/demolition of 222 residential, agriculture or commercial structures and livelihood impact on 151 households.
- 88. The project took steps to minimize and reduce impacts of involuntary resettlement by avoiding a large commercial poultry/broiler farm on the ROW using alternative design options for the main canal. The new alignment will require fresh acquisition of 17.2 acres of land for which the notification will be processed soon. The broiler factory involving 12.7 acres was covered under the original acquisition plan. This decision to realign the ROW avoided widespread disruption in terms of job losses, relocation and resettlement of the factory. Additional land acquisition of 4.5 acres of land at the Head Regulator of Chaubara Branch Canal (at Zero RD) is also required to adjust hydraulic flow in design. PID will acquire additional land to realign the ROW around the Head regulator and the Broiler factory. For this new land acquisition, a separate draft LARP has been prepared, following normal processes of Land Acquisition under LAA (unlike the emergency clause used in 2006-2011 acquisition). A draft LARP has already been reviewed and accepted by ADB. The EM used for this LARP is the same as used for CAP.

4.2 Assessments by Types of Impacts

4.2.1 Land Acquisition Impact

- 89. The impact on land was assessed in terms of (a) total affected land area as percentage of total land under cultivation at the time of survey; (b) type of land use, both cultivated and uncultivated; (c) average per acre market price of land; and (d) price of land proposed and paid.²⁴
- 90. Based on the design parameters and PID ROW requirements for operating the Canal system, the total 5615 acres of land for the construction of the project is acquired from two main sources

- private land (4410 acres) and forest land (1205 acres). Therefore, for the preparation of this CAP, the impact was assessed for the entire proposed ROW irrespective of the private or government ownership. The LA map (Figure 2) provides the System and RD wise details for the acquired and annexed, private and Government land included in the overall design of the canal system.



91. The Census and DMS survey recorded that the construction of the CBCS will require land located in tehsil Noorpur (Khushab District), tehsil Darya Khan and Mankera (Bhakkar District) and tehsil Chaubara (Layyah District). The DMS survey identified three different categories of land – private land, provincial government land and forest land. Distribution of land in these three categories is important while making assessment of impacts.

4.2.1.1 Impact on Private Land

- 92. The private land required for the construction of CBC System is located throughout the route of the main canal, distributaries and minor canals (see LA Map, Figure 2)
- 93. Types of Private Land: Three different categories of land acquired for the GTC-Phase II Chaubara Branch Canal system (Table 20).

TABLE 20 Three Categories of Land Acquired					
Category	Total	Total AHs	Total	Nature of Acquisition	
	Land		BOR(APs)		
	Area				
	(Acres)				
	3660	4020	15690	Private land acquisition through 57	
1. Private Land	3000	4020	15690	awards ²⁵	
		461	0	Sharecroppers	
2. Provincial Government Land used for agriculture by titled lease holders/allotees or contested leasing rights.	750	138	Provincial Govt	 95 Acres through exclusive 6 awards ²⁶ with only Provincial Government Awards, 687 Acres mixed with 33 awards BOR awards only recorded title of land as Provincial Government Land. DMS survey identified sharecroppers 	
3. Forest Land Encroac hers ²⁷	1205	43	Not Applicable	Annexed through BOR notification 43 encroachers identified by DMS	
Total	5615	4662			

TABLE 20 Three Categories of Land Acquired

Of the total land 4410 acres acquired land, 3660 acres are private and 750 acres provincial government land. Of these, 4392 acres are used for agriculture and the remaining 18 acres issued for residential/commercial purposes. The Project area is comprised of two different categories of agricultural land;

- A) 3978 acres (90.3 %) semi-sand dunes/rain fed/ Barani with only one crop a year. The rain fed nature of cultivation has direct bearing on the market price of land.
- B) 414 acres (9.4%) are leveled and irrigated through privately installed tube wells, where more than one crop is cultivated. This tube-well irrigated land is tagged around 50% higher market rate.
- 94. As only seasonal rain is the source for irrigation for category A and all-time availability of irrigation source for category B, the average crop yield varies a lot between both areas. Table 15 lists the various categories of private land on the ROW.

TABLE 15 Impact on Private and Government Land by Types and %				
Area in Acres	Type of Land and %			
3978	90.3% Semi-sand dunes/rainfed/ Barani			
414	9.4% leveled and irrigated through tube wells			

.

²⁵ That include 1 award from Tehsil Darya Khan (2.2 Acres) 23 awards from tehsil Mankera and 33 awards from tehsil Chaubara.

²⁶ Of the 6 only provincial Government land awards 1 (Award no.44) is From Tehsil Noorpur, and remaining 5 (award no. 45,46,47, 49 and 60) from Tehsil Mankera. ²⁷ For details awards and *tehsil* wise provincial Government land see CAP –Annex-1.

18	0.3% divided into residential, commercial and communal land
4410	Total Private and Government land

4.2.1.3 Impacts of Acquired Provincial Government and Forest Land

95. Table 16 lists the effects of the acquired government land. As evident, the land is not entirely free of encumbrances. A total of 181 AHs with contested rights and non-title holders/ squatters broadly termed as encroachers will experience partial losses of land under cultivation in the proposed ROW of the Canal system.

Land category	Total Land Acquired (Acres)	No. of AHs
Provincial Govt. Land Barani/Rainfed	119	135
Provincial Govt. land - Irrigated - Tube well	7.25	3
Forest / Land Encroached -by Neighbouring farmers	102	43
Forest (Rangeland) freely available	930	0
Covered by Govt Road/Path	5.75	0
Total	1205	181

TABLE 16 Permanent Loss of Government Land by Contested Rights

96. Figure 3 provides a map of the Forest/Rangeland area under GTC -Phase II.

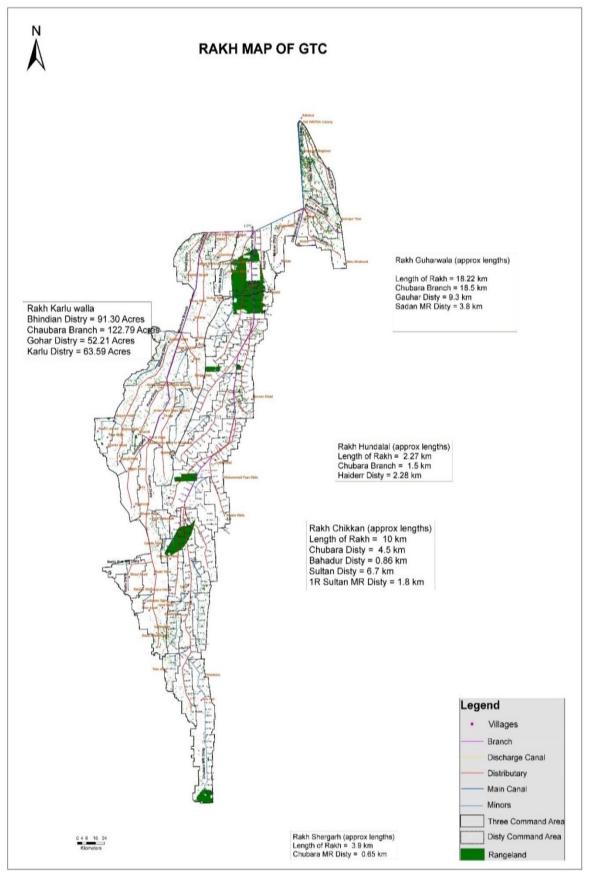


FIGURE 3 Forest Area under GTC - Phase-II

4.3 Losses and Extent of Impacts

4.3.1 Average land losses by different Categories of APs

97. The acquisition of land for the project is both from private ownership and public/government leased land. The APs from private land acquired comprises of owners and share-croppers. Blocks of different sizes leased out to individuals or groups to develop land for agriculture on long term basis with incentive to transfer the ownership title. The lease holders pays annual rent for the use of the land. The basic condition in the contract is if at any time the land is required for some development purpose i.e. development of waterways, service grant or any other public utility the lease will not be effective. In case of land acquired for GTC-Project (government project) the part of land used for ROW will be considered – the part of land will be muted for GTC project. The action will effect only muted part of land, while the remaining part will be considered as lease. The Revenue staff opinion is under rules the lease holders cannot contest for that compensation for land, provided the announce some relief through the Grant-in-Aid or the court decide some benefit to such land holders. The DMS survey identified the Lease holders as without any registered agreement as encroachers. The impact of each category of AHs is presented in Table 17.

		Acquired				
Canal System	Description	Owner	* Share Cropper	**CRH of Govt. Land	Encroachers on Forest Land	Total ***
Main Canal	Area (Acre)	835	118	53	27	915
	No of AHs	507	65	11	3	586
Distributaries	Area (Acre)	1955	548	230	67	2252
	No of AHs	2280	334	121	35	2769
Minors	Area (Acre)	1332	106	5	8	1348
	No of AHs	1233	62	7	5	1307
Originally	Area (Acre)	4122	772	288	102	4512
Overall	No of AHs	4020	461	138	43	4662
	Average acres	1.1	1.6	2.1	2.4	0.97%

TABLE 17 Average	Land Affected	by Category of A	AH and Canal System
INDEE IN MORAGO		by Outogoly of /	an and Sana System

* The share croppers and owners cultivate same land parcel on share cropping basis so the land area not counted in land but AH are counted in total to avoid area overlap.

** CLHR is the abbreviation for contestants of lease holding rights on acquired govt. land who are not confirmed by BOR.

*** In total encroached forest land and corresponding AHs included.

- 98. The following are evident from the Table:
 - (i) The AHs on average are permanently losing 0.97 acres of land under their control/cultivation. Overall, 23.5% of the land is affected by the construction of main canal, 56.8% by 11 distributary canals, and 19.7% by 11 minor canals.
 - (ii) Around 96% of the AHs are owners or share-coppers of private land and the remaining 4% are renters or squatters of the government land annexed to the project.
 - (iii) Around 772 acres of land is under 461 sharecroppers Typical sharecropping arrangements are described in table 25 below.

	Partner	Labour	Inputs	Share in Product
Model -1	Share cropper	All types of labor from land leveling to weeding and thrashing	50% share for Seed, fertilizer, chemical and irrigation expanses,	50%
	Land Owner	Nil	50% share for Seed, fertilizer, chemical and irrigation xpanses	50%
Model-2	Share cropper	All types of labor from land leveling to weeding and thrashing	Zero share for inputs	20%
	Land Owner	Nil	100% expanses for seed, Seed, fertilizer, chemical and irrigation	80%
Model-3 Advance option	Share cropper	Pay advance for the use of land for two – three year period and bear all labor expanses	100% expanses for seed, Seed, fertilizer, chemical and irrigation	50%
	Land Owner	Develop and maintain source of irrigation Return advance at the ti share cropper	•	50%

Table 25: Typical Models of Share Cropping in the Area.

99. Efforts have been ensured to document sharecroppers separately, however clear parceling is not possible and duplication in some cases is likely . A resident land owner for land may opt to increase the area under his cultivation and contract with the non-resident owner to cultivate his land, because he is possessing agriculture machinery and source of irrigation. It may also be an entrepreneur ship once you get hold of some land as share cropper and gradually mobilize resources to buy that land or neighbouring land.

4.3.2 Significant Impacts for Acquired Agriculture Land

Based on Census and DMS Survey, it appears that average private landowner will lose9.5% of their agricultural holdings on the ROW. Overall, around 57% of the total private

landowners will be losing around 7% of the total land, while the remaining 43% will lose land in the range of 7% to 15%. The corresponding ratio is lowest (7%) at the distributary canals and highest (15%) on the main canal and minor canals respectively. This translates to the significance of the impact where around a third of the APs are likely to lose more than 10% or more of their agricultural land. The reason for the significant number of affected landowners is due to small land holding and subdivision of land within the owners.

4.4 Impact on Crops

- 101. The proposed Chaubara BC command area, at present, is primarily rain fed with some areas irrigated by tube wells, leading to very low agriculture productivity. The Census and DMS survey coincided with the Rabi (winter) crop sowing where Chickpeas and fodder placed as major crops of the area. Chickpea is a major drought tolerant cash crop and a major source of livelihood of the rural population. Fodders are grown for the livestock rearing which is the second source of livelihood in the desert economy. The impact of land acquisition for the construction of CBC system was assessed in terms of type of crop, affected land, expected per acre output as well as ratio of affected land to the total crop grown in this area. The crop losses were assessed based on the total number of harvests derived over one year period.
- 102. Another significant aspect in assessment of impact on crops is the tenancy status of the farmer whether the occupant is owner cultivator, sharecropper, renter or squatter. The data on crop loss in the government land will establish that the government land awarded to the project is not free from encumbrances and the project at the time of vacation of land for construction of canal may face problems.

4.4.1 Affected Cropped Area by Land Ownership and Canal System

103. The census and DMS Survey calculated a total of 4384.1 acres of cropped area of the 4662 affected land cultivators will be lost by the construction of CBCS components. Of the total cropped area, 92.8% is privately owned or by sharecroppers and 7.2% is government land cultivated by contesting rights by renters and encroachers (Table 18). The total area (2305.5 acres) and number of entitled APs (2770) is higher on distributaries, followed by minor canal and lowest on the Chaubara canal. The land with the remaining 757 APs is under other impacts i.e. barren, tree plantation, residential and commercial.

Canal System	A	ffected Land	Total*	Number of AHs entitled for crop Compensation		
Canal System	By Owners	By Share Croppers	By Encroacher (Forest land)	CRH of Govt. Land		
Main Canal	1070.7	117.6	26.8	52.5	1097.5	586
Distributaries	2238.4	548.7	67.1	231	2305.5	2770
Minors Canals	975	131.8	8.1	5.1	983.1	1306
Total*	4284.6	798.1	102	288.6	4386.1	4662
	97.6%		2.3%		100	

* The cropped area noted for share cropper and CRH of government land is not counted in total to avoid multiple count.

4.4.2 Types of Crops affected by the Project

104. A major part of the Thal comprises of uneven sand dunes that only allow drought resistant and rain-fed crops during Rabi Cropping (November to April) season only. Chickpeas are the only one season crop cultivated on 89.6% of the cropped area throughout the ROW of the CBCS. Wheat is cultivated on 10% area comparatively flattened with availability of at least three irrigations by shallow wells/ tube wells. Chickpea and wheat jointly share 99.6% of all crops, cultivated in one cropping season as Rabi crop. Owning to low productivity ratio, a major part of wheat produce is kept as food reserve. Overall, chickpeas and wheat are the major cash crops and source of livelihood of the rural population (Table 19). Other crops (0.4%) are mainly livestock fodder and vegetables for household consumption. Total crop yield is counted as per year per crop for all crops cultivated by the AHs in different categories.

Canal System	Affected Land by Type of Crops (in Acres)							
-	Chickpeas	Wheat	Fodder & Other Crops	Total				
Main Canal	809.8	54.9	5.1	869.8				
Distributaries	2022.9	161.3	7.3	2191.5				
Minors	1098.0	221.1	5.8	1324.8				
Total	3930.7	437.3	18.2	4386.1				
% share	89.6%	10.0%	0.4%	100%				

TABLE 19 Types of Crops Affected by Canal System

4.4.3 Crop Yield and Compensation

105. The Census and DMS survey estimates the used crop production rates of the Department of Agriculture for the year 2020 to establish per acre crop yield and market rate for the compensation against crop losses for the CAP (Table 20). As noted earlier, two major crops – Wheat and Chickpeas dominate the crop production to 99.6% in the project area. The remaining 0.4% are fodders and or vegetables for subsistence.

Сгор	Range of Per Acre yield	Average Per acre yield	Market Price at Harvest	Total per Acre Income/Rs.			
Wheat in All areas	1200-1400 Kg	1300 KG	Rs.45/Kg	58500			
Chickpeas- irrigated areas 400-500 Kg 450 KG Rs.86/kg 38700							
At Current government rate for purchase of wheat and market rate for Chickpeas.							

TABLE 20 Per Acre Crop Compensation Rates

4.5 Impact on Trees

4.5.1 Number and types of Trees

106. The DMS survey counted a total of 122,620 trees of which 16782 (14%) from the forest (rangeland) area and 105838 in the private land in the GTC-Phase II ROW. The number of trees are further divided into 1400 fruit trees (1%), 14588 nurseries (12%) and 106,632 wood trees (87%). The taking of forest /rangeland will not affect any AP of land rather included in 1205 acres of forest/ rangeland. The number of trees by type of trees and canal system and category are detailed below (Table 21).

Canal System		Fruit/ timber			
	Fruit	Nursery	Timber	Total	
Chaubara Branch	96	0	21,724	21820	
Distributaries	1,120	700	57,980	59,800	
Minors	184	13,880	26,936	41,000	
Total	1400	14,580	106,640	122,620	
	1 %	12%	87%	100	

TABLE 21 Number of fruit and Timber Trees by Canal System

107. The fruit trees are only over 1% of the total, grown on farm hedges and mostly citrus and used (90 percent) for domestic use. Another 12% is nursery for replantation. The remaining 87% is timber of several species.

4.5.2 Ownership Status of Trees

108. The ROW of the CBCS, besides swaying through grazing pastures of forest land will impact on private land owners and the renters and squatters of provincial government owned land. A summary on affected AHs by trees and canal components is provided in Table 30.

	Pr	ivate land	Provi		
Canal System	Owner	Share Croppers	Lease Holders	Encroachers (Forest land)	Total
Main Canal	507	220	0	23	750
Distributaries	2280	76	8	122	2448
Minors Canals	1233	0	3	0	1236
Total	4020	296	11	145	4472

TABLE 30 NUMBER OF AHS AFFECTEES BY TREES

109. The Forest Department will lose a total of 16782 wood trees. Except for the trees under the Forest Department, all current owners of the trees irrespective of land title will be paid compensation for the loss of trees as per the entitlement matrix for compensation. Of all the trees in the ROW around 86% are private trees and 14% government trees (Table 31).

TABLE ST Number of Trees by Ownership								
Ownership	Wood Trees	Pol Crop	Fruit Trees	Total				
Forest department	4,560	2,222	0	6,782				
Private land owners	99,858	0	2062	101,918				
Nursery owners	0	14,580		14,580				
Total	104,418	16,802	2062	122,620				
	85.%	14%	1%					

TABLE 31 Number of Trees by Ownership

4.5.3 Measurement of Impact on trees

110. The Census and Detailed Measurement Survey collected data on trees by the size, age and girth level. Table 22 presents data on wood trees on five successive girth levels. Compensation cost for trees is calculated on the basis of size (Girth) of the trees. 111. Eight different species of wood trees are included in the total wood trees enumerated in the ROW of the CBCS. All species have different value tag at maturity. Most common wood tree grown on the hedges of the agriculture farms is khagal, sharing 67% of all wood trees. This is followed by kikar (13%) and Berry (8.5%). The remaining is divided into five other species. These species have commercial value and additional source of income for the residents.

Type of Tree	< = 12 ["]	13-24 ["]	25-36 ["]	37-48 "	Above 48"	Total
Berry	8829	1279	114	17	3	10242
Farash	424	909	477	194	4	2008
Jand/Kari	164	267	215	122	61	829
Khagal	44616	25690	9193	848	24	80371
Kikar	14665	761	285	44	3	15758
Shereen/Saras	1721	1489	985	350	10	4555
Shesham/Tale	409	452	408	67	9	1345
Sufaida	3654	1229	566	1	0	5450
Grand Total	74482	32076	12243	1643	114	120558

Table 22 Number of Timers Trees by Size (Inches) of the Tree

4.5.4 Fruit Trees by Type and Age Group

112. Only two species of fruit trees – citrus (1809) and dates (253) reported grown in the private lands. Citrus is grown for commercial use while the dates are natural growth in the Thal desert currently present on the hedges of agriculture land. Age wise type of fruit trees is presented in Table 23 below.

	Age of Fruit Trees					
Type of Trees						
Dates	8	74	81	90	253	
Citrus	937	120	81	671	1809	
Total	945	194	162	761	2062	

TABLE 23 Types and Age of Fruit Trees

4.5.5 Mitigation of Adverse Environmental Impacts of Trees

113. Due to the cutting of a large number of trees and to mitigate the adverse environmental impact on surroundings, plantation on both sides of the main canal, distributaries and minor canals is already planned²⁸. The owners of these trees will be compensated on the official compensation rate for trees at the implementation of the project.

4.6 Impact on Residential and Commercial Structures AHs

114. The Census and DMS survey identified the number of residential, farming and commercial structures of different sizes and dimensions in the ROW. The acquisition of land for the construction of CBCS will impact on 137 small and mostly temporary structures of 128 owners, 1 lease holders, 2 share croppers and 6 encroachers/squatters. The loss of structures

will be compensated to all AHs irrespective of the title as per the Entitlement matrix of GTC-Phase –II project. The number of Affected structures location and type of AHs is presented in table-34.²⁹

Table 34 Ownership of Structure by Canal System						
Canal/Distributary/Minor						
	Owne r	Lease holder	Sharecropper	Encroacher/Squatte r	Total	
Main Canal	24	1	0	2	27	
Distributaries	79	0	2	4	85	
Minors Canals	25	0	0	0	25	
Total	128	1	2	6	137	

4.6.1 Farm level Residential and Livestock Sheds/shelters

115. Besides acquisition of land, the private landowners will also lose their residential as well as livestock sheds/structures. A total of 58 residential structures and 8 livestock sheds/ shelters including fodder cutting machines and storage huts, 30 farm related structures, 34 drinking water and irrigation channels, 2 community structures and 5 commercial structures will be affected. of different construction types will have total or partial demolition due to construction of canal components Table 35.

Table 35 Type of Structure by Canal System						
			Type of Struct	ure		
Canal/Distributary/Minor	Animal Shed	Community Structures	Farm structures	Residential Structure	Shops or commercial structures	Total
Main Canal	1	2	9	10	5	27
Distributaries	7	0	43	35	0	85
Minors Canals	0	0	12	13	0	25
Total	8	2	64	58	5	137

116. A total of 16454 sq. ft. of construction area comprising of 13092 square feet Pakka, 3349 feet of semi Pakka and 607 square feet of katcha constructed areas will face demolition (Table 36).

TABLE 36 Numbe	r and Size of	Residential	and Livestock	Shelter Structures
----------------	---------------	-------------	---------------	--------------------

		Constructed Area (Sft) By Type						
Type of Structures		Pukka	Semi Pakka	Katcha	Total			
Residential Structures -	No	46	9	3	58			
houses	Area (Sft)	11802	1749	427	13978			
Livestock Sheds/shelters	No	5	2	1	8			
LIVESIUCK SHEUS/SHEILERS	Area (Sft)	1290	1,006	180	2,476			
Tatal	No	51	11	4	66			
Total	Area (Sft)	13092	3349	607	16454			

²⁹ See Annex 1 – CAP Database, Vol. 2, GTC Phase -II Project, 2021.
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4.6.2 Dismantling and Re- installation of Drinking Water / Irrigation Sources

117. Hand pumps, tube wells and water courses are important and only available sources of drinking water for human and animals and agriculture in the Thal desert. The acquisition of the ROW strip of land will cause dismantling and re-installing of 2 irrigation tube wells, 26 hand pumps, 2 electric water pumps and 1 drip irrigation system of 13625 feet length Although these systems will be reinstalled in the neighbouring agriculture plots, the dismantling will cause people and animals without water and agriculture without irrigation. Dismantling will lead to loss of Steiner pipes, foundation platforms, shelter huts/ engine room. The re-installation charges will include boring charges, pipe, construction material etc. Around 3750 feet length of lined water course of the private landowners will also be demolished (Table 24).

		Constructed Area
Type of Machinery	No. of Structures	area
Tube Well - Engines	2	4823 sq ft
Hand Pump	26	0
Electric Motor	2	0
Drip Irrigation	1	13625 rft
Watercourse	8	1946 rft
Total	39	

TABLE 24Dismantling Re-Installation of Drinking Water/Irrigation Sources

4.6.3 Impact on Community and Commercial Structures

118. A total of 9 community and commercial structures (2 community Mosques, 1 poultry farms, 1 office, and 3 grocery shops/ tyre shop) with a total of 3837 sft. Constructed area will need to be removed from the ROW (Table 25). Around 42.7% of the constructed are Pakka, 52% semi pakka and remaining 5.3 % is katcha.

	No. of	Constructed Area (Sft) By Type						
Type of Structures	Structures	Pukka	Semi Pakka	Katcha	Total			
Community Mosques courtyard	2	252	-	200	452			
Commercial Structures-Grocery /tyre shops	4	650	-	0	650			
Commercial Structures- Poultry farms*	1	2845		0	2845			
Total	9	3,637		200	3,837			
 Measurement was reconfirmed at the time of preparation of LARP for additional land (17.2 acres) in May 2021 to meet design improvements at Head Regulator and re- 								

TABLE 25 Impact on Community and Commercial Structures

aligning canal to avoid dislocation of Akram Poultry Farm.

The cost of commercial structures loss with applicable income restoration support as per EM has been included in the LARP for Additional Land and is deducted from the budget for CAP. .

4.6.4 Extent of Impacts on Different Types of Structures

- 119. Table 26 presents the nature and extent of impacts on different types of structures. These include community structures, shops/commercial structures, and established irrigation structures. Half of the structures listed (51%) will be fully affected others are affected at varying degrees. However, all affected structures will require demolition and/or relocation from the ROW.
- 120. The functional viability of majority of the affected structures cannot be ensured. Small animal sheds with 50% loss cannot sustain or used for the purpose. Handpump and its pedestal once part is dismantled cannot function, in case of drip irrigation only the pipe network will need to be winded un from the affected piece of land and installed in the neighbouring plot. Once part of irrigation water course is broken it will require full replacement. Functional viability for each affected structure is addressed in Table 26 below.

Structure Category	N	o. of Affecte	d structures		Functional Viability
	Fully Affected 51% plus	Partly Affected 26 – 50%	Slightly Affected Up to 25%	Total	
Animal Shed	6	2	-	8	No
Drip Irrigation	1		-	1	Yes only shifting the pipes in next plot
Electric Motor	4		-	4	NO
Hand Pump	16	10	-	26	No
House	43	15	-	58	No
Mosque	1	1	=	2	Only courtyard will be affected
Business -Poultry Farm	2	0	-	2	No
Business –village Shop	1	0	-	1	No
Tube Well	20	7	0	27	No
Water Courses	8		0	8	No
Grand Total	102	32		137	
Note: one poultry farm a	•		d in additional I ost tables in ch		17.2 acres, so excluded in

TABLE 26 Severity of Impact on Structures and Irrigation Systems

4.7 Assessment of Business Loss for Commercial Entities

121. The DMS survey besides the loss of structure and valuation of the land also assessed the monthly income levels, need for relocation, and distance of preferred relocation place and expected shifting allowance for the seven small rural commercial entities. The responses of the owners/operators of the respective entities are summarized in Table 40 below.

Type of Business	Average Monthly Income from Business	Re-location	Shifting/ Transportation Cost (Rs)	Proposed New Location (Distance)					
1Village Grocery Shop	30,000	Required	20,000	0.5 km					
2.Poultry Farm-1	35,000	Required	50,000	3 Km					
3.Poultry Farm-2	35,000	Required	50,000	2 Km					
Note: one p	Note: one poultry farm and three sops are covered in additional LARP for 17.2 acres,								

TABLE 40 Monthly Income, Need for Re-Location and Place for Relocation

122. The average monthly income of these small village based commercial entities is Rs.26000 ranging between 15000 to 35000 rupees. All of these small businesses will require relocation. All are local residents and will relocate their business in the nearby villages. The relocation will require different packages as per their requirements.

4.8 Access Related Impacts

- 123. The project area is a desert and agriculture is rain fed and prone to seasonal sand storms. The residents use direct or landmarks (e.g., buildings, cluster of trees and or settled sand done) to access other settlements and/or traces for destination. Three types of access roads/pathways are available in the project area: (a) rural access road (partially black top) constructed by the government; (b) Kacha tracks/path to access agriculture fields, the settlements/ farmhouses/ cattle sheds from rural roads; and (c) walkways towards nearby agriculture fields or hamlets. (a) and (b) are mostly visible on the beamed Google map, while (c) is not.
- 124. The proposed canal systems crossing through the private land bifurcates ownership into two parts on the right and left of the canal. The private landowners will face access problems for cultivation of land on the other side. Also, the canal crossing near the settlement will create access problems for the agriculture community for the other side of the canal and for the entire community to link with other neighbouring settlements across.

The specific sites and areas have been identified by the Census/DMS team. The PID and design engineers will undertake efforts to minimize the impacts of access restrictions reported and accordingly accommodate in the design ways to facilitate normal access to and from the local communities.

4.9 Project Impacts – Summary

125. The project will have "significant" impacts in terms acquired ROW land (5632.2 acres)³⁰ and number of affected households (4662) with huge number of DPs BOR (15690). Out of total noted households 1570 AHs effectively cultivating acquired land will face 10% and more loss of their productive asset and 35 DHs with total DPs (total family members) face physical dislocation due to loss of residential structure and commercial assets/income sources (shops etc.). Besides, affected households and local communities will also face loss of drinking and irrigation water sources due to acquisition to acquisition of land and assets. Combined with above impacts the acquisition of 4410 acres of private, the project is considered as a 'A Category' project as per ADB SPS. Furthermore, due to the legacies with regards to land and compensation issues, it is a complex project that will require many corrective measures, resources and efforts in CAP implementation. The CAP has been designed, based on a due diligence report, to address all outstanding issues in terms of policy, resources, and entitlements irrespective of titles.

4.10 Impact on Community structure and Common Public Resources

 $^{^{30}}$ 5615 acres already acquired and 17.2 acres additional RoW land being acquired for adjusting design alignment. 63 | P a g e

126. The canal will mostly travers through sandy and undulating land scape sparsely populated with quit limited public facilities and resources. Except noted partial impacts on one community mosque (loss of open courtyard only), no public infrastructure are other common resources will be affected. However, the canal will be crossing intercity and rural connector roads and paths where construction of new bridges has already been included in canal design and project construction cost. Impact details of affected community mosque are presented table 38 above and costed in the CAP budget accordingly. Besides noted 2 community mosques, project will require shifting of 20 poles of electric supply lines that fall within the canal construction limit i.e. the canal prism.

CHAPTER 5: SOCIOECONOMIC PROFILES OF PROJECT AREA

127. This chapter presents the socioeconomic characteristics of the affected people with the purpose to (i) understand fully how the existing profiles may be affected by the project interventions; (ii) identify and assess all social dimensions that are necessary to plan for restoration and improvements in post-project period; and (iii) establish a baseline to monitor and evaluate the implementation of the CAP.

5.1 Census and Methodology for Socio Economic Survey

- 128. A complete census of the affected landowners/users on the ROW and detailed measurement survey of structures and other assets has been prepared by the TRTA Team. The census/inventory is in Volume 2 -Annex 1 in the *CAP Database.*
- 129. The socioeconomic survey was based on a sample of 480 households distributed in the command area of the Main Canal, Mankera Branch and proposed Chaubara Branch. The survey included affected households with formal ownership as well as those without titles (e.g., tenants, sharecroppers, landless, squatters/encroachers, vendors, small shop owners, laborers and other vulnerable groups). The Team conducted separate Focus Group Discussions (FGDs) among men, women and other stakeholder groups. The social survey respondents were over 18 years of age and/or married/head of household; only one person from each household was interviewed. The households were randomly selected from different parts of the village for a balanced representation of all areas/groups and settlements in the project area. the area. Table 41 lists the villages with the number of households interviewed.

Main Canal Mankera				Chaubara	l			
S#	No of Villages	# of HHs	S#	No of Villages	# of HHs	S#	No of Villages	# of HHs
1	7	112	1	11	176	1	12	192

TABLE 41 List of Sample Villages with Number of Households Interviewed

A TOTAL OF 65 FDGS WERE CONDUCTED.

130. Table 42 presents the distribution of the FGDs in Tehsil and District by gender.

	Mankera / Bhakkar	Darya Khan/ Bhakkar	Chaubara/ Layyah	Noorpur /Khushab]
Male	18	1	6	8	33
Female	18	1	6	7	32
Total	36	2	12	15	65

TABLE 42 Number of FGDS Conducted in the Project Area

5.2 **Population and Demography**

131. The Population Census 2017 calculated the total population of these tehsils as 812,837 people living in 131,267 housing units with an average of 6.2 persons per households. The entire area is rural and thinly populated with an average population density of 93.4 persons/per Km2. The demographic features include the information on household's profile, gender composition, occupations, and literacy status of sample HHs. The information relating to the demographic profile is described below (Table 43).

Project area	Population	Households	Average hh size	Density/persons/ km ²
Tehsil Noorpur	243,295	41,428	5.9	101.4
Tehsil Mankera	257,100	43,486	6.1	72.3
Tehsil Chaubara	252,200	36,617	6.9	85.8
Total	752,595	121,531	6.3	86.5
Total	812,837	131,267	6.2	93.4

TABLE 43 Population	of GTC Canal Cor	mmand Area
		initialita / li oa

Source: Block-wise Population Census Results 2017

5.2.1 **Gender Distribution**

132. The Block-wise Population Census 2017 assessed the entire canal command area as rural and thinly populated with an average population density of 93 persons per km². The total population of Mankera and Chaubara, is estimated at around 792,838, of which 53% are men and 47% women. The gender composition in Mankera is 89 females per 100 males. Whereas the gender composition in Chaubara Branch Canal area is 92 females per 100 males.

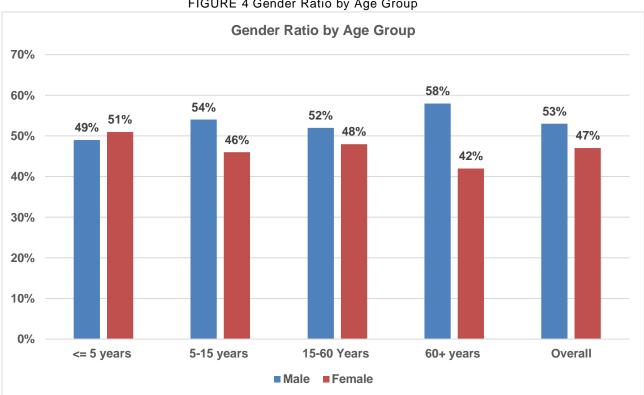


FIGURE 4 Gender Ratio by Age Group

5.2.2 **Average Household Size**

133. The Population Census 2017 calculated the average household size in the project area as 6.3 persons (Table 44). Figure 5 presents population distribution by age-group in the project area – Main Canal, Mankera and Chaubara.

		-	
Chaubara (Chaubara Tehsil, Layyah District)	3.6	3.3	6.9
Mankera (Mankera Tehsil, Bhakkar District)	3.2	2.9	6.1
Main Canal (Noorpur Tehsil, Khushab District)	3.1	2.8	5.9
Overall	3.3	3.0	6.3

TABLE 44 Average Family Size

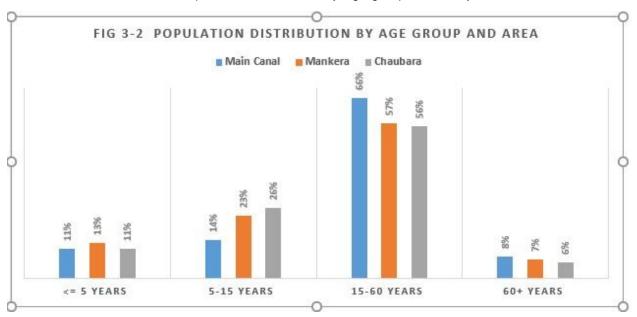


FIGURE 5 Population Distributions by Age-group in the Project Area

5.2.3 Population by Age Groups

134. Around 12% of the total population are juvenile, 24% children and 7% elders that make 43% dependent population on 57% working age group (15-60 years). Dependency ratio is 34% in Main canal as against 43% in Mankera Canal command and Chaubara Branch Canal areas respectively. For gender ratio in different age groups and canal command areas see Table 27.

Age Group	Main Canal		Mankera		Chaubara		Overall		
gender	Male	Female	Male	Female	Male	Female	Male	Female	Total
<= 5 years	44	48	101	98	87	95	232	241	473
5-15 years	118	97	178	153	214	182	510	432	942
15-60 Years	285	268	434	404	453	408	1172	1080	2252
60+ years	44	26	62	41	48	44	154	111	265
Overall	491	439	775	696	802	729	2068	1864	3932
%	53	47	52.7	47.3	52.5	47.5	52.6	47.4	100

TABLE 27 DISTRIBUTION OF POPULATION BY AGE GROUP AND GENDER

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5.3 **Literacy and Educational Attainment**

5.3.1 Adult Literacy

135. The overall adult literacy (15+ years) in the project area is only 40%, while the remaining 60% are non-literate (Table 28). The adult literacy ratio varies significantly between Chaubara (34%) to Mankera (50%) and in the Main Canal area (50%). The overall adult male literacy ratio is 58%. The adult literacy ratio varies: 48% in Chaubara, 57% in Mankera and 71% in Main Canal villages. The overall adult female literacy is 22% and varies: 19% in Chaubara, 36% in Mankera and 27% in Main Canal villages.

	Μ	F	Т	Μ	F	Т	Μ	F	Т	М	F	Т
Literacy												
Non-Literate	42%	78%	60%	29%	73%	50%	52%	81%	66%	43%	73%	50%
Literate	58%	22%	40%	71%	27%	50%	48%	19%	34%	57%	36%	50%
Educational Attainmer	nt											
Up to Matric	49%	18%	34%	58%	23%	42%	38%	18%	28%	49%	34%	44%
Intermediate	5%	2%	3%	9%	1%	5%	5%	1%	3%	1%	1%	3%
Bachelor	3%	1%	2%	0%	1%	1%	4%	0	2%	2%	1%	2%
Master	1%	1%	1%	2%	2%	2%	1%	0	1%	1%	1%	1%

M = Male, F = Female, T = Total

5.3.2 Gender Gap in Literacy

136. There is a wide gap in male and female literacy. The overall male literacy is 58% as against only 22% for females. Figure 6 below shows that in Chaubara where all the project area is rain fed and semi-arid, the male female literacy gap is higher as against Main Canal where canal systems are developed.

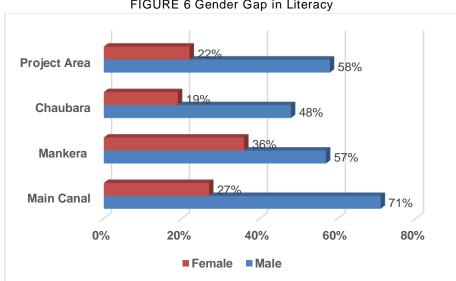


FIGURE 6 Gender Gap in Literacy

5.3.3 Educational Attainment

- 137. Due to the non-availability of educational facilities at the village level the educational attainment level for the adult population remained at the 10th grade. Around 85% of the adult literates reached at middle or high school level,8% studied at higher secondary and 5% attained bachelor and only 2.5% are reported as Master's degree holders.
- 138. Tehsil Mankera seems to be better placed with educational facilities with 50% adult literacy, and around 88% of the adult literates reported attained education up to 10th grade. The status of educational attainment over 10th grade has been nominal.
- 139. Female educational attainment has been limited to local high school level in the entire project area. The low literacy rate is attributed to the access to educational institutions.

5.3.4 Access to Educational Institutions

- 140. Access to social services like education and health is a major challenge in most communities across the project area.
- 141. **Primary Schools:** Government primary schools are the most accessible service available, with an average distance of less than one kilometer (0.71 km) for boys' schools and more than one kilometer (1.02) average distance for girls' primary schools. In Chaubara, all selected villages had Boys Primary school with average distance of 1.43 km for Girls Primary school compared to 1 km in Mankera. Most primary schools offer co-education, therefore, in many communities there is either a Boys or Girls primary school unless the community population size requires more than one primary school.
- 142. **Secondary and Higher Education Institutions:** Distance to secondary and higher education institutions is considerable in most communities especially in Chaubara, where the average distance for boys' secondary schools was 7.75 km and 10.75 km for girls.

5.4 Land Types and Average Farm Size

143. The average farm size in the entire canal command area is 8.0 ha, that includes 2.5 ha (31%) flat surface irrigated land, 4 ha rainfed small sand dunes, and remaining 1.5 ha medium and large sand dunes or uncultivable waste (Table 29).

		Ave. Area (ha)	Ave. Area (ha)	Ave. Area (ha)	Ave. Area (ha)
1	Flat Surface Irrigable Land	1.8	2.0	3.6	2.5 (31%)
2	Rainfed Small Sand Dunes	4.6	2.1	6.1	4.0 (50%)
3	Rainfed Medium Sand Dunes	2.3	0.6	1.4	1.4 (17.5%)
4	Rainfed Large Sand Dunes	0.1	0.2	0.0	0.1 (1.5%)
5	Total Farm Gross Area	8.8	4.8	11.2	8.0 (100%)
Sou	rce: SEBCON's Socioeconomic an	d Agriculture Pro	duction System	Survey (Sample	e HH Survey)

TABLE 29 Land Types and Average Farm Size

5.5 Occupational Status

5.5.1 Background of Calculation of Economic Profile

144. The socio-economic survey classified economic activity of the households into (a) agriculture farmers, (b) livestock farmers, (c) mixed farmers; and (d) non-farming households. Table 30 shows that the 84.8% households' falls in the category of mixed farmers (agriculture + livestock).

Categories			Main	Canal	Man	Mankera		Chaubara		tal
			#	%	#	%	#	%	#	۱%
Only Agri Farmers			29	2.6%	79	7.3%	27	2.9%	135	4.3%
Only Livestock Farmers		20	1.8%	81	7.5%	11	1.2%	112	3.5%	
Agriculture + Livestock Farmers		1025	90.6%	806	74.5%	847	89.5%	2678	84.8%	
Non Farmers		57	5.0%	116	10.7%	61	6.4%	234	7.4%	
Total		1131	100	1082	100	946	100	3159	100	
	Source: Socio Economic & Agriculture Survey SEBCON, November 2019									

Table 30 Classification of Farm and Non-Farm Households in the Project Area

5.5.2 Major Sources of income

- 145. Farming is the main source of employment for the majority of the population. However, considering that agriculture in the area is mostly barani or rain-fed, farm produce for small or middle farmers is not economic, therefore, most households are dependent on multiple sources of livelihood. Another significant aspect is that a quarter of households were self-cultivators who also lived in the village. Absentee landlords are also common in the area, whereby, people lease out their land or hire tenants to cultivate their lands while the owners reside in large urban centers like Lahore or Faisalabad. Data further shows that 10 percent of households are dependent on daily labor or seasonal farm labor.
- 146. Occupational status of sampled HHs tabulated in Table 31 shows that vast majority of occupations are related to farming or at the farm such as farming and livestock farming. Other occupation/livelihood sources include sharecropping (7.7%), shop keeper (9.8%), wage labor (9.2%) and businesses (8.4%).

	Type of Occupation	Main Canal	Mankera	Chaubara	Total *
		% HHs	% HHs	% HHs	% HHs
1	Farm owner	94.6	83.0	88.5	87.9
2	Livestock farmer	41.1	40.3	18.8	31.9
3	Shop keeper	8.9	11.9	8.3	9.8
4	Sharecropper	2.7	6.3	12.0	7.7
5	Unskilled Labour/Daily wager	9.0	12.2	6.2	9.2
6	Mechanic/Carpenter/Blacksmith	0.9	6.8	5.2	4.8
7	Transporter	2.7	7.4	0.5	3.5
8	Teacher	7.1	2.3	1.6	3.1
9	Others- Business, etc	6.2	9.6	8.3	8.4

TABLE 31 Major Source of Livelihood / Occupational Status

147. The number of only agriculture farmers is higher (7.9%) in Mankera than in Main Canal (2.6%) and Chaubara Area (2.9%). The number of both agriculture + livestock farmers is higher (90.6%) in Main Canal area.

5.5.3 Monthly Income from Non-Farm Sources

148. As evident from Table 50, all sampled houses in the project area have non-farm family income.

	Main	Canal	Mankera		Chau	ıbara	Total		
	# of HHs	%	# of HHs	%	# of HHs	%	# of HHs	%	
Yes	67	60%	112	64%	84	44%	263	55%	
Total	112	100%	176	100%	192	100%	480	100%	

TABLE 50 Sampled HHs Having Monthly Non-Farm Family Income

TABLE :	51	Non-Farm	Sources	of	Income/Monthly

Source of income	Main Canal		Manke	ra	Chaub	ara	Average		
	Avg. (Rs)	%	Avg. (Rs)	%	Avg. (Rs)	%	Avg. (Rs)	%	
Daily Wages	5,223	31%	5,056	34%	2,450	29%	4,243	31%	
Salary from service	5,848	34%	2,733	18%	2,896	34%	3,826	28%	
Business/Trading	4,705	28%	1,818	12%	609	7%	2,377	18%	
Transport Business	304	2%	2,040	14%	240	3%	861	6%	
Shop Keeper/Stall	295	2%	756	5%	1,302	15%	784	6%	
Pension	276	2%	551	4%	495	6%	441	3%	
Tractor Rent	179	1%	841	6%	130	2%	383	3%	
Skilled Worker	54	0%	369	2%	380	4%	268	2%	
Thresher's income	-	0%	347	2%	-	0%	116	1%	
Rent of property	-	0%	-	0%	-	0%	-	0%	
Other	223	1%	568	4%	-	0%	264	2%	
Total Monthly	17,107	100%	15,079	100%	8,502	100%	13,563	100%	
Income									

Source: SEBCON's GTC Socioeconomic and Agriculture Production System Survey (Sampled HH Survey)

- 149. As indicated in Table 51, the affected households in the project area have non-farm income from an array of sources. Daily wage and salary from services are key sources mentioned. People also have income from businesses, shop keeping, and rental services.
- 150. Female income generating activities are quite limited and the most common economic activity for females is seasonal labour, which is mostly available during harvesting period and in some cases during crop sowing time. Women contribute to livestock rearing and caring, but in most households' livestock are mostly kept for family consumption and not for commercial purposes. In case of commercial use of livestock, some women did earn through selling milk, butter or curd.

5.5.4 Annual Income

151. Table presents the average household income, which is approximately Rs 345,613 per year (approx. US\$ 2300/ year). Based on the average household size of 6.2 people, and estimated poverty rates in the districts (see Section 5.10), this estimate seems reasonable. While the majority of household heads are farmers, almost half of household income is from non-farm sources. With agriculture currently being only marginally profitable in the area this is perhaps not unsurprising with households needing to adopt a range of income sources – relying on one income source would be viewed as too risky so the current strategy increases resilience in the face of external shocks.

Source of Income	Main Canal	Mankera	Chaubara	Average
	Rs	Rs	Rs	Rs
Non-farm Income	205,284	180,948	102,024	162,752
Farm income	221,935	100,218	226,429	182,861
Agriculture	106,102	34,259	105,179	81,847
Agroforestry	18,598	18,253	23, 122	19,991
Livestock	97,235	47,706	98, 128	81,023
Total (Rs)	427,219	281,166	328,453	345,613

TABLE 52 HHs Average Yearly Income by Source of Income

5.6 Household Assets

152. Two types of assets – immovable and movable - in terms of ownership, number and average value were assessed for the project area.

5.6.1 Immovable Assets

- 153. The residents during the socio-economic survey identified four major immovable assets/ structures in the project area. Overall, 99% of the residents reported ownership of at least one residential structures/houses in which they are currently living in. The average value of a residential structure is reported at Rs.447,724; the highest value at Rs. 488,318 was reported in the Main Canal area while Mankera reported Rs 457,368, and the lowest at Rs.416,184 in the Chaubara canal system.
- 154. Around 48% of the residents have animal sheds with an average value of Rs.42,582. The average estimated value of an animal shed is reported at Rs.44,500 in Main Canal area, as against Rs.46,638 in Chaubara, and Rs.37,800 in Mankera. Around 8% of the residents reported having grocery shops with current value of the business at Rs.392,047.

5.6.2 Movable Assets

- 155. The survey respondents while living in harsh summer and desert like environment, generally considered the following five food storage tank, electric fan, motorcycle, mobile phone, and solar panels as essential household assets.
- 156. The most essential and frequently used asset in the very hot summer environment is an electric fan either ceiling or pedestal. Around 71% of the respondent households reported using electric fans. The average value of ceiling fan is Rs.2680 as against pedestal fan worth Rs.5000. The second most essential household asset is motorcycle reported by 34% of the households with average unit cost ranging between 3,348 to over 5,000 rupees.
- 157. A mobile phone is prioritized as the third essential household asset and an important means of communication within the family members as well as with the outside world. Around 38% of the total respondents use a mobile phone. The average reported value of one set of a mobile ranges between Rs. 2,500 to Rs.10,000. The overall frequency of use of solar panels as an alternative source of energy is only 1%. The average price of household used solar panel is Rs.13000.

158. Food and seed storage tanks are considered as the most essential items in the rural and agriculture environment. Around 14% families have the financial capacity to buy and maintain separate food and seed storage tanks with an average unit cost of Rs. 6,000. A significant number (5%) of families identified ownership of a car as a household asset with an average unit price of Rs. 567,609. The ratio of such families varies from 6% each in Main Canal and Mankera and 4% in Chaubara with different price range.

5.7 Caste Groups in the Project Area

159. Caste and baradari systems play an important role in the social fabric of the rural communities in this region. The predominant castes among the local residents are Pushya in Gohar Wala, Chinna in Mankera and Gohar Wala, Karlu around Karlu villages, Shahi in and around Gohar wala, and Badwal and Chinna around Hyderabad and Mankera. Besides this, many villages/settlements are exclusively established by migrants from India and from Sialkot district. There are some Christian sub-settlements but all in the urban settlements like Mankera and Hyderabad, earning their livelihood as wage workers. Over 99 % of the project area people are Muslims.

5.8 Availability of Civic Facilities

5.8.1 Electricity

160. Around 66 % of households were reported with electricity; the small settlements out of the main village boundary are not provided electric connections. They are now increasingly converting to Solar Plates for part of their electricity needs, especially for electric fans in the summer and limited need for light. The Main Canal area is better electrified where 92% of the households are electrified. In Mankera and Chaubara the ratio of electrified households is 60% and 56% respectively.

5.8.2 Drinking Water

161. The water table in general is quite shallow and hand pumps for household usage and tube wells for irrigation purposes are common water sources in most communities across the project area. The overwhelming majority (98%) collect drinking water from in-house or from neighbours' shallow hand pumps or bore holes. It is called collection because hand pumps are mostly installed at open or common places for general uses –bathing, washing, animals etc. Water for drinking and kitchen use is collected and stored at separate places.

5.8.3 Latrine

162. Majority (78%) reported using in house latrine either flush or pit latrine. Majority of males still reported using agriculture fields for defecation.

5.8.4 Street Pavement / Access Road

163. Around 95% of the rural settlements in the project are void of any paved or metaled road connecting with neighboring communities. They all use dirt road/ tracks for connecting with others. Only 3 % reported paved streets within the village and 2% using metaled road for connecting with other communities. The communities that reported using dirt roads for connecting with other communities is as high as 98% in Chaubara area.

5.9 Status of Women in the Project Area

5.9.1 Women's Roles and Responsibilities

164. Focus Group Discussions were conducted in the Project Area to assess roles and responsibilities of household members with respect to household activities. At household level, roles and responsibilities are divided among male and female members. Similar to the majority of rural areas of Pakistan, females' role are predominantly more specific to household chores, while outside activities are mostly done by male family members.

5.9.2 Major Roles that Women Play

- 165. **House Keeping** including household work like cooking, washing, cleaning, nursing and feeding infants/children are done by women of the house with help from other female family members.
- 166. **Collection of Water:** Collecting water is also primarily done by females but other family members also do in case of need. It should be mentioned that water is quite accessible for most households' using hand pumps and long-distance traveling is not needed to collect water.
- 167. **Livestock Care:** Livestock care is generally done by women, however, assistance from other household members is also common in terms of physical labour like chaffing or cutting fodder or grazing which in more than 80% households was done by other male family members. Female family members mostly clean livestock yard and bathing and milking. Male members in these activities play a supporting role.
- 168. Women Contribution to Farm Work: Decision making regarding agriculture activities is divided. In more than half of the households', women participate in initial preparation activities including choice of crop, allocation of plot area, weeding, harvesting etc. but marketing and determining price of produce in majority communities is done by men. Sale and buying of livestock including sale of milk, poultry etc. is either done jointly or by the women. Women contribute to farm work alongside their male members. Various farm work activities in which women are involved are summarized in Table 53.

TABLE 35 Canal Wise Average recentage of Noie and Nesponsibilities of Women in rain work						
Activity	Responsibility	Main Canal	Mankera	Chaubara		
Transplanting	Women	37	54	57		
Manual weeding	Women	41	29	26		
Harvesting (field crops)	Women	50	50	43		
Harvesting (vegetables)	Women	77	70	71		
Any other Paid Work	Women	44	20	28		
Off farm agriculture labour	Women	41	28	40		

TABLE 53 Canal	Wise Average	Percentage	of Role and	Responsibilities	of Women	in Farm Work
	wise Average	i ercentage v		Responsionnes	or women	

Source: GTC Qualitative Report Vo.1, 24-12-2019

169. **New economic activities for women:** The work of World Women,³¹which is working in Bhakkar and Layyah District with Norwegian support, shows that there is a demand from women to receive vocational training. As such vocational training activities should bring new economic

³¹ An NGO working with women in the project area.

opportunities for women in the project area (see Chapter 8/Section 8.5.3 Training and Facilitation Support).

5.10 Poverty and Vulnerability of APS

170. The APs, particularly the sharecroppers and agriculture workers, are generally considered extremely poor or poor due to their volatile situation and their unsteady sources of income. The international poverty line established by the World Bank is US\$1.90 per day (defined by the World Bank in 2015). Adjusted for inflation this makes a current poverty rate of US\$2.09 in Pakistan per person per day (Rs. 351), and a moderate poverty line of less than US\$3.41 (Rs. 573) per person per day. Given rural agriculture labor are often sole income earners, this brings all workers under the poverty line and the small landholders under the moderate poverty line. In Figure 7, among the three districts, Bhakkar has a poverty rate of 51.7%, Layyah 45.6%, and Khushab 40.4%.

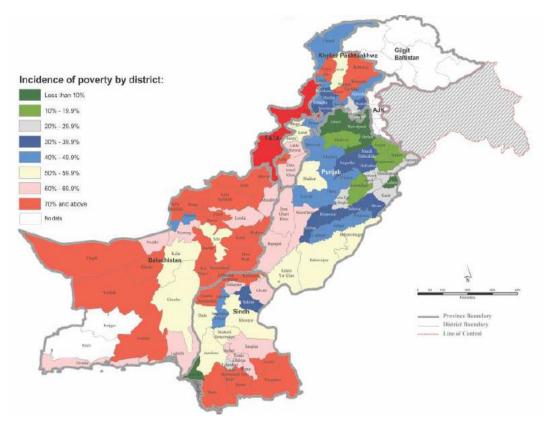


FIGURE 7 Incidence of Poverty by District, 2014-15

Source: Multidimensional Poverty in Pakistan, UNDP, 2016

171. The census and DMS survey identified a total of 151 most vulnerable APs meeting the criteria earlier set and agreed (Table 32). However, list of vulnerable AHs shall be revised and updated by including all identified vulnerable households after conducting poverty assessment and vulnerability profiling study proposed under sub-heading 5.12 below and accordingly vulnerability allowances will be paid and monitored (internally and externally). In the project context, vulnerability has physical (e.g., age, ability/disability), economic (e.g., employment, income livelihood) and social (e.g., female-headed households) dimensions. In around 46% of the vulnerable households', women headed households, 28.5% are those whom the local community identified as the extremely poor, around 7% are those where the bread earner of the family facing some physical disability. A separate list of vulnerable households has been prepared with name, village and all

other identification marks and is available as Annex 3 in the CAP, Vol. 2. The World Women will be engaged to work with vulnerable people for training and income opportunities with support from the project.

Vulnerability Criteria	Number of APs.			
Household Head has Chronic Illness	2			
Household Head has mental illness	2			
Key bread earner is 65+ years age	22			
Key Bread Earner Is Under 18 Years Age	3			
Household Head has Physical Disability	10			
Household is Extremely Poor	43			
Household Head is Widow	69			
Total	151			

TABLE 32 Vulnerable Households /Families in the Project Area

5.11 Community Well Being and Responses

172. The FGDs conducted a simple well-being ranking of the communities during FGDs aimed at self-defining the economic status. The poverty status of the rural population is determined at 64.6% whereas around 5% of them are more vulnerable and homeless (Table 33).

TABLE 33 Household Well-being Status					
Category	Main Canal	Mankera	Chaubara	Project Area	
Rich and Affluent	3.3%	2.6%	2.5%	2.7%	
Middle Income Group	23.7%	28.1%	30.4%	28.0%	
Poor	65.9%	63.7%	64.6%	64.6%	
Vulnerable/Homeless	7.1%	5.5%	2.5%	4.7%	

173. Overall, only 2.7% are classified as rich or affluent, while another 28% crossed over the threshold of poverty. The combined assessment is that around 30% of the population is out of the poverty orbit, while the remaining 70% are under the poverty line. The average ratio of the vulnerable group is 4.7%, which is as high as 7.1 % in the main canal area, 5.5% in Mankera and as low as 2.5% in Chaubara.

5.12 Poverty assessment and Vulnerability profiling of the affected households.

- 174. The socio-economic assessment results included in the CAP are derived from the sample based socio-economic study conducted in 2019. The firm conducted sample-based survey of 480 households from entire canal command, and the information compiled and analyzed lacked poverty assessment and vulnerability profiling of the surveyed households. Further, in the CAP and LARP, consultant team only focused to conduct detailed measurement and census survey of the households losing above land assets of the entire ROW. This is because, at the beginning of the consultant's social safeguard assessment work, it was reported that the land acquisition of the ROW awarded between 2008 to 2011 was fully completed without any residual issues, hence the detailed census and socio-economic assessment survey of the households of the acquired landowners was not covered in the ToRs of the consultants.
- 175. Since, the demographic and socio-economic profiles for all the affected households including all titled landowner, sharecroppers, leaseholders and informal land user households have not been comprehensively analyzed, so precise assessment and analysis on impact

severity and livelihood loss due to lost productive land and non land assets of each entitled AH/AP were hardly possible at the timing of this CAP finalization. Thus, the lacking baseline socio-economic information of affected households in different categories required a detailed poverty assessment and vulnerability profiling survey for precise identification of vulnerable groups, and to ensure adequate measures are included in the community development program for restoration of livelihood and living standards of the affected households; particularly the vulnerable groups.

- 176. Bases on noted information gaps in the CAP, it is concluded that the PMO and ADB project team will mobilize requisite resources immediately after acceptance of this CAP for conducting a detailed Socio-Economic assessment survey. The proposed survey will cover all affected households including land owners, leaseholders/allotees, sharecroppers, contesting leasing right holders and encroachers effectively cultivating affected/acquired land parcels on government land and a judiciously selected sample size of local communities in different income groups among landowners and cultivators, livestock farmers and entrepreneur etc. living in settlements within canal command area. Such survey including poverty assessment and vulnerable household profiling will be completed well before design review and supervision consultant is on board and civil works contract award.
- 177. Based on the survey, entitlements will be provided to the eligible affected households as per the entitlement matrix of the CAP, and result of the provision of such entitlements will be reported in the monitoring report to be verified by the external monitoring agent. The results and proposed measures for restoration of livelihood and living standards including but not limited to providing project-based employment opportunities, cash assistance as livelihood support or input for improved agriculture productivity from remaining land and training to adopt alternative livelihood support will be embedded in the community development plan to be executed during execution of the project. The broader TORs for conducting in depth socio-economic assessment survey for delivering poverty assessment and vulnerability profiling study are as under:
 - Collection and review of baseline socio-economic information for 100% AHs effectively cultivating affected land parcels they own/occupy and randomly selected about 10 % households in different income groups from the communities living in different settlements located within canal command area.
 - Review of prevailing economic profile of the project command area and alternate income sources and livelihood opportunities available along project corridor
 - Meaningful consultations with project executors and the surveyed communities particularly affected households to assess and document willingness level with preferences for participation in project related job/income opportunities
 - Assessment of needs for training and re-training requirements and costs involved not only for training rather providing seeding money to help the affected communities to establish their cottage business etc.

Assessment of the budget for providing the livelihood assistance support, inputs for enhanced agriculture outputs, and training facilities to adopt alternative income sources.

5.13 Conflict Resolution

178. Social issues of low intensity are resolved locally through local elders/ influential of the area and if it remains unresolved, then the matter is reported to police. The FGD participants did not identify any such case (except for land ownership cases) that goes beyond the police. Conflicts of land ownership are not resolved at the local level. The majority of such cases involve middle level violence and are resolved by the revenue authority or the court of law. The inheritance related issues require documentary evidence for both the conflicting parties. The cases go directly to the land revenue authority or the local court of law.

5.14 Indigenous People

179. The Socio-Economic Survey, Census and DMS Survey as well as the FGDs clearly screened and determined that no indigenous people are present in the Project Area and neither do they have any collective attachment with the project area. Hence the ADB's Indigenous Peoples Policy under the SPS 2009 does not trigger for this project.³²

5.15 Community Organisations

- 180. Social Mobilization is the core principle of community organizations. Over a hundred community organizations, networks and donor organizations, are currently operative in the project area and implementing donor-funded, public sector programs as well as self -help initiatives. The sectors in which these community organizations are involved includes: responding to disasters, women empowerment, community based infrastructure development, health, education, civic rights, accountability and transparency, observing the principle of benefitting the community at large, and ensuring that the poorest and most vulnerable people are included in the programs.
- 181. These organizations work with rural men and women to release their potential abilities and skills, build their knowledge and enable them to decide their own development priorities. The purpose is to break the cycle of poverty, both economic poverty and 'poverty of opportunity', which is ultimately village wide socio-economic development they are in a stronger position to bring about sustainable improvements in the quality of life. They offer vocational skill training, micro-finance services, physical infrastructure development, and environmental and natural resource management. Awareness of women's rights, and their right to participate in local development, are integral to NGOs work with community members.
- 182. Major NGO support is visible from donors such as the Pakistan Poverty Alleviation Fund (PPAF), the World Bank, UK DFID, USAID, the Government of Pakistan, ILO, ADB, IFAD, UNICEF, CIDA, FAO, IFAD, and UNHCR. The local NGO support networks such as NRSP, SAP – PK, Insaan Foundation Trust, Doaba Foundation, SVDP etc. are working as middle level organizations. Their efforts have contributed to helping people to raise their standard of living, initiate village-wide socio-economic development and realize new opportunities for themselves and their children. People have achieved new levels of awareness about their human rights and civic rights and obligations, and, perhaps most significantly for the long term, have become integrated into local systems of governance and service delivery.
- 183. In addition to the above, as per the Khal Panchayat Act 2019, the Water Course Level management will be the responsibility of the Khal Panchayat that will be the official elected body of landowners from the respective water course. The land acquisition data shows that 25-40% of the affectees/landowner are women. The rules of Khal Panchayat under the GTC-Chaubara Branch Canal System must provide at least proportionate opportunities for election to the Khal Panchayat. Once around 40% women are elected, the elected members will be responsible to participate in community-based construction of water courses, fully participate in the discussions on design and

³² For operational purposes, the IFIs consider the Kalash as the only indigenous people in Pakistan. There are no Kalash people in the project area.

placement. Ensuring election of women in Khal Panchayat will ensure their views are well captured.

CHAPTER 6: STAKEHOLDER CONSULTATION, PARTICIPATION AND DISCLOSURE

184. This chapter describes the consultations undertaken with stakeholders to explain the project scope and its activities and to seek their views and responses. The consultations were held with households residing in the RoW and surrounding communities to engage the primary stakeholders in a meaningful way in order to design appropriate social plans with measures for mitigation. Several rounds of consultation were held in the field over the project preparation period. This chapter also includes the results and feedback from the consultation and public disclosure meetings held in March 2021 with stakeholders in the project sites to share project implementation arrangements, including social/resettlement and environmental safeguard measures.

6.1 GTC II – Stakeholders

- 185. GTC-II stakeholders both primary and secondary stakeholders are the directly affected landowners/users and beneficiaries in the GTC area, the project owner PID, and other related government departments/agencies, the local governments in Thal area, the project financiers, advocacy groups, elected officials, and NGOs. The PID and the design consultants conducted local-level consultation at various stages of the project development.
- 186. The TRTA Team made concerted efforts for consultation and communication with the primary stakeholders during safeguard planning and documentation stage as an integral part of the process of gathering data for impact assessment and development of mitigation policies and measures. The consultation and disclosure activities are summarized in this chapter.

6.2 Objectives and Guiding Principles

- 187. The stakeholder consultations followed a participatory and interactive process in order to gain local inputs. This was further reinforced by SPS 2009 requirements for consultation and public disclosure. GTC II safeguards planning benefited from consultation with and participation of the APs.
- 188. A key objective was to ensure meaningful and adequate consultation of all stakeholders, particularly the primary stakeholders in the project area. This chapter demonstrates (i) how the consultations were carried out; (ii) how people were involved and engaged in the processes; (iii) the scope of the consultation meetings; and (iv) how the local stakeholders perceive the project and other feedback received.
- 189. This chapter also focuses on plans for future consultations during the project implementation stage, including information sharing and disclosure meetings among the stakeholders.

6.3 Consultation at Various Stages in Project Preparatory Work

190. The approach to consultation and participation in the GTC- II was based on the principle that the affected persons should be fully informed and closely consulted on the project design,

impacts, and measures for compensation and resettlement. Accordingly, the TRTA Team engaged with the affected villages and communities at various stages of project planning – for instance, census and detailed measurement surveys, socioeconomic survey, due diligence review, and land market surveys – and thus have followed participatory planning processes with local inputs in decision-making, policy development and mitigation measures. Table 34 describes the stages, mechanisms and outcomes of the approaches to consultation. The census/detailed measurement survey teams met with over 5,000 APs for collecting relevant data on land, crops, trees and other impacts. As evident from Table 34, the TRTA Team remained in contact with local communities for over a period of two years (Oct/Nov 2019 – Mar/April 2021) dealing with safeguard planning and disclosure issues.

	Stage/Period	Mechanisms	Outcome
1	Census/Detailed	Household-level interaction; info sharing,	Complete enumeration of the
	Measurement	feedback/responses; checklist for follow up	affected households, and
	Surveys (Oct	meetings; FGDs with local communities	measurement of losses for
	2019 to Feb 2019)		valuation and compensation
2	Socioeconomic	Interviews with heads of households and	Detailed household level
	Survey (Nov	sharing of project briefs/ROW impacts;	socio-economic data for
	2019-Feb 2020)	collection detailed socio-economic data and	safeguard planning and
		households and community profiles	mitigation
3	Public	A major public consultation in terms of door-	Project brochure and other
	Consultation and	to-door contacts was planned under the	related documents prepared;
	Disclosure	TRTA for Feb-April 2020. The Team was	Consultation and Disclosure
	(Feb-April 2020)	mobilized in the field but had to abandon the	meetings rescheduled for
	D D'''	plan due to the Covid-19 pandemic.	later dates.
4	Due Diligence	Interviews/FGDs were held with 45 directly	DDR Report highlighting the
	Review (May -	affected persons (all male participants) at	gaps and recommendations
	June 2021)	the village level to understand concerns	to address legacies in order
		regarding project impacts, compensation	for the project to be
		issues, gaps to address legacy issues and	compliant with SPS 2009
		legacy issues with regard to land and non- land issues	
	Land Market	Land Market survey in the project area to	LMS Report confirming CMR
	Survey (Dec	assess the Current Market Rate (CMR) for	for various types of land
5	2020-Jan 2021)	land already acquired in 2006-2008, but	under acquisition; policy
5	2020-Jan 2021)	payments remained outstanding;	entitlements for CMR for land
		interviews/FGDs with buyers and sellers;	compensation
		review of land deeds, interviews of local	compensation
		revenue officials	
6	Public	Public consultations introducing project, land	The revised CAP contains a
Ū	Consultations	acquisition impacts, proposed compensation	summary of the consultation
	(MarApr 2021)	payments, entitlement matrix, project	and disclosure conducted in
	· · · /	implementation procedures, GRC and	March-April 2021 (see
		timeline of project activities. All participants	Section 6.6).
		reported as direct affectees by land take.	·

TABLE 34 Consultation During Project Preparation and Outcomes

6.4 FGDS with Local Residents

191. In October –November 2019, the FGDs conducted were aimed at informing the communities living in the GTC CAD areas of the Greater Thal Canal resettlement strategy. A total of 65 FGDs were held with 558 participants (both men and women attending separately) in selected communities of Tehsils Mankera, Darya Khan, Chaubara and Noorpur, in Districts Layyah, Bhakkar and Khushab. Table 35 provides details of the 65 FGDs held in 4 tehsils of the project area, of which 48 were held in the Chaubara Branch Canal area. FGDs were conducted to

establish socio-economic profile of people living in GTC CAD area including the project localities, before establishing the population affected by land acquisition.

192. As evident, an almost equal number FGDs were organized for men and women (Table 53). The main criteria for the selection of participants were: (a) participant was over 18 years of age and married; (b) only one person from each household was selected; and (c) households with similar social economic characteristics randomly chosen for representational purposes. The FGDs were facilitated through a semi-structured guideline. An average of 8 community women and 8 men participated in separate male and female FGDs. A total of 480 men and women participated in the FGDs. Number of FGDs conducted and participants by tehsil detailed in table 57.

	Mankera	Noorpur	Chaubara	Darya Khan	Total
No of Male FGDs	18	8	6	1	33
No of Participants	142	52	43	8	245
No of Female FGDs	18	7	6	1	32
No of Participants	136	50	42	7	235
No of FGDs	36	15	12	2	65
No of Participants	276	102	85	15	480

TABLE 35 Number of FDGs Conducted in the Project Area

193. Besides disclosure of information on the proposed project, the FGDs collected information for community profile and infrastructure; access to education, health and other social services; economic activities and livelihood sources; gender roles and responsibilities; household decision making; and women specific attitudes and practices in the project area.

6.4.1 Community Perceptions and Benefits

- 194. The FGDs, while focusing on community perceptions on irrigation schemes, particularly concentrated on the following aspects: (i) communication and information sharing pre and post intervention; (ii) community feedback and satisfaction level; (iii) impact on agriculture production and economic activity; and (d) water related conflict.
- 195. People in Chaubara communities where there is GTC proposed construction of canal irrigation systems are hopeful and positive about the benefits of the canal. People felt that the Canal would bring about the following changes:
 - (a) Increase in crop production;
 - (b) New crops will enhance their economic conditions;
 - (c) They would be able to grow more vegetables;
 - (d) Livestock will flourish;
 - (e) Barren uncultivated land can be cultivated after irrigation;
 - (f) Landless and poor households will have more work opportunities;

6.4.2 Issues and Concerns in the FGDs

196. The FGDs also brought about issues that are of concern to the people in the project area. Table 36 lists the key concerns raised at the FDGs.

	Issue/Concern	Description	Remarks/Responses
1	Water Related Conflicts	Scarcity of water for irrigation; water is available only for limited period. As a result, there are occasions when conflicts arise between individuals on water sharing; this is more frequent in the Main Canal area compared to Chaubara and Mankera.	Typically low intensity conflicts; settled locally by village leaders or maliks using the traditional <i>jirga</i> system
2	Land Related Conflicts	Land ownership, demarcation or encroachment related conflicts are of the nature of asset building for the family, thus it involves the entire family and extended kin for zero-sum decision	Resolution through amicable settlements rare; resolved by the revenue authority or the court of Law.
3	Social Conflicts	Inter-personal issues and conflict, often between tribe members; typically low intensity,	Resolved locally by elders/maliks; unresolved cases reported to police
4	Inheritance Related Issues	Typically involving land; require documentation by both parties in the conflict	Resolved by Land Revenue Authority or Court of Law

	TABLE 36	Issues and	Concerns	Raised	at the	FDGS
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6.5 Institutional Consultations and Coordination

197. Institutional consultations were held with different departments/agencies of the government, who also have stakes in the project and play an important role in project planning and implementation. The TRTA Team carried out consultation with many relevant agencies. A brief summary is presented under this section.

6.5.1 Consultation and Coordination with Revenue Department

198. Consultation with institutional stakeholders, particularly with the Revenue Department (including District Revenue/DC Offices), Planning and Development Department, Irrigation Department, Department of Finance – played an important role in getting the final decision from the Provincial Cabinet. The TRTA consultant worked tirelessly with the agencies explaining the project legacy issues and the need for new policies for resolving the legacies to make the project compliant for ADB approval.

6.5.2 Consultation with PID Field Staff

199. TRTA Team conducted consultation meetings with XEN, SDO and Sub Engineers of Sargodha Divisions and discussed design-related social and environmental aspects of the project. PID staff extended valuable suggestions for designing of project and suggested engineering solutions for the safety of the proposed canal system. PID Adhikot Coordination and Implementation (C&I Unit) prepared cadastral maps for the project; C&I Unit is the custodian of all land records of the project.

6.5.3 Fisheries and Wildlife Departments

200. The Social Survey Team held consultation sessions with representative from Fisheries and Wildlife Departments in the offices located at Rajanpur and D.G Khan. They were apprised over the details of the subproject. The survey team briefed the officials over subproject. Officials of both departments raised no particular concerns.

6.5.4 Consultation with Forest Department

201. The ROW of the Chaubara Branch Canal System will pass through four rangelands and form part of the 21.5% of the total land required for the CBCS. Institutional consultations with the Forest Department continued from the inception stage of the project till the final decision of the Government of Punjab for the land acquisition and remaining payments. The Secretary Forest was one of the members of the Punjab Government in the decision making body that decided on the acquisition of 720 acres of land and an allotment of 1205acres of land to the Forest Department as against the same awarded to the PID, and the PID will provide irrigation water from the CBCS for the new land³³. The SEU PMO Barrages, I&C Unit Adhikot and Social and Environmental Consultants held several meetings with the District and Tehsil Level staff in Bhakkar and Layyah regarding measurement of ROW in the forest areas, counting and validation of forest trees in the ROW, identification of local influential and neighbouring small farmers encroachment of the forest land, valuation of fruit, and wood trees.

6.6 Public Consultation and Disclosure Meetings

- 202. The public consultation and disclosure meeting, which was suspended in Feb/March 2020 due to the Covid-19 pandemic has resumed later (under pandemic conditions with all Covid-19 protocols) a year later on 15 March 2021. This constituted the final round of consultation during this stage of project preparation. All materials for instance, specific guidelines on consultation meetings, public consultation brochure, the methodology and coverage, location for consultation, and a pamphlet in Urdu were prepared, reviewed and approved by ADB staff. The field staff went through a day-long training prior to the meetings.
- 203. All affected villages/settlements were notified by social mobilizers to attend locally held consultation meetings with schedules (location, date and time) to ensure larger participation (see Figure 8). In all, 35 consultation meetings were held in the project area in March -April 2021. A separate report³⁴ is available on the public consultation and disclosure meeting. A brief summary of the processes and findings are presented here.

³⁴ Public Consultation and Disclosure Meeting Report, April 2021.

³³ Minutes of meeting held on July 4, 2020, under the Chairmanship of Senior Member Board of Revenue, in the Planning and Development Department.

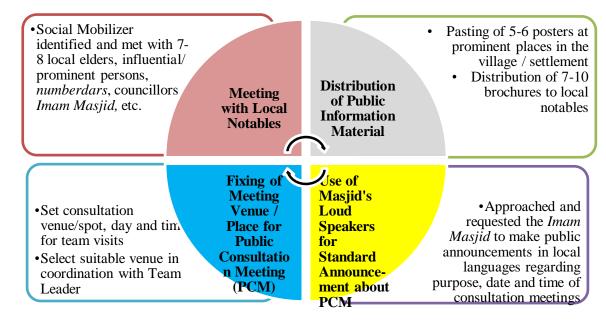


FIGURE 8 Social Mobilization and Public Consultation Processes

- 204. As part of the social mobilization and public consultations, brochures, posters, and banners were prepared, designed, and after approval, printed for public consultations and information disclosures of the GTC-II Project. The Social Mobilizers visited all 35 settlements/villages and were tasks to : (I) identify and meet 7-8 local elders, influential/prominent persons, numberdars, councillors, Imam Masjid, etc., to inform them about the Project and the public consultation; (ii) distribute 7-8 brochures to notables; (iii) paste at least 5 posters at prominent places in each settlement; (iv) set consultation venue/spot, day and time for Public Consultation Meetings; and (v) approach and request the Imam Masjid to make public announcements regarding the consultation purpose, date and time and to ensure participation of all affectees and other villagers encouraging female participation. Overall, the Social Mobilizers met with 332 local notables/influential including 276 (83%) Affected Persons (APs) and 56 (17%) non-Affected Persons (Non-APs). These local notables included 217 landowners/activists, 45 Imam Masjids, 35 shopkeepers, 10 school teachers, 9 social activists, 7 Govt. services officials, 7 councillors/politicians, and 2 plumbers/electricians.
- 205. Public Consultation Meetings (PCMs) were held in all 35 villages. All possible efforts were made to reach out to all affected people and mobilize them to attend the meetings. As a result, a large number of Affected Persons and the general public from these villages attended the PCMs. Separate meetings were held with the women from these villages by women staff of in all the 35 villages. Number of women participants (350) increased men that includes 160 women from affected households and 190 from non-affected households. So, in all 70 sessions were held in the project area to inform the affected households and communities about the project, entitlements and schedules.
- 206. Key benefits perceived by the APs/AHs that were discussed in the PCMs included satisfaction on the received compensation rates of land as per DC notified rates of 2021; provision of canal water; cultivation of new crops and varieties; increase in cropping intensity and agricultural production; increased fertility of land; land levelling and conversion of barren land into canal irrigated land; increase in cultivated area, trees, and livestock; improved paths/road network and new bridges; reduction in heat intensity and temperature, reduced use and cost of

diesel for tube-wells; increase in land prices; employment opportunities; increase in population and prosperity in the area.

207. Concerns and suggestions of the APs/AHs included payment of additional grant-in-aid land to even those who had already received compensation amounts; timely payment of compensation to all; changes in travelling paths/bridges; permission to cultivate acquired land until construction of canal; compensation for all losses including trees, structures, temporary disturbances for cultivation of land near the canal ROW, land fill issues, and support for severely affected APs, widows, and old-age people. APs/AHs suggested support for construction of water courses; priority for employment to local people; avoiding water logging; and tree plantations. Participants also raised concerns for canal demarcation with a change of alignment; correction of record lists and corruption in compensation payments. Two small graveyards were found on the border area of the project. The PMO will provide protection walls on the canal side to preserve the graveyards.

6.7 Disclosure of CAP

- 208. In addition to the disclosure meetings above, the CAP will be disclosed to the APs by the Joint Team of the PMO Barrages, I&C Unit Adhikot and Director SEU of the Project once it is approved by GOP and the ADB. The APs will be briefed over salient features of the CAP. The Team will assure APs affected by the ROW that their compensation will be paid for land and relocation (if required) prior to any civil work on the ROW. Measures will be taken to protect existing routes/tracks so that access and mobility of local people are not affected during construction. Mitigation measures will be adopted to control noise and air pollution. In case of any complaint/grievance from the households, a well-defined GRM has been established under the CAP.
- 209. As part of the disclosure requirement, an English version of the CAP will be uploaded on the website of the Punjab Irrigation Department and ADB. The CAP will be translated in Urdu and placed on the PID website. Hard copies of the Urdu version of the CAP will be placed at the site office for information disclosure purposes. The PMO office will prepare pamphlets in Urdu with GRM information and an entitlement matrix for distribution to APs and other stakeholders in the project area.

6.8 Consultation and Participation Framework at Implementation

210. The PID will involve and engage the APs and other stakeholders in key project activities during project implementation. This will enhance greater ownership of the project by the affected communities; it will also improve the local capacity building in CAP implementation and management. Thus, the CAP has been designed for participation of the primary stakeholders in key project activities during project implementation. Table 37 provides a framework for stakeholders' participation in committees dealing with the CAP implementation.

Team/Committee	Role of Stakeholders in Committees		
CAP Implementation Committee	Two or more representatives of affected villages will be on the CAP Implementation Committee		
LGRC and 3-Tier GRCs for dispute resolution	GRCs at all levels will have representatives of the affected persons/villages for decision-making and dispute resolution		

Livelihood Restoration and Development Committee (LRDC)	LRDC will be formed based on Main Canal and sub-projects with representatives from the local area(s) to design and plan for livelihood restoration activities.
Relocation and Resettlement Committees (RRCs)	Affected persons will be represented in RRCs to plan and schedule for relocation and resettlement of households/structures affected by the project interventions.
CAP Monitoring Committee	The Project will establish a CAP Monitoring Committee consisting of Director- ESU, and local elders/leaders as representatives of the affected communities to review and assess progress in CAP implementation, including recommendation for course corrections, if needed.

211. In addition, the PID through its Field Office will undertake a series of pre-construction activities as part of the social preparation and readiness for project implementation. These consultation and participation activities will involve affected persons and other stakeholders – for instance, in activities such as inventory updating, decisions about household relocation options, and livelihood programs. In sum, the purpose of consultation is to engage the local communities in the development and implementation processes of the Project.

CHAPTER 7: LEGAL FRAMEWORK, ENTITLEMENT POLICY AND MATRIX

7.1 Scope and Objectives

212. This chapter reviews the existing legal framework of Pakistan with regards to land acquisition and resettlement for public purpose projects, its adequacy and gap analysis with SPS 2009, and the new measures taken by the PID and Government of Punjab to comply with ADB requirements, including compensation for assets acquired at market/replacement cost, relocation and resettlement of the project-affected households and other additional measures so that APs can restore and/or improve their conditions in the post-project period. The entitlement policy and the matrix form the basis of compensation, relocation and other additional measures undertaken by the GTC II Project.

7.2 Legal Framework for Land Acquisition

7.2.1 Constitution of The Islamic Republic of Pakistan (1973)

213. The Constitution of Pakistan (1973) clearly addresses the protection of property rights (Article 24) and says that "no person shall be compulsorily deprived of his property save in accordance with law" and "no property shall be compulsorily acquired or taken possession of save for a public purpose, and save by the authority of law which provides for compensation" and therefore either fixes the amount of compensation or specifies the principles on and the manner in which compensation is to be determined and given. Further, Article 4 (sub- clause/a of 1) reiterates the legislative right of the people by stating that: "No action detrimental to the life, liberty, body, reputation or property of any person shall be taken except in accordance with law".

7.2.2 Land Acquisition Act 1894

- 214. The Government of Punjab's current law and regulations governing land acquisition for a public purpose is the Land Acquisition Act (LAA) of 1894 with successive amendments. The LAA regulates the land acquisition process and enables the federal and provincial governments to acquire private land for public purposes.
- 215. In the absence of a specific resettlement policy, the Land Acquisition Act (LAA) of 1894 is the defacto legal instrument governing resettlement and compensation to displaced persons (DPs). Although LAA lays down detailed procedures for acquisition of private properties for public purposes and compensation, it does not extend to resettlement and rehabilitation of persons as required by multilateral development banks (MDBs) such as the Asian Development Bank. Further, the compensatory measures under the LAA of 1894 are inadequate to provide for equal or enhanced living status of the people in post-displaced conditions.
- 216. The LAA is a complex legal instrument, which comprises of 55 sections pertaining to for example, area notifications and surveys, acquisition, compensation and apportionment of awards, dispute resolution, penalties and exemptions. Table 60 provides a summary of the salient sections of the LAA 1894 and the lengthy processes it entails from notification to payment of compensation for acquired assets.

Section	Description	
Section 4	Publication of a preliminary notification (called a Section 4) in the official Gazette This notice will give appointed officers the power to enter land for the purposes of conducting survey and other tests	
Section 5 Formal notification of land needed for a public purpose. Land Demarcation. affected persons assets		
	Affected persons may raise objection in writing to the collector within 30 days of notification under section 5.	
Section 5-A	Section 5a covering the need for enquiry and stakeholder consultations.	
Section 6	The Government makes a more formal declaration of intent to acquire land, hold stakeholder consultations, and appoint a District Price Assessment Committee (DPAC) to assess the rates	
Section 7	District Land Commissioner shall direct the respective Land Acquisition Collector (LAC) to take order the acquisition of land.	
Section 8	The LAC then has to direct which land is required to be physically marked out, measure and planned	
Section 9	The LAC gives notice to all PAPs that the Government intends to take possession of the land and if they have any claims for compensation then these claims are to be made to the LAC at appointed time	
Section 10	Delegates power to the LAC to record statements of PAPs in the area of land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgagee, and tenant or otherwise.	
Section 11	Enables the Collector to make enquiries into the measurements, value and claim and then to issue the "Final Award ". The award includes the land's marked area and the valuation of compensation.	
Section 16	When the LAC has made an award under Section 11, the LAC will then take possession and the land shall thereupon belong to the Government, free from all encumbrances.	
Section 17	In cases of urgency, whenever the Government can take possession of any land needed for public purposes or for a Company. Such land shall thereupon belong to the Government, free of all encumbrances.	
Section 18	In case of dissatisfaction with the award PAPs may request the LAC to refer the case onward to the court for decision. This does not affect taking possession of the land	
Section 23	The award of compensation for the owners for acquired land is determined at its market value plus 15% in view of the government led land acquisition for public purposes	
Section 28	Relates to the determination of compensation values and interest premium for land acquisition	
Section 31	Provides that the LAC can, instead of awarding cash compensation in respect of any land, make any arrangement with a person having an interest in such land, including the grant of other lands in exchange	

TABLE 60 Salient features of the LAA 1894

7.2.3 The LAA of 1894 and Its Limitations

217. The age-old law used as eminent domain (i.e., the right of a government or its agent to expropriate private property for public use, with payment of compensation) has many limitations from the international financial institution (IFI)-funded project context – for instance, (i) it does recognize only those with legal or legalizable title and those without recognizable title under law are excluded from any compensation or assistance; (ii) the valuation of assets and compensation paid is typically based on yearly average of recorded transactions which are mostly less than the market value; (iii) except for compensating for acquired assets and sustained damages there are no provisions for resettlement or assistance for relocation and income restoration; (iv) the gazette notification under section 4, 5 a & 6 are issued and published to denounce land acquisition while concerns and claims tendered by titled land owners are reviewed and redressed before awards but it lacks specific provisions for community involvement, preparation and implementation of land acquisition and resettlement plans ;" and (v) landowners, if unhappy with the compensation, can file petitions to the court of law, which are rarely successful. In sum, the existing legal framework lacks robust provisions for addressing various dimensions of likely impacts of a development project in a manner consistent with the ADB's SPS provisions.

7.3 ADB SPS 2009 and GAP Analysis

7.3.1 ADB Guidelines and Policy Principles

- 5 ADB guidelines require (a) avoid and/or minimize involuntary resettlement where possible by exploring project and design alternatives; (b) enhance, or at least restore, the livelihoods of all economically displaced persons in real terms relative to pre-project levels; and (c) improve standards of living of the displaced poor and other vulnerable groups.
- 6 The involuntary resettlement safeguards cover physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions to access. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.
- 7 The policy principles require disclosure of project impacts, meaningful consultation with the displaced and other affected persons, valuation of assets at market rate, appropriate relocation and resettlement of the displaced people, improvements in the standard of living of the poor and vulnerable groups, and establishment of a grievance redress mechanism. In essence, there are many gaps between the LAA of 1894 and the ADB SPS 2009 requirements.

7.3.2 Gaps between LAA 1894 and ADB SPS (2009)

8 The LAA of 1894 and ADB SPS diverge on many key points. Table 61 presents a discussion on the gaps and recommends measures to bridging the gaps in the GTC II Project.

	TABLE OF Gap Analysis and measures to Address the GAT's						
	Key Principle	LAA of 1894	ADB SPS 2009	Measures Taken to			
			Address the Gaps				
1	Compensation	Compensation for land	DPs are to be	Land valuation is to be			
	at	and other assets is	compensated for	based on current			
	Replacement	based on average values	all their losses at	replacement (market)			

TABLE 61 Gap Analysis and Measures to Address the GAPs

cost	and department unit	replacement cost	value with an additional
	and department unit rates that do not ensure replacement market value of the property acquired. However, LAA requires that a 15% compulsory acquisition surcharge supplement the assessed compensation.	replacement cost, including transaction cost and other related expenses, without deducting for depreciation.	value with an additional payment of 15%. The valuation for the acquired housing land and other assets is the full replacement costs keeping in view the fair market values, transaction costs and other applicable payments that may be required.
2 Relocation and Resettlement of the APs	No provision in the LA Act for resettlement expenses, income/livelihood rehabilitation measures or allowances for displaced poor and vulnerable groups.	Requires support for rehabilitation of income and livelihood, severe losses, and for vulnerable groups.	Provision should be made for relocation and resettlement, including all possible assistance (transportation and transitional allowances), compensate for loss of income, and provide support to vulnerable persons and those severely impacted (considered to be those losing more than 10% of their productive assets).
3 All APs irrespective of titles are eligible for assistance	Lack of formal title or the absence of legally constituted agreements is a bar to compensation for instance, squatters and informal tenants/leaseholders are not entitled to compensation for loss of structures, crops.	Lack of formal title is not a bar to compensation and rehabilitation. All DPs, including non- titled DPs, are eligible for compensation of all non-land assets.	Squatters, informal tenants/ leaseholders are to be considered entitled to compensation for loss of structures and livelihood and for relocation. In other words, entitlements must be inclusive.
4 Resettlement is planned and executed as part of the Project	Land acquisition and compensation process is conducted independently by the Land Acquisition Collector following a lengthy prescribed legal and administrative procedure. There are emergency provisions in the procedure that can be leveraged for civil works to proceed before compensation is paid.	Involuntary resettlement is conceived, planned and executed as part of the project. Affected people are supported to re- establish their livelihoods and homes with time- bound action in coordination with the civil works. Civil works cannot proceed prior to compensation	Project executing agencies to prepare land acquisition and resettlement plans, as part of project preparation based on an inventory of losses, livelihood restoration measures, Pakistan law and principles enumerated in SPS. Where gaps exist in the interpretation of Pakistan law and resettlement practices, requirements of ADB's involuntary resettlement policy will prevail. Civil works may only proceed after the resettlement plan is implemented and compensation for loss of assets and other allowances (budgeted as

	fully paid.
5 Accessible grievance redress mechanisms for dispute resolution No convenient grievance redress mechanism except recourse of appeal to formal administrative jurisdiction or the court of law. Requires th establishmen accessible grievance red mechanisms receive and facilitate th resolution of I concerns about displacement other impact including compensatio	he EAs will establish easily nt of accessible grievance e redress mechanism dress available throughout s to project implementation that will be widely publicized within respective project DPs' area and amongst the bout DPs. t and cts,

7.4 Resettlement Principles and Policy for The GTC- II Project

- 218. Based on the due diligence review, field surveys, gap analysis and intensive consultations between the ADB and GOP, 35 PID, and Revenue Department, and TRTA Team recommendations, the GOP finally adopted the following resettlement policy and principles for the GTC Phase-II to comply with ADB SPS 2009 requirements. The resettlement policy and principles for the project include the following:
 - 2.5.1 The Government of Punjab, in order to address the legacy issues in the project approved a supplementary package for settling all outstanding compensation issues at market rates.
 - 2.5.2 A time-bound Corrective Action Plan (CAP) to deal with land compensation payments, including payments for structures, trees and crops at replacement cost.
 - 2.5.3 The CAP will have provisions for relocation and resettlement for physically displaced household with all possible assistance, including transportation.
 - 2.5.4 Provision of income and livelihood restoration for affected households, including tenants and wage laborers affected by the land acquisition.
 - 2.5.5 PID to undertake stakeholder consultations and disclose the CAP to the affected communities; in addition, APs will be represented in local committees for CAP implementation to enhance project ownership.
 - 2.5.6 The CAP entitlement policy will be inclusive in that non-titled person (e.g., informal dwellers/squatters and encroachers) will be compensated for their losses and assisted in relocation and resettlement.
 - 2.5.7 Vulnerable groups and severely affected displaced persons will be provided special assistance;
 - 2.5.8 PID to pay compensation and resettlement assistance prior to the construction contractor taking physical acquisition of the land and prior to the commencement of any construction activities; and
 - 2.5.9 Establishment of appropriate institutional, grievance redress, internal and external monitoring and reporting mechanisms.

7.5 Project-Specific Additional Measures to Address Legacies

7.5.1 Observations by the ADB Fact Finding Mission

³⁵ Includes the Planning and development Department, Board of Revenue, Forest Department, Irrigation Department, Punjab cabinet and Chief Minister.

- 219. The ADB Fact Finding Mission (7-18 Feb. 2020) during the meeting with the Government of Punjab reiterated that continuing with the ongoing land acquisition procedures will prevent ADB from financing the project. The mission further referred to the following approach to meet the SPS requirements:
 - (i) For unpaid landowners in 3690 acres and 722 acres, the Government of Punjab shall pay to fill the gap of the land prices approved in 2006-08 and the current market rate, which is to be calculated at full replacement cost as per ADB's SPS; and
 - (ii) Lands in 3690 acres whose owners have already been paid not in anticipation of ADBs support to the project will be considered as "Acquired Government Land" and the landowners will not be paid to fill the gap of the land prices approved in 2006-08 and the current market rate. However, payments of any relief or supplementary allowances to fill the land price gap for already paid landowners may be considered by the Punjab government, if deemed necessary.
 - (iii) The PMO will ensure payments for non-land compensations and allowances, such as housing and commercial structures, trees, agricultural crops, vulnerability allowances, and livelihood restoration program costs, to affected people on 3,690 and 722 acres to meet ADB's SPS requirements

7.5.2 Responses to DDR and Additional Measures by GOP

- 220. The DDR reported36 on the legacies of the land acquisition history in the project and provided a set of recommendations. These include (i) valuation of land and other assets acquired must be at market/ replacement rates; (ii) compensation for land and other assets must be paid prior to civil works; (iii) displaced households must be resettled and/or assisted in the relocation process and provided support for livelihood and income losses; and (iv) all affected persons must be recognized irrespective of titles (e.g., leaseholders, squatters, encroachers) and must be compensated for their losses. The DDR also recommended for consultation and disclosure of project impacts and provision for easy access to grievances redress mechanisms during project implementation.
- 221. The GOP moved swiftly to redress the gaps for making the project more compliant with SPS 2009. The steps and measures taken are summarized.³⁷
 - (i) The BOR issued notification to pay all outstanding payments for land immediately.
 - (ii) The Provincial Cabinet, acting on the request of PID, approved additional finance in the amount of Rs.1.4 billion to pay compensation at market rate for land acquired in 2006-2008.
 - (iii) A land market survey was conducted by PID/TRTA Team to assess the market value for all types of land acquired for the project.
 - (iv) The additional payments to match the market price for land will be paid in the form of "grantin-aid" and not as compensation (to avoid potential conflict with the existing law).
 - (v) The CAP will provide compensation for all non-land assets (previously not covered) and consider all affected persons irrespective of titles.
- 222. The above measures are now integrated into the project resettlement policy and entitlement matrix.

³⁶ See Chapter 2 – Due Diligence Review and Recommendations

³⁷ See Chapter 3 – GOP Responses and Actions

7.6 Eligibility and Entitlements

7.6.1 Cut-Off-Date

- 223. The agreed cut-off-date for eligibility for compensation is February 29, 2020 for each section that involves LAR impacts. The cut-off date is set and announced to prevent influx of outsiders and to avoid false and frivolous claims for compensation, relocation and livelihood rehabilitation entitlements. Any person who enters in the project land after the announced cut-off date or any assets established in corridor of impact after the cut-off date will not be eligible for compensation, however the affected persons will be served a prior notice to remove their assets and take the salvage free of cost.
- 224. For GTC II CAP, each household/land owners have been identified and documented in the database. The cut-off date has already been disclosed to the APs through consultative meetings, focus group discussions, field surveys and other means of communication including face-to-face communication with communities in close coordination with the heads of the villages. The disclosure of cut-off date has thus been formalized through documentation of consultation meetings and disclosure reports.

7.6.2 Eligibility

- 225. In the GTC-II, the APs are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of acquisition of land by the project. The persons holding or occupying the land/assets on ROW on or before the cut-off date and who face physical or economic displacement due to permanent or temporary loss of their assets including land, structures and other assets appended to the land or their livelihood whether full or partial as a consequence of land acquisition and/or eviction from public land (ROW) will be entitled for compensation and rehabilitation/income restoration provisions under the provisions of this CAP.
- 226. Thus, APs may include (i) persons or legal entities with formal legal rights to acquired land and/or structures in entirety or in part, (ii) persons who have no formal legal rights to land and/or structures lost wholly or in part but who have claims to such lands that are recognized or recognizable under national law, and (iii) persons who lost the land or structure they occupy in entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The eligible APs entitled for compensation under the CAP may include but not limited to the categories defined below:
 - Owners of land and assets i.e. structures (residential/commercial or of any other use) with formal legal title to land and the recorded occupiers/users of land/assets as provided in the land record registers and cadasters etc.;
 - (ii) APs whose rights are not formal or legal but whose claims are recognized or recognizable under national laws or customs will be eligible for compensation against their affected land/assets. Such APs may include people who have customary usufruct right to the land that is held either by the community (collectively) or the state or people who have inherited, occupied, and utilized the land for generations but lack titles simply because the state has not formalized the land records and issued title to them.
 - (iii) APs without formal legal rights or recognizable claims under national law and customs and

may include all squatters, tenants, sharecroppers, and wage laborers. Although such APs lack legal or recognizable rights to the land/asset but because of lost assets or impacted livelihoods they will be considered APs eligible to receive compensation for assets other than land and resettlement assistance.

(iv) Cultivators or those whose livelihood is dependent on acquired land, business operators of affected commercial structures and their employees whether registered under law or informal and the identified vulnerable groups.

7.6.3 Unit of Entitlement

- 227. The unit of entitlement may be household (i.e., head) and/or individuals, depending on the type of impacts or losses. For instance, for loss of land the titled /owner(s) of land while individual members of the same household unit may be eligible for income losses or livelihood assistance. The same household member may be eligible to a range of entitlements depending on the types of losses experienced. In general, the following entitlements have been recognized in the GTC II CAP entitlements.
 - (a) Compensation of land at market/replacement rate
 - (b) Replacement cost of the affected structure and other immovable assets
 - (c) All AHs with special needs/vulnerable with the project will be provided with additional logistical and other in-kind (for example, transportation by PMO) support for relocation
 - (d) Shifting and transportation allowances in case of relocation
 - (e) Livelihood allowances
 - (f) Vulnerability/women-headed household allowances
 - (g) Allowances for agricultural wage laborers and others affected
 - (h) Allowances for loss of commerce/business and employment
 - (i) Provision for replacement of community structures asset/property etc.

7.6.4 Entitlement Matrix

- 228. The CAP entitlement Matrix in presented in
- 229. Table 62. The implementation guidelines are discussed in Section 7.6.5. All compensations will be annually adjusted based on corresponding market units rates and the source of information for allowances (CBM or OPL as applicable).

TABLE 62 Entitlement Matrix

Asset	Specification	Eligible Persons	Compensation Entitlements
A. Permanent loss of and or permanent access restriction or damage to agricultural (including uncultivated agricultural), grazing or other lands used for agricultural purposes	<u>A.1 All</u> Land falling <u>under</u> <u>Project</u> Impacts	Legal owners of land on ROW. (15690) (BOR)APs identified through census/ survey and revenue documents	Cash compensation at replacement cost plus 15% Compulsory Acquisition Surcharge (CAS)/Current Market Rate (CMR), free of taxes, registration and transfer costs.
and subsistence.		Lease holders of Government Land (Registered or not) (138 AHs)	 Land compensation for leaseholders with recognized/regularized lease or land for land swaps No land compensation for non- regularized lease. Cash compensation equal to market value of gross harvest crop/other agricultural output from the affected land for the remaining lease years up-to maximum of 3 years.
		Sharecropper / Tenant (Registered or not) (461 AHs)	 No Compensation for lost land. Cash compensation equal to market value of gross harvest crop/other agricultural output from the affected land, proportionate to their share for three years.
		Agriculture Workers (Registered or not)	Cash indemnity corresponding to their salary for the remaining part of the agriculture season up-to maximum of 6 months.
		Squatters/ informal Settlers / including those using forest land for agriculture purposes land as per records/surveys (if land use right is unrecognizable) (43 AHs)	 No Compensation for lost land. One rehabilitation allowance equal to market value of one gross annual yield/other agricultural output from lost land in addition to standard crop compensation
		Farmer/Titleholder/ tenant/lease holders (1109 AHs)	Severe Agriculture Land Impact allowance equal to the market value of the gross annual yield/other agricultural output from lost land for 2- years and/or net agricultural income for 2 years (for non-crop related agricultural land based activities).
		Sharecropper / Tenant (Registered or not) (461 AHs)-	One severe impact allowance equal to value of share of harvest/other agricultural output lost for 2 years, in addition to standard crop compensation; and/or net agricultural income for 2 years (for non-crop related agricultural land based activities).
		Agriculture Workers (Registered or not)	Agriculture workers, whose contracts will be interrupted, will receive an indemnity corresponding to 3 months of income at the current

Asset	Specification	Eligible Persons	Compensation Entitlements
			minimum wage rate of the government of Punjab. FY 2021-22 MWR is Rs. 20,000 per month
		Squatters / informal Settlers (43) As all the squatters will loose 100% of the land encroached.	One rehabilitation allowance equal to value of gross annual yield/other agricultural output from lost land for 2 years in addition to standard crop compensation; and/or net agricultural income/output for 2 years (for non-crop related agricultural land based activities).
B. Use of Forest (Rangeland) for construction of Canal	Forest land is annexed through notification by Board of Revenue	Dept of Forestry, Government of Punjab (1205 Acres)	Use of land will be compensated with Additional land for plantation Replacement costs Provision of water to the forest are through irrigation system
C. Residential / Commercial Land	All types of residential / commercial land	Owner legal / legalizable (128)	Cash compensation at replacement cost plus 15% compulsory acquisition surcharge (CAS) free of taxes, registration and transfer costs;
		Renter/ Leaseholder/ Sharecropper	Cash compensation of a value proportionate to the duration of the remaining lease period
		Non-legalizable APs using land plot. Which is the only land plot used for residence or providing the main source of income for the AH (6)	One time allowance in cash equal to a minimum monthly subsistence allowance (Rs.20,000) for a 12 month period.
D. Temporary impacts on land	All land	All APs	Temporary land impacts will be compensated based on the productive value of the plot during the period of impact; after use plot condition will be re- established by the EA at the pre- impact productive conditions
E. Loss of Crops: Impact on Crops on Land to be Acquired	All types of Affected Crops Loss of crop and orchards	All users with or without title or registration (4662)	Crop Compensation for each crop lost during Kharif /Rabi agriculture season based on provincial agriculture department
F. Residential, Commercial, Agricultural and Community Structures	All Affected Persons	Owner(s), titled and non-titled of the structures (128) and squatter (in case of squatters only those actually occupying the structure (6) and in case of Community structures, (2) the members of the committee jointly. Sharecropper on owners land (1)	 Cash Compensation at replacement cost for affected structures by type of construction and other fixed assets free of deductions for salvageable materials, depreciation and transaction costs. In case of partial impacts, cash assistance compensation will be provided to restore the remaining structure. If > 25% of the building's floor area is affected, cash compensation will be computed for the entire building/structure. The replacement value for Pacca residential structure Rs.1200/sft, Semi- Pacca and Kacha structures are proposed Rs.1000/sft. and Rs.

Asset	Specification	Eligible Persons	Compensation Entitlements
			560/sft respectively based on the current material cost. The final rates of District Building Department at the time/year will apply. The District Building Department approval will be Annexed.
G. Boundary Wall, Floor ETC.	All Affected Persons	All relevant APs (including informal settlers and other non-title holders)	For Pacca Rs. 800/sft, Rs.120/sft. Boundary wall will be calculated length x 5-6 ft height
H. Movable Structures Siting on the Ground	cobblers, hair	formal owners of structures	 No compensation for moveable structure.
	cutter etc.		 No compensation will be provided to the DPs sitting on the ground like cobbler, hair cutter etc., if they can move near by the existing place without disturbance of their income.
			 One time allowance in cash equal to a minimum monthly subsistence allowance (Rs.20,000) for a 6 month period, if no replacement space is available to continue operation, and displacement is permanent and affects ability to sustain the same level of income. Eligible to participate in CDP.
I. Trees	All affected trees	Owner (4472 DPs) Forest Trees (Forest Department)	Fruit trees: compensation for mature fruit-bearing trees will comprise of the market rate of the yearly crop yield multiplied by the number of years required to grow such a tree to the same productive level it was cut; and for immature trees that are yet to bear fruit compensation will be based on the gross expense needed to reproduce the tree to the same age it was cut. Timber trees will be valued based on the market value of their dry wood volume. The wood of the fallen tree will remain with the owner and its value will not be deducted from the compensation.
			All trees affected in the forest area are wood trees Replenishment cost and land for land provided by the Board of Revenue Punjab
J. Loss of business, business or commercial income and employment	Shops, stalls and kiosks	Business owners, renters, leaseholders, and informal operations (both residential cum commercial and commercial),) and employees as identified by the census.	The business owners will be paid: (a) if temporary impact, cash grant for net income loss for duration of business stoppage, up to a maximum of 6 months. (b) if permanent impact, cash grant for net income loss for 12 months. Different business report different monthly income rates, each will be compensated as per its reported income.

Asset	Specification	Eligible Persons	Compensation Entitlements
			The affected employees will be paid: One time cash grant equivalent to 3 month effective wage or 3 months official monthly minimum wage, if income is informal.
K. Shifting allowance	impacted material etc.	^{bs} with residential, commercial, agricultural and community structures affected by the project (excluding mobile structures)_ cluding 35 for lost shelter and 3 for lost business)	A lump sum (Rs.30,000) one time relocation allowance will be paid to relocating households, businesses, agricultural operations and mosques etc. for shifting their belongings, inventory, equipment and installations. The shifting will be mostly local and relocation and reconstruction nearby or vicinity.
L. Loss of livelihood	Loss of income and livelihood	All APs with impacted livelihoods	Participation in Community Development Program (CDP) Priority participation in CDP is provided to vulnerable and severely affected APs.
M. Severe Impacts: Physical Relocation and other severe impacts (excluding impacts covered under A2)	10% or more loss in income or productive assets and physically relocated AHs.	All DPs meeting severe impact eligibility criteria, including non- title holders. (38 DPs_including 35 for lost shelter and 3 for lost business)	Non land-based livelihoods: 12 months based on minimum wage per month/OPL will be paid to the AP (For land-based livelihoods and agricultural income: refer to A2)
N. Affected Vulnerable Households	Vulnerable APs as per definition	All vulnerable APs (151 AHs)	ssistance allowance in cash equal to 3 OPL. Temporary or permanent employment during construction or operation of the facility that necessitated involuntary resettlement, where feasible. Additional logistical and other in-kind support (logistics, relocation planning, assistance with replacement housing search, as appropriate) for relocation by the project
O. In case of AP expires	Land Any structure/above land assets	Known legal heirs of the expired Sp. The Spouse and /or Head of household	The land compensation for expired AP (BOR) will be paid to the known and recorded legal heirs as per mutation record following outlined provision at A-1. The next eligible AP will be his spouse (if expired AP was married) or the household head (if expired AP was unmarried) for non-land compensation including allowance for expired but eligible encroachers/squatters. No need to provide court succession letter, only death certificate verified by the affected persons' committee will be provided. In case the AP was the only

Asset	Specification	Eligible Persons	Compensation Entitlements
P. Loss of drinking water and irrigation sources, and other communal property and common pool resources	Family or communal source of drinking water and source of irrigation, and other community infrastructure and common pool resources	All directly affected APs (137 structures Animal Sheds -8 Community Structures.2 Only 2 community structure and Electric supply line poles.	member recorded during the census survey, no other person will be entitled and compensation will be cancelled. Handpumps and tube wells are essential source of drinking water for human and animals in the Desert. The construction of canal will only provide surface water for Rabi season only. Immediate replacement of sources of water be given priority with full replacement cost. Immediate replacement of all community infrastructure and common property resources beyond water and irrigation requires replacement/ rehabilitation with full replacement
Q. Unforseen impacts during construction, including temporary impacts and impacts on livelihoods not otherwise assessed	Unanticipated impacts declared minimum wage by th	All APs	cost Due compensation to be assessed and paid when the impacts are identified based on the above provisions and on the requirements of SPS 2009.

7.6.5 Implementation Guidelines for Entitlements

230. This section provides implementation guidelines for entitlements as presented in the Matrix (

231. Table 62 Entitlement Matrix/EM), including definitions of various entitlements. LACs/PID will follow the guidelines in the implementation of the CAP.

1. Compensation for Loss of Land – All Types and Categories (Re EM/A: Permanent Impact for Loss of Agricultural land, including uncultivable waste land)

- All compensations will be annually adjusted based on corresponding market units rates The replacement cost is equivalent to the market value of the land/assets, sufficient to replace the lost assets and cover transaction costs;
- The current official valuation table called DC rates for types and kind of land for each village will be used as base prices. In addition to this, the land compensation will be paid 15% CAS and transfer of land will be free of taxes, registration and transfer fee;
- All legal owners/entitled persons will be paid CMR and/or supplementary allowances (i.e., grant-in aid) as per Provincial Cabinet Decision;
- Ownership of Leased land is with provincial government, leases are not suspended rather part of land transferred to PID for Irrigation development,
- Grievance Redress Committee to resolve disputes related to payments

2.Compensation for Loss of Crops (Re EM/B. Loss of Crops)

- Titled owners/cultivators etc. has already been identified through the DMS by the TA Consultants based or records and/or surveys;
- Market value of crops will be determined by Department of Agriculture of respective district
- PID/Resettlement Unit will coordinate with related government departments /agencies to assess values;
- Owners will be allowed to harvest of standing crops prior to dispossessions and/or construction; and
- Official minimum daily wage rate as determined by local DC office

3.Compensation for Loss of Residential Structures/ Livestock shelters (Re EM/D. Loss of Residential Structures/ Livestock shelters)

- DMS by TA Consultant has already identified residential structures and animal sheds to be relocated, with respect to the occupants irrespective of legal ownership.
- List of APs and local estimates made and the list is provided in the draft LARP.
- Cash Compensation at replacement cost for affected structures by type of construction and other fixed assets free of deductions for salvageable materials, depreciation and transaction costs.
- In case of partial loss, cash compensation will be provided to restore the remaining structure; however, if more than 25% of the buildings/floor area is affected, cash compensation will be computed for the entire building/structure;
- APs will be allowed to take salvage materials free of cost; in the project area, most animal shelters are of thatched material; APs cab easily use the salvaged materials for reconstruction.

- Non-legalizable APs using land plot. If the only land plot used for residence or providing the main source of income for the AH is affected, the owner(s) will be compensated with a) one time allowances in cash equal to a minimum of monthly subsistence allowance (Rs.20,000) for 12 month period. And b) one time relocation allowance (equal to Rs.30,000)
- Advance notice (with all eligible compensation paid) to residential structure owners, for cacate the land for project construction;

4.Compensation for Permanent Loss of commercial/ business structures and space (Re

EM/E. Permanent Loss of commercial/ business structures and space

- DMS by TA Consultant has already identified residential structures and animal sheds to be relocated, list of AP and local estimates made and a list is provided in the draft LARP
- Cash Compensation at replacement cost for affected structures by type of construction and other fixed assets free of deductions for salvageable materials, depreciation and transaction costs.
- Owner(s) of affected commercial/business structures will be allowed to take salvaged materials free of cost;
- Compensation for interrupted income due to lost assets will be provided based on assessed temporary or permanent loss of business/income source. In case of temporary loss compensation will be allowed for 6 month interruption period based on reported income. In case of permanent loss compensation will be allowed for 12 month based on reported income.
- In case of partial loss, cash compensation will be provided to restore the remaining structure; however, if more than 25% of the buildings/floor area is affected, cash compensation will be computed for the entire building/structure;
- Advance notification (with all eligible compensation paid) to commercial/business owners, and vendors to vacate the land for project construction;
- Vendors identified by the Census and Inventory of lost assets (only those occupying ROW before the cut-off date);
- PID/Resettlement Unit will coordinate with relevant agencies, and extend assistance to vendor for self-relocation;
- In the absence of documented evidence of lost income, the minimum daily wage rate for the rural labor will apply.

5. Compensation for Loss of Affected Trees (Re EM/F. Affected Trees)

- The wood of the fallen trees and fruit-bearing trees will remain with the owner of the trees; but following principles will apply to assess replacement cost of the wood and fruit trees grown on acquired land parcels.
- **Timber trees** will be valued based on the market value of their dry wood volume. The wood of the fallen tree will remain with the owner and its value will not be deducted from the compensation.
- Fruit trees: will be assessed and valued based on their product value at the time of acquisition. Mature fruit- bearing trees will be assessed based on market rate of the yearly crop yield multiplied by the number of years required to grow such a tree to the same productive level it was cut; and imature fruit trees that are yet to bear fruit will be assessed based on the gross expense needed to reproduce the tree to the same age it was cut.

• PID/Resettlement Unit will coordinate with relevant agencies, and assist the tree owners in the negotiation to arrive at acceptable and satisfactory rates.

6.Assistance to Affected Vulnerable Households (Re EM/G. Affected Vulnerable Households)

- List of households losing agricultural land will be obtained from respective LACs;
- Poor and female-headed households already identified through census/surveys; this would be further verified and updated at implementation for livelihood support;
- PID/Resettlement Unit will update the list; and
- Official minimum wage rate as determined by Provincial government. Lump sum assistance allowance in cash equal to 3 OPL.
- Temporary or permanent employment during construction or operation of the facility that necessitated involuntary resettlement, where feasible.
- Additional logistical and other in-kind support for relocation by the project

7.Assistance to Severely Affected and Economically Displaced Persons (Re EM/H. Severely Affected and Economically Displaced Persons)

- List of severely affected households/persons from census/survey, to be verified during implementation by PID/Resettlement Unit; however, for calculation and payment of severe impact assistance principal below will apply.
- The titled APs and or the share croppers facing 10% and above of their productive land will be provided severe impact allowance as per provisions explained in the Entitlement Matrix (refer A-2) after verification of harvest record registers by the PID Resettlement Unit. The sever impact allowance will be in addition to entitled compensation of land and land based assets (crops/trees)
- The APs facing physical or economic displacement due to lost shelter or productive/commercial assets (other than land) will get sever impact allowance in addition to other applicable compensation costs as per entitled provisions explained in the EM (refer item L). Non-land sever impact allowance will be for 12 months calculated by following
- Current year's minimum wage rate as determined and announced by the provincial government will apply. For 2021 announced minimum wage rate is PAKR 20000.

8.Support for Livelihood Restoration (Re EM/I. Livelihood Restoration)

- The AHs facing physical/economical displacement due to lost shelter or productive assets/structures will get one-time lump sum assistance @ Rs 30,000 for shifting/transportation of their belongings to the relocation sites.
- List of AHs requiring relocation will be reviewed and updated by the PID Resettlement unit for payment of relocation assistance.
- The employees in affected commercial structures and/or the agricultural workers (if any) will be entitled to 3 months OPL based lost income. The impact and census/survey results will be reviewed and
- The PMU will launch i) Rakh areas due diligence study to review and assess adverse social impacts on the pastoral households/communities having access rights in Rakh areas for grazing their live stock and ii) i) additional detailed socio-economic survey for poverty assessment and vulnerability profiling of all affected households.

- Based on study findings PMO will prepare and endorse a community development and livelihood restoration plan with adequate budget for ADB's review and concurrence before award of civil works contract.
- For restoration of livelihood all APs losing their income/livelihood generating assets or facing significantly adverse impacts due to impeded and restricted access to their livelihood source and grazing lands in Rakh areas will be eligible to participate in the community development program (CDP) and project based livelihood opportunities.
- PID/resettlement Unit to work with contractor(s) for preferential hiring of people willing to work in project construction

9.Reconstruction of the Community Structures (Re EM/J. Community Structures)

 PID/Resettlement Unit will consult and coordinate with the concerned committee and or community leaders on the affected structures and rehabilitation or substitution of the structure(s).

10.Unintended Impacts of the Project during construction (Re EM/K. Unintended Impacts of the Project during construction)

- Households/Persons affected by unforeseen impacts during project construction shall be identified by PID/resettlement Unit with due care as per the adopted policy and/or SPS 2009 and forwarded to ADB for review and approval;
- Details such as the nature and types of impacts, quantity of losses, ownerships and the entitlements; and
- The entitlements must be approved by PID and concurred by the ADB.

CHAPTER 8: COMPENSATION, RELOCATION AND INCOME RESTORATION

8.1 Overview

- 232. This section deals with the compensations for affected land, structures and assets that have been proposed on the basis of the findings of the Census Survey; and under the legal and policy framework of Government of Pakistan (GoP) and the Asian Development Bank (ADB) Guidelines. The CAP will focus on providing compensations for the lost assets and suggests measures to restore their livelihoods at least at the former living standards of the APs.
- 233. The project will impact on 15690 APs from 4410 acres of private land, require payment of compensation for the loss of 5480 acres of crops, and uprooting of around 122620 trees, total and partial dislocation of 222 structures and income loss of 151 vulnerable APs. The applicable compensation, relocation and income restoration aspects of respective APs in each category are discussed separately in the sections below.

8.2 Compensation for Affected Land

- 234. The project will impact 5615 acres of land (4410 acres' Private land 1205 acres of Government Land) and will compensation related impacts for 15690 APs along the entire ROW of GTC-Phase II project. The PID have already paid a total amount of PKR 153.9 million for the acquisition of 4410 acres of land in 2006 and the Government of Punjab approved 1.4 billion as additional Grant–in Aid to meet the full replacement cost criteria. Thus, the total value of land to the Revenue Department comes out at PKRs.153.98 million, of which PKR 93.9 million has already been paid to 5434 APs.
- 235. Table 20 and Table 15 identified that 4410 acres of land acquired is further divided into two ownership categories a) 3662 acres under private ownership and b) 748 acres under Provincial Government ownership of which 126.5 acres is being cultivated by private persons under different types of contested rights and remaining 622 acres encroached by private persons.
- 236. The assessment of compensation for acquisition of land was made for the 4410 acres of land acquired that include 748 acres of provincial government land cultivated by contesting rights holders and encroachers. The Revenue Department policy in this regard is clear. The land acquisition / grant –in –aid will remain with the respective LACs unless the ownership title is granted to the renters / contesting right holders by the revenue authority.
- 237. Of the 1205 acres of forest land 278 acres are encroached by local influential and the remaining 927 acres are freely available for the construction of GTC Phase-II
- 238. Of the total 15690 APs in 4 LACs, only 2533 (16.15%) are ineligible for grant- in-aid (those paid before cut-off date and 2901 (18.5%) AP will be paid differential between the paid after cut-off date, while the remaining 10242 are entitled for replacement cost at current market rate (Table 63).

			Number of Affected Per			
S.No	LAC Name -District	Total Awards	Paid before Feb.2020	Paid After Feb.2020	Nev	
1	Noorpur –Khushab	2	66	-		
2	Darya Khan –Bhakkar	1	10	-		
3	Mankera –Bhakkar	60	1,796	-		
4	Chaubara –Layyah	33	661	2,901		
	Total	96	2,533	2,901		
	Percentage		16.0%	18.5%		
One	award approved in June 2021.					

TABLE 63 LAC/ Award wise Number of APs Paid & Unpaid

239. The total amount required to complete the compensation for land is PKR 1.013 billion (154 million award amount + 859.3 million Grant–in-Aid). The award amount is already available with the respective LACs and the Grant-in-Aid committed by the Provincial Government. The disbursements will be made through the LACs/ government channels. The total Grant-in-Aid is assessed as PKR 949,689,351 of which the PKR 859,338,273 will be paid as differential and remaining PKR 90.35 million will be retained as contingencies (Table 38).

			Amount of		
S.No	LAC Name -District	Total Awards	Paid Before Feb.2020	Paid After Feb.2020	
1	Noorpur – Khushab	2	4,577,649	-	
2	Darya Khan -Bhakkar	1	88,475	-	
3	Mankera – Bhakkar	60	47,122,494	-	
4	Chaubara – Layyah	33	14,054,493	40,502,816	
	Total	96	65,843,111	40,502,816	

TABLE 38 LAC/ Award-wise Amount Disbursed

240. Of the 4 respective LACs, only two- Mankera and Chaubara are required to disburse land compensations. The LAC Mankera is required to disburse over PKR 809.3 million to 3586 APs as against PKR 403.9 million to 8559 APs (Table 65). The CAP will plan the land compensation disbursement with the respective LACs to meet the deadline for other resettlement related activities.

S.No	LAC Name -District	Total Awards	APs to be Paid	Differential to be paid
1	Noorpur	2	0	0
	-			
	Khushab			
2	Darya	1	0	0
	Khan -			
	Bhakkar			

TABLE 65 LAC/ Award-wise Amount to be Disbursed

3	Mankera	60	358	809,290,55		
	–Bhakkar		6	3		
4	Chaubar	33	855	403,902,81		
	a –		9	3		
	Layyah					
	Total	96	121	1,212,193,		
			45	366		
	Pa	Payments for land compensation started in July 2021				

241. The Provincial revenue department as custodian of the land is responsible for the payment of all compensations for land through the respective LACs. The role of PID as implementation agency for the project is limited to coordination with the district/ tehsil revenue authority.

8.2 Compensation for Crops

242. The Census and DMS survey estimated a total of 4386.3 acres of cropped area that will be lost by the construction of CBCS components. Chickpeas are the only one season crop cultivated on 89.6% of the cropped area. wheat on 10% area and fodder crop on 0.4% area, throughout the ROW of the CBCS. Wheat is cultivated on comparatively leveled areas with availability of at least three irrigations by shallow wells/ tube wells.

Сгор	Average Per acre yield	Market Price at Harvest	Total per Acre Income	Cropped Area Affected (Acres)	Total Crop Compensation (PKR)
Wheat –Rain fed area	1050 KG	Rs.45/Kg	47250	383	18,096,750
Wheat – irrigated Areas	1300 Kg	Rs.45/Kg	60750	54.3	3,298,725
Chickpeas- Rain fed Areas	425 Kg	Rs.95/Kg	36550	3477.9	127,117,245
Chickpeas- irrigated areas	575 kg	Rs.95/kg	49450	452.9	22,395,905
Fodder			15,000	18.2	273,000
Total				4386.3	171,181,625

TABLE 39 Crop Area, Per Acre Yield and Cost of the Crops

243. Overall, chickpeas and wheat are the major cash crops and source of livelihood of the rural population. Other crops (0.4%) are mainly livestock fodder and vegetables. Of the total cropped area of 5480 acres, 4912 acres (90%) is under chickpeas, 548 acres (9.5%) under wheat and 20 acres (0.5%) under fodders. The current season average yield of chickpeas is estimated at 1300 kg per acre and for wheat 450 Kg per acre. The average market rate at harvest season for chickpeas was PKR 86 per Kg and for wheat PKR 45 per Kg. Based on gross yearly yield of conventional crops, the worked out compensation for crops is Rs 171,181,625 which is included in CAP budget.

8.3 Compensation for Trees

244. A total of 122,620 trees will be uprooted from the RoW of the proposed project components. Of the 14% is nursery or pole crop. 1% fruit trees and remaining 85% wood trees.

245. Compensation for trees is assessed for 104418 wood trees, of which 99858 (95.5%) are private trees and 4560 belongs to forest department. All fruit trees (2062) are in private land, grown on the hedges of agriculture land.

8.3.1 Wood Trees

246. The Census and DMS survey already identified the types of trees with girth size and number of wood trees (Table 40). The provincial government rates are overlapped with the number and size of trees to calculate the total compensation for trees. The owners of these trees will be compensated on the official compensation rate for trees at the implementation of CAP.

Type of Tree	< = 12	13-24	25-36	37-48	Above 48	Total
Type of free	< = 12	15-24	25-50	57-40	Above 40	10(2)
						0
						2
Berry				j		4
Dony				1		2
		!	q	4		0
Fara	1		4]		0
sh Jan				1		0 2 4 2 2 0 0 0 0 8 8 2 9 9 8 8 0 0
d/Ka			6	}		2
ri	4		-	4		9
						8
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nd	4	:		1		2
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al			1	1		5

TABLE 40 Number of Timers Trees by Size (Inches) of the Tree

	1		5
			8

8.3.2 Fruit Trees

247. Only two species of fruit trees – Dates and citrus fruit are identified in the ROW. Of the total 2062 fruit trees, 253 are date palm and assessed for compensation of PKR 1,199,300. A total of 1809 Citrus fruit of in four different age groups is assessed for compensation of PKR 10,517,730. Total compensation for fruit trees is assessed as PKR 11,717,030. The number of trees by age group, compensation rate and species is described in Table 41.

		No	o. of Fruit Tree	s by age of th	e tree	
Type of Tree		3 Years	4 - 7 9 8 2 8 7 8 8 7 8	8-12 Years	13+ years	Grand Total
		8	7 4	8	9 0	2 5 3
Dates		1 , 7 8 5	3 , 5 0	6 , 8 2 0		
110		1 4 , 2 8 0	2 6 2 , 7 0	5 5 2 , 4 2	3 6 9 , 9	1 , 1 9 9 ,

TABLE 41 Compensation of Assessment for Fruit Trees

111 Page	Al I Fr ui t Tr e e s	u s	Ci tr	
3 , 8 2 7 , 8 7 0	9 4 5	3 , 8 1 3 , 5 9 0	9 3 7 4 , 0 7 0	
, 5 0 7	g	, 2 4 4	2 0 1 0	C
3 9 9 5	1 6 2	, 0 7 8 , 1	1 , 3 1	0
4 , 7 5 1 , 5 3 0	7 6 1	4 , 3 8 1 , 6 3 0	6 7 1 6 , 5 3 0	d
1 1 7 1 7 , 0 3 0	2 0 6 2	1 0 , 5 1 7 , 7 3 0	1 8 0 9	3 0 0

111 | Page

		provided by the aisalabad lette		yub

- 248. Total compensation for private trees estimated at PKR.111,164,600, and private fruit trees is PKR 11,717,030. The cost of forest trees including replenishment cost is estimated at PKR 70,224,000. Thus, the total estimate for compensation of trees is Rs.193,106,330.
- 249. Due to cutting of large number of trees and to mitigate the adverse environmental impact on surroundings, plantation through the Forest Department on both sides of the main canal, distributaries and minor canals will be planned. For mitigating adverse impacts of the project, the EMP cost for linear plantation within acquired ROW has already been calculated and included in the PC-I of the GTC-Phase II,. The owners of these trees will be compensated on the official compensation rate for trees at the implementation of the project. Total compensation for trees is valued at the 2020-21 rates finalized by the Forest Department.
- 9 For the basis for estimation of cost for wood trees and total cost compensation see Table 42 below.

	Ту ре	Mond	Rate Mond	Average Rate	Total Amount
A. Private	Ti mb er/ Sm all			6 0 0	4 5 , 0 3 1 , 8 0 0
	Ti mb er/ Me diu m			1 4 0 0	6 2 , 3 5 8 , 8 0

TABLE 42 Estimated Compensation Cost for Trees

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				0
				0
Total Private				1 1
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				0
Ti			1	0 6
mb	:		4	
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8.4 Compensation for Privately Owned Structures

250. The acquisition of land for the construction of CBCS will impact on 222 small and mostly temporary structures that include farm level animal sheds or shelters, tube well huts, relocation of irrigation machinery, residential structures and village level commercial structures. All structures with location, nature of impact and remedial measures are listed in the DMS survey database. The impacted structures are discussed in five different categories 8.3.1 to 8.3.5 separately.

8.4.1 Residential Structures

251. A total of 58 residential structures will have total or partial demolition due to construction of canal components. The DMS survey calculated a total of 51,129 square feet of construction area comprising of 8,630 square feet Pakka, 7,914 feet of semi Pakka and 34,585 square feet of katcha constructed areas will face demolition. The official construction rates for the year 2020 for each construction type are given in Table 70 below. Compensation for structures will be paid as per the official construction rates for each construction type. Besides compensation for construction of residential structures, the fully affected households will also be eligible for relocation and livelihood allowances and salvage material. As per entitlements outlined in the EM table 62, table 70 below present i) computed compensation on replacement cost payable to all 58 affected for affected residential structures/assets and ii) computed relocation and sever impacts allowance as per EM provision for 35 AHs facing physical relocation due to full loss of their structures.

	ation of Resider			
Detail of Structures	Number of Structures	Covered Area (Sq. Ft.)	Unit Rate (Rs./sq.ft.)	Total Cost (Rs)
Residential Structures				
Pacca	46	11802	800	9,441,600
Semi Pacca	9	1749	560	979,440
Kacha	3	427	350	149,450
Total Compensation for structure loss	5	13978		10,570,495
Relocation Allowance Note: for fully affected and need for relocation	35		30,000	1, 050,000
Severe impacts allowance due to physical relocation	3 5	_	240,000*	8,400,000

TABLE 70 Valuation of Residential Structures

Total Allowance				9,450,000
* AS per EM (Re-M) Sever impact allowance ba	ased on monthly	minimum wage r	ate for 12 mont	hs period.

8.4.2 Livestock Sheds/Shelters

252. A total of 8 livestock sheds/shelters will have total or partial demolition due to construction of canal components. A total of 2996 square feet of construction area comprising of 550 square feet Pakka, 1006 feet of semi Pakka and 1440 square feet of Katcha constructed areas will face demolition. Based on the Official construction rates for each construction type, total compensation of residential structures is estimated at PKR 417,200 (Table 71).

Detail of Structures	Number of Structures	Area (Sq. Ft.)	Unit Rate (Rs./sq.ft.)	Total Cost (Rs)
Livestock Sheds/Shelters				
Pacca	5	1290	200	258,000
Semi Pacca	5	1050	180	189,000
Kacha	1	180	150	27150
	8	4 7 6		474,150
Relocation Allowance				owance as all will be t of agriculture land.

TABLE 71	Valuation of	of Livestock	Shelters/Sheds
	valuation c		enoncon o/ enoug

8.4.3 Community Infrastructure

253. Two community Mosques are included in the list of affected infrastructure. The severity of impact is assessed as, one structure will be fully affected and need to be replaced/ reconstructed and the other will be partially affected. The sensitivity of a religious place requires full replacement with better construction materials. The mosque structure will be relocated in the nearby vicinity at proper locations, with the consultation of the local community/ management committees. The covered area for both small village level Mosques will be increased from present 452 Sft, to 750 stf and will be paid at the full replacement cost (PKR 800 per Sft.) (Table 72).

Detail of Structures	Number of Structures	Area (Sq. Ft.)	Unit Rate (Rs./sq.ft.)	Total Cost (Rs)
Village Mosques				
Semi Pakka & Pakka	2	750	800	1,200,000
Total	2	7 5 0	8 0 0	1,200,000

8.4.4 Dismantling and Re-Installation of Farm /Irrigation Machinery

254. The acquisition of ROW strip of land will cause dismantling and re-installing of 2 irrigation Tube wells, 26 hand pumps, 4 electric water pumps and 1 drip irrigation system of 13625 feet lengths. These systems will be re-installed in the neighbouring agriculture plots, the dismantling will cause loss of Steiner pipes, foundation platforms, shelter huts/ engine room. The re-installation charges will include technical skills for boring charges, pipe, construction material etc.

255. Unit cost for dismantling and re-installation of irrigation tube wells, hand pumps and electric water pumps will be paid at current market rate. For current market/unit rates see Table 73 below.

	Detail of Structures	Number of Structures	Unit Rate (Rs./sq.ft.)	Total Cost (Rs)
1	Hand/Water Pump	2 6		390,000
2	Electric Motor	4	15,000	60,000
3	Drip Irrigation (reinstallation)	1	50,000	50,000
4	Rehabilitation of Pakka Water course (3750 rft)	8		3,0 00, 000
5	Tube Wells – Bore Hole and fixation charges	2		70, 000
	Total	41		3,570,000

TABLE 73 Agriculture / irrigation Machinery /Infrastructure

8.4.5 Small Commercial Structures

256. A total of 7 village level commercial structures that include 4 grocery shops and 3 poultry farms will face demolition and will be replaced at some nearby place (Table 43). Affectees will be paid at current market rate for the construction of commercial structures. Besides compensation for land and structures, the APs are eligible for relocation and business disbursement allowances. As per entitlements outlined in the EM table 62, table 74 below present i) computed compensation on replacement cost payable to all 3 affected households for lost commercial structures/assets and ii) computed relocation, business interruption cost and a sever impacts allowance as per EM provision for 35 AHs facing physical relocation due to full loss of their structures.

Commercial Structures	No	SFT	Unit Rate (Rs)	Total Cost
Poultry Farm – semi Pakka	2	0	800	
				400,000
Grocery Shops (1),	1	1	800	120,000
Total Compensation	3	7		520,000
Relocation Allowance (30,000)		Applicable as per the entitlement matrix		
Business Disturbance Allowance	6 month average monthly income as per the 540,000			540,000

TABLE 43 Compensation and Shifting Allowances for Commercial Structures

	entitlement matrix	
Severe Impact Allowance	* AS per EM (Re-M) Sever impact allowance on monthly minimum wage for 12 months period.	720,000
	Total Allowance	1,350,000

8.4.6 Relocation of Government /Utility Structures

257. The design consultant identified a total of 20 electric poles to be relocated from the ROW. The relocation will cost unit cost of Rs.50,000 that amounting to PKR 1 million.

8.5 Relocation Options

8.5.1 On-Site Relocation of Residential structures

- 258. The affected persons in the project have experienced more economic than physical displacement requiring relocation and resettlement. A total of 79 (all types) structures will be affected; of this, owners of 35 residential structures will be fully affected, requiring relocation. The affected structures are on their own lands under cultivation, and their livelihood is attached with the land. During consultation meetings, these affected households expressed their preferences to move back and re-build on their own land near the ROW. Any other option for instance, relocation to any resettlement site was not considered viable on economic and social considerations.
- 259. Under the situations, the project has adopted an "on-site" self-relocation strategy considered most realistic and best option for the physically displaced households. This will not affect the existing socioeconomic settings and social organization of the affected population, because the resettled households are basically on the same site and/or move only a short distance. As a result, the impact and burdens of resettlement will be limited and those displaced will be able to reconstruct and re-build quickly. The displaced families will receive all their entitlements and will be assisted by the project.
- 260. However, keeping in view the physical relocation of 35 AHs facing full loss of structure will have been allowed relocation costs and severe impact allowance as provided in the EM for this CAP. Worked out cost for shifting/relocation assistance and severity allowance is PKR, **9,450,000** (refer table 70 above) which is included in the budget table accordingly in addition to compensation on replacement cost.

8.5.2 Relocation of Business Structures

261. The owners of the shops and other business structures falling within the ROW will have the option to relocate themselves at a suitable feasible location in the nearby vicinity. For this purpose, they will be provided shifting allowance in addition to cost of the affected structure provided on replacement cost. Keeping in view the required relocation from the acquired ROW limits and loss of income because of interrupted business, all three commercial structure owners are allowed relocation and income restoration costs as per EM. In addition, they will also get severity impact allowance due noted significant impact in the income sources as per EM for this CAP. Total computed cost for relocation assistance, income interruption and severity allowance

is PKR,**1,350,000** (refer table 74 above). Same is included in the budget table in addition to compensation of affected structures on replacement cost.

8.6 Additional Assistance for Vulnerable Households

262. Based on the Census and DMS survey a total of 151 AHs have been identified as vulnerable. Out of these, 65 AHs are women headed household. Although some of them, monthly income was above Official Poverty Line (OPL); however, these APs will be treated as vulnerable due being a widow. The bread winners of other 86 AHs include poor (43 DPs) with income below poverty line and other 43 DPs facing different parameters of vulnerability like elderly and differently abled etc. Apart from the compensation (on full replacement cost) for their acquired land and structures/assets and other applicable allowances, these AHs will also be entitled vulnerability allowance equal to 3 month OPL allowance as per EM provision. The computed cost to provide vulnerability allowance to 151 AHs if **PKR 9,060,000** which is included in the cost budget table.

8.7 Severe Impact Allowance

- 263. Although the Project is anticipated to make a positive impact on the economy of the area, those facing loss of agriculture based income or non-land income due to 10% and above loss of their productive agricultural land or non-land asset are considered eligible fore severe impact allowance. The review of impact inventories confirmed 1570 DPs (1109 land owners/contesting lease rights and 461 share croppers) facing 10% and above loss of their productive agricultural land who have been treated as severely affected DPs in land loss category. Following EM provisions (RE EM-A.2) compensation amount PKR 141,300,000 is computed and included in the budget table.
- 264. The impact assessment confirmed that 38 AHs/DPs including 35 physically relocated due to full loss of residential structure and 3 experienced loss of their income source other than land (small scale poultry shed 2 DPs) and a grocery shop (1 DP) are counted as severely impacted. Thus a total 38 DPs have been allowed a one time sever impact allowance as per EM (Re EM-M). for Total amount of non-land sever impact allowance is PKR 9,120,000, which is presented in tables 70 and 74 above as well as in budget table accordingly.

8.8 Income Restoration Programs

- 265. The APs losing a significant source of their income (i.e. losing 10% or more of their agricultural land or shops) and/or those who will be physically displaced from housing and vulnerable households are disproportionally affected and may have more difficulty coping with their displacement. The DMS survey calculated a total of 5840 APs that need additional support to restore their livelihood. Income restoration programs may require support and services for three to five years before they become viable. Both short-term and long-term training and employment have been considered in the project.
- 266. To achieve this objective, the services of a Livelihood Expert and Women Development NGO, will be hired from either side i.e. through PMO Barrages or Project Implementation Consultants

(PIC). His/her role and responsibilities are discussed in section 8.9. The following actions will be done to support these APs.

8.8.1 Prioritization in Project-related jobs

267. A number of employment opportunities will be created during the construction phase, particularly for the un-skilled labor. The contractor will employ the un-skilled/skilled labor (male and female) from the local communities under Contact Clause. PMO Barrages will inform APs of available job opportunities from the project and provide the contractor of the list of APs who are interested in applying.

8.8.2 Livelihood Restoration Allowance

268. For restoration of livelihood all APs losing income/livelihood source will be eligible to participate in the community development program (CDP) and project based livelihood opportunities. Keeping in view the limited information available about the socio-economic profile, poverty and vulnerability incidence among affected household population and local communities particularly the pastoral communities grazing the live stock in affected range lands of Rakh areas it is impossible to precisely identify the target affected people eligible and entitled to livelihood support programme as per EM provisions. Therefore, additional surveys are proposed and planned for studies including i) detailed due diligence of pastoral communities living in project corridor likely to face restricted access in grazing land of Rakh area and ii) poverty assessment and vulnerability profiling of the affected households. Based on findings of these additional studies, CDP will be designed and implemented during execution of the project. It will be ensured that the government endorsed CDP is reviewed and accepted by ADB before contract award. The CDP will be implemented as stand alone document, so all applicable itemized costs for livelihood restoration and community development plans will be included in CDP budget. However, for CAP purpose, estimated costs for CPD is provided as contingent cost as a line item.

8.8.3 Training and Facilitation Support

- 269. A Livelihood Expert will be engaged to help link APs with ongoing livelihood support and training programs in the area and provide some coaching sessions on alternative occupations or livelihood sources that they may explore.
- 270. The project will plan Livelihood improvement and skill trainings for an estimated 1000 women and men trainees in total. Table 75 lists the types of training that are planned both for men and women in formal training centres and by the local NGO to be hired.

Training title	Participants	Location
Training in Improved Agriculture Techniques	Men and women	Farmers Field Schools by Agriculture extension program
Training in Handicrafts and marketing	Women	Village level centers established by NGO
Training in electrification and solar application	Men and women	TEVTA

TABLE 75 Types of Training for Men and Women

271. Such training will be open to men and women. Training particularly suited to women will include training by the agriculture extension department through farmer field schools in the areas mentioned above, particularly the cultivation of high value crops including orchards and vegetables. The Livelihood Expert will coordinate with the local NGO Women World in designing training for women.

8.9 Steps in Income Restoration and Enhancement Program and TOR for Livelihood Expert.

- 272. The Livelihood Expert to be hired will initially undertake the following tasks as steps to Income Restoration and Enhancement Program (IREP) planning and implementation.
 - (i) Analyze economic activities of APs (by gender, age group, education, skills, income, household size, preference and options) to assess their needs.
 - (ii) Identify multiple income restoration programs (both individual and group specific) through consultation with APs and also market and financial analysis, if required
 - (iii) Pilot test IREP with selected APs as a trial by involving local NGOs
 - (iv) Develop framework for institutional supervision and budget
 - (v) Evaluate the program and provide additional support where needed.
- 273. In sum, the tasks and responsibilities of the Livelihood Expert to be hired shall be but not limited to the following
 - During the construction phase, a number of employment opportunities will be created, particularly for the skilled labor. The Livelihood Expert (LE) will prepare a data base of DPs or their children who are 18 years and above to accommodate / maximize absorption of local people in the project activities.
 - The LE will prepare inventory of the DPs/ children covering age , health, gender, education , relevant experience and willingness to work with the contractor.
 - The LE will guide and facilitate the applicants, arrange clearance from relevant authorities for suitability for work with the project.
 - The LE shall liaise with the contractor/ sub-contractors for openings available as per the
 experience and qualification required for the jobs. The contractor, under the contract
 Clause 6.1 section 8 Specific Provision of Particular Conditions of Contract (Part-B), is
 required to hire locally available labor skilled and unskilled (males and females) from
 the affected communities in project construction work.
 - The Livelihood Expert will inform the DPs about the available job opportunities on the project.
 - The expert will negotiate with the contractor in fixing salary/wage of the DPs or their children.
 - The LE will collect the data of the technical institutions/centers in the area and will manage short courses of skills required during construction of the project, Selection, negotiation and management of the skill training at site or at workshop will be the responsibility of the Livelihood expert.

• In addition to obtaining training in construction related activities, the LE will also explore possibilities for training of local youth in computer and surveyor.

8.10 Livelihood Restoration and Enhancement Program

- 274. The linear scale and size of the project, together with the income and poverty level in the project area, require a comprehensive livelihood restoration and enhancement program (LREP) open to participate all significantly affected AHs and all vulnerable groups living in the project area. In the light proposed study findings and the above TOR, the livelihood expert with technical inputs from PMOs safeguards staff and CSC/Resettlement Specialist, the NGO to be hired at implementation will design the LREP be on the concept of a Community Development Program (CDP) as a standalone project component. Major focus of the CDP would be (a) social mobilization of the potential beneficiary groups; (b) analysis of poverty and its causes; (c) development of plans for enhancement of income with necessary resources; and (d) inclusive and sustainable community-based agency for participatory implementation. CDP will adopt a need assessment process and based on that will start economic resilience initiatives. The program will focus on the poor and ultra-poor segments of the project area communities. Provision of economic support, vocational training, awareness and networking will be characteristic features of CDP.
- 275. The TRTA consultant, in consultation with ESU-PMO already proposed an estimated budget for CDP related activities. In addition to upgradation of girls schools under CDP, a detailed assessment of budgetary needs for LREP will be prepared during implementation of CAP and accordingly will be included in CDP budget.

CHAPTER 9: GRIEVANCE REDRESS MECHANISM

276. This chapter briefly describes the rationale and purpose of the Grievances Redress Mechanism (GRM), the processes, and various tiers of GRC system to resolve grievances at project level during the implementation of this CAP. The documentation and disclosure of the GRC outcomes are also discussed in the chapter. Since GRM is an "extra-legal" dispute resolution mechanism, the GRCs will largely deal with project-related entitlements or benefits other than compensation for land and assets acquired, that are legal in nature and are within the domain of the District administration and Revenue Department. In case any such any submissions are made to GRC, the PMO/Social Environment Unit will coordinate with the District Admn/Revenue Department and facilitate resolution of the complaint.

9.1 Rational and Objectives

- 277. A key objective of the GRM is to establish procedures for filing any grievances and disputes on social safeguards and other entitlement issues arising out of the implementation of the CAP. In view of the impacts and the number of affected persons, grievances and disputes over various entitlements are very likely to arise due to for example, (i) lack of land/lease titles issues; (ii) unintended errors in establishing the project inventory of losses; and (iii) exclusion of legitimate affected households during census/surveys.
- 278. The scope and mandate of Grievance Redress Committees (GRCs) to be established under the GRM shall include any grievances or disputes related to policy and/or measures in the CAP. The GRCs will deal with grievances and disputes to resolve locally to facilitate smooth implementation of the CAP and other social measures under the project. As a result, the establishment of GRC system will make the project accountable to the affected people. Further, it also democratizes the development processes at the local level.

9.2 **GRM – Legal and Policy Framework**

- 279. The legal and policy framework of GRM is derived from the Land Acquisition Act (1894), which allows for "objections" or "reference" to Court under Section 18 against any "award" of compensation by the Collector, requiring further review of the award. However, in case of grievance arising from "non-land" impacts and issues there are no statutory mechanisms provided in the LA Act 1894. Further, the SPS 2009 requires establishment of affordable and accessible procedures for third-party settlement of disputes arising from resettlement, including availability of judicial recourse and community and traditional dispute settlement mechanisms. In the context of GTC II Project, grievances would likely be more on resettlement and other social and livelihood entitlement measures in the CAP.
- 280. The GRC mechanisms established in the GTC II will be disclosed to the affected persons prior to Project approval. A grievance redress cell will be established in the PMU/Safeguard Office under the Director – ESU, responsible for implementation of the CAP. It will be accessible to the affected persons and communities for redressing their grievances and issues.

9.3 GRC Campaign and Disclosure

- 281. The PID/PMO will launch an awareness campaign in the project area, with pamphlets and brochures, clearly explaining the project and its implementation processes and avoid misinterpretations. Negotiations and consultations will be held with the APs and measures will be taken to prevent grievances rather than having to go through a redress process. People will be informed of their land rights and the provisions stated in this CAP in an attempt to avoid complaints and grievances.
- 282. The overall purposes of the GRM are to redress mechanisms to (i) reach mutually agreed solutions satisfactory to both the project and the APs; (ii) cut down on lengthy litigation processes; and (iii) prevent delays in project implementation.

9.4 Types of Grievances

- 283. It is anticipated that the majority of grievances will be related to eligibility for compensation and allowances, and valuation of lost assets. The possible types of grievances that might require resolution include the following:
 - (i) Affected Households not included in the detailed measurement surveys. The PID acquired some 3690 acres of private land in the year 2008-11 of which only 26% was transferred in the name of PID till July 2020. In July –Aug 2020 the entire remaining land was muted for CBCS. The period (2011-June 2020) between acquisition of land and transfer- may have changes in the title of land from original owner to some intermediary. The DMS on the other hand recorded the title holder to the original land owner. A significant number of current registered affected households may raise grievance on this issue.
 - (ii) Sale Purchase of Project ROW Land. Sale purchase of PID acquired land on the basis of Land Revenue record. In some instances, due to lack up to date record, past owners received compensation while the current owner(s) are in possession. on the one hand, sold land at the current market rate. The present owners are encroacher to PID and will be paid compensation for crops, trees and structures, if any.
 - (iii) *Dissatisfaction with valuation amounts.* DMS survey recorded significant number of land owners dissatisfied with the then (2006) valuation amount and did not receive compensation payments made under involuntary acquisition.
 - (iv) *Disputes about property ownership and demarcation of boundaries.* Such cases mostly surface at the time of transfer and payments, which can only be solved with local wisdom and practices.
 - (v) Delays in disbursement of compensation. The PID paid Rs.140.44 million for the acquisition of private land to the Land Revenue Department in 2006 and 2008. The Local LAC is responsible to disburse the compensation for the land acquired and transfer land to the GC-CBCS/PID. Delays in the government procedures increase the probability of increase in grievances caused by the project. The affectees will be looking for a forum to address the grievance.
 - (vi) Dispute over assessment of vulnerabilities and other allowances. Although the DMS survey largely identified the vulnerabilities but the allowances will be paid by the resettlement unit of the PID during implementation of the project at later stages. Disputes many arise on the status during implementation such as the vulnerable

identified by DMS team in September 2020, permanently shifted, or died the next to kin will be eligible or not. The decision should be left to Local GRC for the change of title.

9.5 Local and Project-Level GRC Systems

284. Since the GTC II comprises a vast area with disperse settlements, the Project will organize Local Grievance Redress Committees (LGRCs), based on Canal/Subproject system and then Federation of LGRC in order to give the affected people a voice in the implementation of CAP. This local and to some extent traditional system will likely resolve many disputes (re 5.13 Conflict Resolution in Chapter 5) before they reach the Project-Level Three-Tier GRC Systems.

9.5.1 Local Grievance Redress Committee (LGRC)

- 285. PID/PMO will establish the LGRCs immediately after the project is approved and prior to project effectiveness date. To ensure Revenue Department participation in the local GRCs the respective LACs will be involved in formation of local GRC and LAC will notify one Patwari as member of GRC. Keeping in view of availability of one revenue staff (Patwari) one person may represent in more than one LGRC. The LGRCs will consist of the following:
 - At least one member from each affected village will be nominated to represent in the system canal.
 - Each unit will be named as Local GRC for system canal (i.e. LGRC Chaubara Branch Canal, LGRC Gohar Distributary or LGRC Chaubara Minor).
 - Each LGRC will comprise of maximum of 3-5 members (3 private members, 1 representative from PID staff and 1 from Revenue Department (Local Patwari)
 - LGRCs will be formed/ nominated during the Disclosure of Project Documents

(although list of activists were prepared during the Census and DMS surveys).

- At the conclusion of the survey of each canal system the preliminary findings will be shared with each LGRC.
- A total of 23 LGRCs will be formed with total membership of 70-100 members from over 70 villages.

9.5.2 Federation of LGRCs

- 286. At the very early stage of project implementation, all LGRCs will be called in to elect a five (5) member FGRC, which will form a kind of advisory committee to the formal Three-Tier Committee for the CBCS CAP implementation. FGRC will be a (5) member strong body representing: (a) one member from Chaubara Branch; (b) 2 members from distributaries and minor canals till the end of Chaubara canal; and (c) 2 members from downstream distributaries and minor canals of the system.
- 287.FGRC members will interact with the Project Implementation Unit to raise and resolve the affectees issues referred to it at as unresolved through the LGRCs.

9.6 Three-Tier GRM System

288. The PMO Barrage, the implementation agency of the PID will institutionalize a GRM similar to other Barrage projects and practices. It is a formal three Tier mechanism. The first tier is for immediate response at the local level and is called Grievance Redress Cell at the project

Implementation office. The second tier will enable resolution of complaints and issues of entitlements that are not resolvable at the local level and which require a formal review by the executing agency PID/PMO, will be a formal institutional committee -1 (GRC-1) The third tier will be at the at the level of Provincial Government, to review any issue that arises in the adequacy of the entitlements and eligibility aspects. The final level is designated as Grievance Redress Committee II (GRC-II). This three-tier GRM, will be publicly notified by the PMO. The constitution of these tiers is detailed in Table 44.

Tier	Level	Constituent Members					
GRM Tier-1	G r i	1.Resident Engineer, Supervision Consultant (Convener)					
	e v a n c e Redress Cell PIU Level	2. Executive Engineer, PID, Member 3. Deputy Director (SEU) PMO –member 4. DPs Male and Female – Representatives –members 5.Female officer, at least Deputy District Officer rank- member					
Tier-II	Grievance Redress Committee GRC-1 -PID	1.Director Technical, PMO Barrages – Chairperson 2.Director -SEU,(PMO), member 3.Senior Sociologist, Supervision					
		Consultant, member 4.Deputy Director Resettlement (PMO) member					
		5.Sub-Engineer PID Concerned region , member					
Tier-III	G r i e v a n c e	1.Member Engineering , GoPb P&D Board , Chairman 2.Representative Board of Revenue, Punjab, member 3.District Coordination Officer of Concerned District-member 4.Head/Projector Director, PID-PMO					
	Redress	Barrages, member 5. Co-opted member as required					

TABL	E 44	GRM	Tiers	and	Constituent	Members

_

-

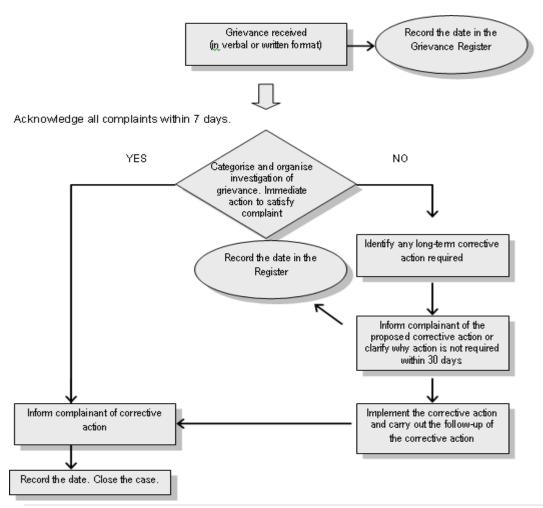
Committee	
GRC-III	
GoPb	

9.7 Grievances Redress Processes

289. Individual or group of DPs may register their grievances in any of the following ways:

- (i) By submitting written complaint with the Director -ESU or Field Office
- (ii) Contacting members of the Project Resettlement Team
- (iii) Reporting to a village representative (LGRCs/FLRGC)
- (iv) Contacting the Community Liaison Officer (CLO)
- (v) Written complaints lodged with the L-GRC
- (vi) Register a complaint with register at the SEU PMO
- 290. The CLO can receive land acquisition and resettlement grievances and will work with the Project Implementation Team (PIT) and relevant organizations to address any grievances that arrive.

FIGURE 9 GRC Processes Adopted in The GTC II Project The processes are further explained in Figure 9.



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9.8 Timeframe for Grievances Resolution

291. For all grievances, an acknowledgement will be provided within seven days of the receipt of grievance and a response will be provided within 30 days. For most cases at Tier I, response and resolution will be done within two weeks. If more time is required to resolve the issue, the anticipated resolution timeframe will be discussed with the complainant within 30 days of receipt of the grievance and preferably as soon as it becomes apparent that more time will be needed.

9.9 GRC Documentation, Outcome and Disclosure

- 9 The record on the grievances and disputes and GRCs working will include date of the complaint, particulars of the complainant, description of the grievance, actions to be taken, the person responsible to take the action, movement of the document to the concerned GRC. The Deputy Director -ESU will be responsible for record the actual measures taken to mitigate these concerns. All complaints received in writing or received verbally (or by phone) will be entered and properly recorded and documented. The Director ESU will devise an appropriate form for this in Urdu for distribution.
- 292. The outcomes of GRC deliberations and decisions will be notified in written form by the ESU Office to the aggrieved party within the stipulated timeline. The decisions taken are mandatory on the PID with regard to any additional awards or compensation to be paid to the disputants. The awards by GRCs will be paid to the parties within 30 days by the PMO Office.
- 293. The meeting minutes at various GRCs will be recorded and decisions made will be as part of the input in the case record document and filed properly by respective GRCs. All documents from LGRC to FLGRD and the GRCs will be maintained by ESU Office. The GRC proceedings will be available for review by ADB missions and external monitors. The GRC activities will be evaluated annually and will be posted in the project website and made available to other stakeholders.

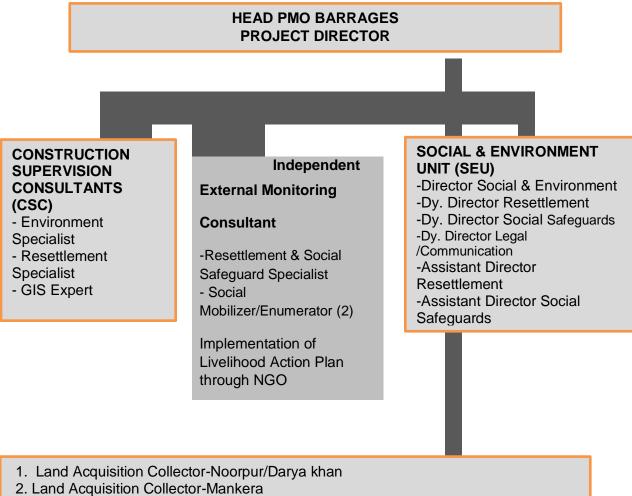
CHAPTER 10: INSTITUTIONAL FRAMEWORK FOR CAP IMPLEMENTATION

294. This chapter outlines the CAP implementation arrangements. The roles and responsibilities of various agencies and organizations are explained. The CAP implementation covers payment of compensation to the APs for affected land, structures and rehabilitation and resettlement activities. All activities related to the land acquisition and resettlement are planned to ensure that compensation is paid prior to displacement and commencement of civil works. Accordingly, a set of key tasks have been identified as steps to implementation. A preliminary CAP implementation schedule has been prepared in view of the overall project implementation.

10.1 Institutional Setup

295. The overall responsibility for implementation and supervision of the CAP lies with the PID – the executing agency (EA) – through Project Management Office (PMO) Barrages. The PMO Barrages will be responsible for implementation of CAP including CAP processes, outcome, GRCs, other relevant committees, and monitoring, evaluation and reporting. The PMO has already established a dedicated Social and Environment Unit (SEU) within the PMO structure for the preparation, implementation and monitoring of CAP. A team of social and environmental experts of Construction Supervision Consultant (CSC) will assist SEU in implementation of land acquisition, resettlement, preparation/up-dation of CAP, monitoring and reporting etc. PMO will also engage an independent external monitoring consultant for the validation of implementation of CAP and a Livelihood expert and NGO for women development activities. The organizational chart for the institutional arrangements for CAP implementation is given in Figure 10.

FIGURE 10 Institutional Framework for CAP Implementation



3. Land Acquisition Collector - Chaubara

10.2 CAP Implementation: Roles and Responsibilities

296. The CAP implementation activities will involve PMO/SEU, CSC, District Administration/Revenue Department, GRC and independent monitoring consultant. As such, a lot of coordination would be required during the implementation phase. Table 45 provides a brief describes the tasks and responsibilities.

Institutions	Roles and Responsibilities
PMO/SEU	PMO (through the SEU) is responsible for the implementation, coordination and overall supervision of the CAP. PMO will also be responsible for internal monitoring of CAP.
Revenue Department	District Collector/Deputy Commissioner is responsible for land acquisition, evaluation of lost assets and disbursement of compensation and other supplementary grants for the local communities through the respective LACs.
Contractor	Responsible for the construction work and will ensure compliance of social and environmental safeguards including GRM.
CSC	Responsible for the planning and design of the project and assist PMO in implementation of CAP. CSC will monitor the social safeguards compliances and submit periodical monitoring reports. Also will update CAP, if required
District Administration	District administration is to provide full support and coordination to all stakeholders and keep law and order related to security measures
Community/ Local GRCs	Local community/ Affected Persons are the affectees as well as beneficiaries of the project. Community is responsible to resolve social conflicts and to safeguard their rights.
Independent External Monitor	PMO will hire the services of an Independent Consultant Resettlement and Social Safeguards independent consultant along with team of two social organizers/enumerators who would be fully responsible for external monitoring of CAP and report to PMO and the ADB
Hiring of NGO	PMO will hire the services of an experienced NGO with expertise in Livelihood and women development . responsible for implementation of Livelihood Action Plan
ADB	Asian Development Bank is the donor of this project and has supervisory and monitoring role.

TABLE 45 Roles and Responsibilities in Implementation of CAP

10.3 Project Management Office

297. As noted earlier, the PID is the EA for the GTC II Project. The PID has already established Project Management Office (PMO) Barrages, to execute the construction of GTC-Chaubara Branch Canal System project. The PMO is headed by the Project Director (PD). The PD is assisted by a Deputy Project Director (DPD) of the rank of a Superintending Engineer. The project will be supported by core units of the PMO that comprise the Technical, Procurement, Finance and Environment and Social Safeguards Unit. As PMO Barrages has overall responsibility for the construction of GTC-Chaubara Branch Canal System, PMO Barrages will

- (i) Facilitate the CAP implementation teams at the project implementation office;
- (ii) Provide and release adequate budget for implementation of CAP;
- (iii) Nominate Executive Engineer for the GTC-CBCS and a local GRC, including APs, contractor and PMO representative through a gazette notification for resolution of complaints and grievances of APs related to CAP implementation;
- (iv) Submit to ADB all documents requiring review and approval; and
- (v) Request clearance from ADB for the award of civil works contract or notice to proceed in CAP implemented areas/zones upon meeting of relevant CAP implementation milestones.

10.4 Social and Environment Unit

298. The Social and Environment Unit (SEU) within the PMO, is responsible for safeguards due diligence. The Unit will be adequately staffed for supervision and monitoring of resettlement entitlements, community liaison and data management. SEU will be headed by Director Resettlement/Social Safeguards who will report to the Chief Engineer/Project Director PMO Barrages and will maintain close coordination with the Deputy Project Director who has operational responsibility for the project. PMO will be designated as Safeguards Compliance Office for the project and has the ultimate responsibility for due diligence on safeguards and minimization of involuntary resettlement impacts. The organization set up of the SEU is given in Table 46 below.

TABLE 46 Social and Environment Unit					
Project Director /Chief Engineer (Pmo Barrages)					
	Project Mana	gement Offic	ce		
	irector Rese	ttlement / Sc	cial Safeguard		
D					
Deputy Director	Deputy	Director	Deputy Director Communication		
Environment	Resett	lement	Deputy Director Communication		
	Project Imple	montation L			
	-roject imple		int.		
Assistant Director			Assistant Director		
Land Acquisition	Assistant Director Environment		Land Acquisition		
/Social Safeguard (1)			/Social Safeguard (1)		
Project Implementation Sect	tion- 1&2		Project Implementation Section-3		
Mankera Unit			Chaubara Unit		
Land Acquisition Fi	eld Staff	l	_and Acquisition Field Staff		
Patwari (4)		(Section	n-3) Patwari (4)		

10.4.1. Director-Resettlement/Social Safeguards

- 299. The Director Resettlement/Social Safeguards, SEU will have the overall responsibility of supervision of land acquisition, social and environmental safeguards under the project. The Director will further be responsible for oversight and supervision of implementing and monitoring of the CAP in coordination with Construction Supervision Consultants (CSC), District Administration, Revenue Department and other line departments. The specific task of Director SEU will comprise of following:
 - a. Update the census of APs linked with project impacts by type, category and severance and prepare compensation packages for each DP on the basis of unit rates given by the Revenue Department and as per entitlement criterion;
 - b. Disclose the CAP to the APs and place at the Union Council and PID website;
 - c. Hold regular CAP related progress review meetings as per schedule given in the CAP;
 - d. Organize conduct and record meaningful consultations with APs.
 - e. Disclose project/LAR related information to APs; and
 - f. Develop and maintain up-to-date database of APs.
 - g. Implementation of approved CAP as per implementation schedule;
 - h. Prepare internal monitoring reports initially on monthly basis and then quarterly depending upon the scale and intensity/complexity of the project impacts and submit to the ADB.
 - i. Translate the CAP in local language/s.
 - j. Disclosure of CAP to the APs, Local Union Council/s and at PID website.
 - k. Maintain close coordination with all stakeholders for the smooth functioning of project activities.
 - I. Facilitate APs in their payment compensations; completion of necessary documentation; and address their possible concerns.
 - m. Help APs to place their complaints/grievances to the GRCs, if not resolved consult court of law, and
 - n. Facilitate PMO for the recruitment/ selection of independent monitoring consultant to conduct Internal Monitoring activities for the project.

10.4.2 Deputy Director- Resettlement

- 300. The Deputy Director (DD) Resettlement will work under the overall guidance and supervision of the Director, and will be directly responsible for overseeing the execution of all tasks of implementation of CAP. The Deputy Director Resettlement will:
 - a) Ensure that CAP related activities are conducted within the agreed schedule;
 - b) Ensure the funds required for carrying resettlement activities in the field are released to the field officers and other agencies (as assigned with resettlement tasks) on time and such activities are carried out without any administrative technical hitches.
 - c) Monitor the implementation of CAP and appraise the Director Social and Environmental Safeguards of required changes to the implementation strategy.
 - d) Submit comprehensive periodic progress reports to PMO through DSE

10.4.3 Assistant Director – Land Acquisition / Social Safeguards

301. Two Assistant Directors Land Acquisition and resettlement will be appointed, one for project site 1& 2 (Mankera Unit) and one for site 3 (Chaubara Unit). The Assistant Director (AD) Resettlement will work under the overall guidance and supervision of the Director and will assist Deputy Director Resettlement in the execution of all tasks of implementation of CAP. The Assist Director Resettlement will also assist Deputy Director Resettlement in undertaking all CAP related tasks mentioned above (10.4.2)

10.4.4 Deputy Director, Social Safeguards

- 302. The Deputy Director Social Safeguards will work under the overall guidance and supervision of the Director-Resettlement/Social Safeguards, and will be directly responsible for overseeing the execution of all tasks of implementation of CAP. The DD -Social Safeguards will:
 - a) Update the census of APs linked with project impacts by type, category and severance and prepare compensation packages for each DP on the basis of unit rates given by the Revenue Department and as per entitlement criterion;
 - b) Disclose the CAP to the APs and place at the Union Council and PID website;
 - c) Hold consultations with APs and other stakeholders for CAP.
 - d) Will hold regular CAP related progress review meetings as per schedule given in CAP;
 - e) Organize conduct and record meaningful consultations with APs.
 - f) Disclose project/CAP related information to APs; and
 - g) Develop database of APs.
 - h) Prepare periodic internal monitoring reports initially on monthly and then quarterly basis depending upon the scale and intensity / complexity of the project impacts and submit to the ADB.
 - i) Help APs to place their complaints/grievances to the GRCs and prepare record of grievances,

10.4.5 Deputy Director MIS Database/ Communication

- 303. The Deputy Director MIS Database/Communication will work under the overall guidance and supervision of the Director Social and Environment, and will be directly responsible for community outreach and database development relating to CAP. The Deputy Director MIS will;
 - a) Cary out monitoring to ensure that the APs are fully aware about the on-going resettlement implementation activities.
 - b) Ensure to disclose the monitoring reports with APs and also in local language.
 - c) Ensure to display the monitoring reports on PMO and ADB websites.

10.4.6 Deputy Director Environment

- 304. The Deputy Director Environment will work under the overall guidance and supervision of the Director Resettlement/Social, and will be directly responsible for overseeing the execution of all tasks of implementation of EIA/IEE, OHS etc. The Deputy Environment will
 - a) Supervise implementation of EMPSs and oversee overall progress on EIAs.
 - b) Disclose EIA/IEE at the Union Council/s and PID website;
 - c) Hold consultations with stakeholders on EMP/EIA/IEE.
 - d) Hold progress review meetings.
 - e) Develop database of Environmental Compliances.
 - f) Prepare internal monitoring reports initially on monthly and then quarterly basis depending upon the scale and intensity / complexity of the project impacts and submit to the ADB.
 - g) Review and resolve complaints/grievances.

10.4.7 Assistant Director Environment

- 305. The Assistant Director Environment will work under the overall guidance and supervision of the Director Resettlement/Social Safeguards, and will assist Deputy Director Environment for overseeing the execution of all tasks of implementation of EIA/IEE, OHS etc. The Assistant Director will;
 - a) Assist in implementation of EMPSs and oversee overall progress on EIAs.
 - b) Assist in disclosure of EIA/IEE at the Union Council/s and PID website;
 - c) Hold consultations with stakeholders on EMP/EIA/IEE.
 - d) Assist in progress review meetings.
 - e) Develop database of Environmental Compliances.
 - f) Assist in preparation of internal monitoring reports initially on monthly and then quarterly depending upon scale/ intensity / complexity of the project impacts and submit to the ADB.
 - g) Review and resolve complaints/grievances

10.5 Staff Training and Capacity Building

306. The present SEU in the PMO Barrages is resourced and have considerable experience to effectively monitor and manage and coordinate the resettlement process and issues. Nonetheless, prior to CAP implementation, a short staff training program will be conducted to explain the CAP history, legacies, tasks, processes, and how best to ensure the quality of CAP implementation and operations. The SEU staff must have proper understanding of the laws and rules and procedures for LAR related tasks and social safeguards requirements of ADB. Further, it is important that the staff are cognizant of the importance of APs participation, information disclosure and vulnerability issues as described in the CAP.

10.6 Independent External Monitoring Consultant

307. The PD will hire an individual External Monitoring Consultant (Resettlement and Social Safeguard Expert along with team of Social Organizer/Enumerators) to conduct independent external monitoring of the implementation of CAP. The independent external monitoring consultant shall review the implementation progress throughout the CAP implementation, will evaluate the level of achievement of CAP objectives, oversee the progress and its compliance in accordance to ADB' Safeguards Policy Statement (SPS)-2009, identify the gaps if any and propose remedial measures. Complete TOR and working methodology for the Independent Monitoring Consultant is provided in Chapter-12.

10.7 Key Steps in CAP Implementation

308. This CAP Implementation will start with a social preparation plan involving information campaign and community consultations with full details of CAP processes, including compensation delivery, relocation and grievances resolution. Table 47 lists the key steps. These steps are further elaborated as guidelines to CAP implementation.

Step	Description and Duration of Activity
Step-1	Disclosure of approved CAP compensation of award by EA. The disclosure will continue till the end of the project for different stages of the project

TABLE 47 CAP Implementation Steps and Monitoring

	implementation
Step-2	Payment of all eligible compensation and other livelihood related assistance – will start with the approval of this CAP and will be completed before start of construction activity
Step-3	Redress of grievances and complaints if any related to compensation for land and other assets and livelihood / resettlement allowances.
Step-4	Removal of structures/ assets is conditional to the payment at the current market rate.
Step-5	Site preparation for delivering the site by sections to contractors for construction, is time bound activity must be completed before award of contract to the contractor.
Step-6	Monitor civil work activities by the Contract ward against social and environmen safeguards.

10.7.1 Disclosure of CAP

- 309. Key features of this CAP have already been disclosed to the APs during consultation meetings, and field level informal interaction with APs. After endorsement of CAP by PMO and its approval by ADB, following CAP disclosure plan will be followed:
 - 1. The CAP information brochure will be prepared and translated into Urdu, and distributed to all APs. It will enable the APs to be aware of their entitlements; unit rates of compensation/resettlement and rehabilitation assistance, payment procedures available for various types of APs, livelihood restoration plan and grievance redress mechanism.
 - CAP (a shorter version) will be translated into Urdu by the PMU and disclose to the APs and other stakeholders. Both versions of CAP will be made available at the offices of PMO, Contractor camp's offices, District Government and PIU as an official public document.
 - 3. SEU in collaboration with District Admn/Revenue Office will organize location specific meetings with the APs to explain the CAP including entitlements, income restoration and rehabilitation assistance, relocation assistance, livelihood restoration plan, process to engage APs in resettlement activities, GRM and overall process.
 - 4. The CAP will be posted on PMO and ADB websites.
 - 5. Disclosure of CAP in APs meetings in close collaboration with their representatives including CAP and GRCs.
 - 6. A Compensation disbursement schedule explaining the date, time and venue for disbursement of compensation for each village will be prepared in Urdu and distributed to all APs. This will also be disclosed in the project location specific meetings and copies of lists will be provided to the APs representatives.
 - 7. A brochure containing following information material will be prepared for each AH:
 - a. Pamphlet / Information Brochure in Urdu based on the summary of CAP.
 - b. Inventory of AH's losses with detail of compensation/resettlement and rehabilitation assistance to be paid to the AH.

- c. Schedule for disbursement of compensation explaining the date, time and venue for receiving compensation with 2-month/60 days' advance notices before evacuating of the ROW.
- d. Schedule for payment of full compensation/resettlement and rehabilitation assistance, to be paid before one month of vacating the ROW.
- e. Detail of sites where APs will temporarily relocate their businesses.

10.7.2 Consultations

- 310. A comprehensive information dissemination and consultation process with the APs will be initiated, where all APs will be informed about the compensation process, tentative time schedule for vacating the land, and dislocation of assets and the GRM. The consultation process will be an integral part of the CAP implementation and will continue throughout the duration of the Project.
- 311. PIU will continue to ensure that all APs, understand the implementation procedures of the CAP and measures to be taken to compensate them through SSO and NRC of CSC. PMO and PIU will keep the APs informed and facilitate addressing any grievances of APs to a maximum level. The APs will be involved in the Grievance Redress process to review and resolve any disputes concerning compensation and other resettlement issues through their representatives.
- 312. Thus, there will be a continuous on-site consultation with APs to ensure that the APs receive their due entitlements/benefits on timely, efficient and transparent manner. They will be informed through written 2 months' advance notices for relocation to alternate sites and receiving compensation/resettlement and rehabilitation assistance amounts, its disbursement schedule including date, time and venue for collection of their compensations and vacating/shifting time.

10.7.3 Verification of APs

313. Verification of the APs will be made through their National Identity Cards (NIC) numbers. APs must bring their original NIC and a copy of it at the time of receiving Compensation. If a DP is below 18 years or does not have NIC, then he/she must accompany with village representative and two other APs from the same village. The NRC and SSO will be responsible for verification process.

10.7.4 Payment of Compensation

314. Payment to APs will be paid in 02 months, keeping in view the total strength of APs for which a schedule will be issued separately on approval of updated CAP; payment of more than PKR 10,000 will be paid through cross cheques, while less than PKR.10,000 through cash.

10.7.5 Notice to Vacate Site

315. Two months' advance notices will be issued to the AHs to receive the compensation/resettlement and rehabilitation assistance cheques with time schedule and venue and vacation notices with detail of alternate sites to vacate the site within one month after receiving the compensation/assistance amounts. If an APs will not vacate the ROW after getting payment of compensation/resettlement assistance within a period of one month, the SSO will submit an application to the GRC. GRC will decide action on case-by-case basis in coordination with APs representatives. However, PMO reserves the right of directly removing such structures, only if a DP/AH will not do this by the agreed deadline in consultation with APs representatives.

10.7.6 Disputes/Grievances regarding Payments

316. Payment of compensation will be made at least one month prior to actual possession of the space to PMO being utilized by the APs. However, in case of a dispute, the assessed/allocated amount of compensation will be pledged in the names of the concerned DP(s), pending until a final decision by GRC. In such exceptional cases, the PMO may possess the ROW without payment of compensation. Grievances or objections (if any) will be redressed as per grievance redress procedures laid down in this CAP. The instructions provided in the *Guidance Note* (Annex 1: Handing Compensation Cases with Legal and Administrative impediments) will be followed in case dealing with any dispute and/or absentees for payment purposes.

10.7.7 Absentee/Non-Responded Displaced Persons

317. The PIU will issue 3 consecutive official notices and a public notice in local newspaper informing the DP(s) to contact the PIU for payment. Absentee DP(s) may receive the compensation after the notified schedules of payments by providing a genuine proof that why s/he could not come to receive compensation on the announced schedule. They will be eligible to receive payments before completion of the project; PMU has to deposit the money in the project account, until the project completion period.

10.7.8 Release of Funds for Payments

318. The PMO is responsible for timely provision of finances for CAP implementation, for the compensation/resettlement and rehabilitation assistance payments and the PIU will be responsible for administration of CAP implementation. Allocations will be reviewed on quarterly and monthly basis based on the budget requirements to be indicated CAP. The compensation funds will go from the PMO to designated bank account of the project and will be disbursed by the PIU to the APs.

10.7.9 Gender Specific Consultations

319. The PIU through SSO(s) and NRC organize meetings with women through female staff and will ensure that women are equally consulted and participated in the implementation of the CAP. If women will face any problems in getting compensation/assistance, APs representatives will facilitate the PIU to resolve the problems relating to resettlement.

10.8 Handover of Construction Sites by Sections

320. A preliminary plan for handover of sites to the contractor has been prepared in consultation with PID (Figure 11). This will be adjusted based on project start date and implementation progress.

10.9 CAP Implementation Schedule

321. The overall CAP implementation schedule in **Error! Reference source not found.** After the approval of the CAP by ADB, the PMO/SEU will implement the plan and synchronize the site preparation and hand over to the contractor by sections after having completed payments of compensation to the affected households.

																													-	l handing of site
System Compone and size	ents		to be p SEU St					Prep	arat														site and		nitor	ing				
Canal System Components	Lengt h (Kms)	Tot al	Gov t.	Pvt	Appro x w/da ys	N	/lar-2	22		Apr	-22		Ma	y-22	2	J	un-2	22		Jul-	22		Aug	;-22		Se	ep-2	2	EM Report	ADB Clearence
Section- 1 (0- 70 RD CBC Minors)	+ Distys a	nd																												
				12																										
1.1 Chaubra Branch	21.3	160	33	7	6						+	+	-	$\left \right $			+	+	+		+	_	+	\square		-	+	+		
1.2 Kora Disty.	7.6	26	26	0 19	0			_				_	_				_	_									_			
1.3 Gohar Disty	21.2	204	12	2	10																									
1.4 Sadhan Minor/Gohar	11.3	50	8	42	2																									
1.5 2-R Minor/Gohar	6.3	146	9	13 7	7																									
Total length of Section	67.7	586	88	49 8	25																									
EM Report to ADB																													30/05/20 22	
ADB Approval / clearence																														06/06/20 22
Section-2 (70-150 RD-CB	C+ Distys a	and Mir	nors)																											
2.1 Chaubara Branch Canal	24.4	286	2	28 4	14																									
2.2 Karlo Disty.	19.3	159	2	15 7	8																									
2.3 Bhindian Disty.	26.2	174	6	16 8	9																									
2.4 1-L Minor/ Bhindian	2.4	38	0	38	2																									

FIGURE 11 GTC Chaubara Branch -Sectional Completion of CAP Activities Leading to Handing Over of Site

2.5 Kamal Disty.	6.4	63	0	63	3														
				21															
2.6 Dadu Disty.	22.9	215	0	5	11														
2.7 1-R Minor/ Dadu	8	61	0	61	3														
				98															
Total length of Section	109.4	996	10	6	49.8														
																		30/06/20	
EM Report to ADB																		22	
ADB Approval																			04/07/20
/Clearence																			22

																								handing	osed ; over of te
System Component Size	s and		to be p SEU St				Pre	epara		AP A				-		-				onito	oring			EM	ADB
Canal System Components	Lengt h (Kms)	Tot al	Gov t.	Pv t.	Appr ox w/da ys	м	ar-22		Apr	-22		May	-22	Jun	n-22	Ju	-22	Au	Aug-22 Sep-2					Report	Clearanc e
Section-3 (150-230 RD 0CB	C + Distys	+ minc	ors)																		Ja	n-22			
Section-3-A																									
						м	ar-22		Apr	-22		May	-22	Jun	n-22	Ju	-22	Au	g-22	2	S	ep-22	2		
3.1 Chaubara Branch Canal	24.4	239	1	23 8	12																				
3.2 Chinna Disty.	29.6	398	57	34 1	20																				
3.3 Jewan Minor	14.6	190	0	19 0	10																				
3.4 Haider Disty	28.2	298	15	28 3	15																				

	96.8	112 5			56													
EM Report to ADB																	29/07/20 22	
ADB Approval / clearence																		05/08/20 22
Section-3-B																		
3.5 Chaubara Disty.	50.2	844	16	82 8	42													
3.6 Sultan Disty.	21.8	462	28	43 4	23	T							T					
3.7 1-R Minor Sultan/Sultan	5.9	168	10	15 8	8													
3.8 Bahadur Disty	16.6	271	7	26 4	14													
3.9 Feroz Minor/Chaubara Disty	6.9	111	1	11 0	6													
3.10 Shah Minor/Chaubara Disty	14.2	305	0	30 5	15													
3.11 Mole Minor	13.4	263	0	26 3	13													
3.12 Kalwan Minor	7.4	181	0	18 1	9													
3.13 Chaubara Minor	33.8	493	2	49 1	25													
Total length of Section	170	309 8																
EM Report to ADB					0												12/09/20 22	
ADB Approval / clearence																		16/09/20 22

CHAPTER 11: CAP BUDGET AND FINANCING PLAN

11.1 Overview

- 322. This chapter provides itemized indicative compensation cost related to land acquisition and resettlement activities in the project. The estimated CAP budget is PKR 2106.9 million. At the planning stage, efforts have been made to prepare a realistic cost estimate to reflect fair values and compensation at the current market rates for assets acquired for the project. For unit cost, the existing rates used by various government departments/agencies (e.g., Irrigation, Forest, Revenue, Communication and Works and Agriculture) were considered first; the rates were capped using market surveys for affected land, crops, tress and structures. As a result, there may be need for some adjustments at implementation.
- 323. The GOP will finance the land acquisition cost for the project as counterpart funds while non-land items (see **Error! Reference source not found.**) will be financed by ADB under the project loan/grant.

Ref Tab.#		Item Unit	Quantity	Rate (Rs/Unit)	Estimated Cost (PKR)	Estimate d Cost (USD)
		A: LAND ACQUISITIO	N COST			
11.3.1	L	and acquired under 96 land awards	4410	Various	1,383,505,210	8,235,150
11.3.1	G	overnment land of forest department transferred to PID	1205	free of cost		
		B: RESETTLEME	NT			
11.3.2	Comp	ensation for Crop and	4386.3	Various	171,181,625	5 1,018,938
11.3.3	Severe	e Agriculture Land Impact allowance	1570	Ref. EM_A.2	141,300,000) 841,071
11.3.4	Comp	ensation for Trees	105838	Table 8.6	193,106,330	1,149,442
11.3.5	Comp	ensation for Residential Structures	58	13978 sft	10,570,495	6 2,920
11.3.6	Reloc	ation Allowance to residential structures	35	Ref. EM _K	1,050,000	6,250
11.3.7	Sever reloca	Impact allowance for AHs facing physical tion	35	Ref. EM _M	8,400,000	50,000
11.3.8	Livest	ock sheds/shelters	8	2476 sft	474,150	2,822
11.3.9	Comm	nunity Infrastructure	2	750 Sft	1,200,000	7,143
11.3.10	Re-ins	stallation of Agri, Machinery/structures	41	Various	3,570,000	21,250
11.3.11	Small	Commercial Structures	3	750 sft	520,000) 3,095
11.3.12	Shiftir	ng/Relocation allowance	3	Ref. EM _K	90,000	536
11.3.13	Busir	ness disturbances Allowances	3	Ref. EM _J	540,000	3,214
11.3.14	Sever source	Impact allowance from other than land e.	3	Ref. EM _M	720,000	4,286
11.3.15	Additi	onal Assistance for Vulnerable HHs	151	Ref. EM _M	9060000	53,929
11.3.16	Reloc	ation of Public Utilities –Electric poles		Lump sum	1,000,000	5,952
Sub-tota	I-B		•		542,782,600	3,230,849
		C: CAP implementation	Monitoring a	and Evaluation	Costs	
11.3.17		CAP Monitoring and Evaluation			33,000,000	196,429
Sub-Tot	al (B+C				575,782,600	3,427,277

Table 80: Budget and Financing -GTC CAP Implementation Plan

		D: Contingency Cost			
11.3.17	CAP	Contingencies @ 10% of sub-total (B+C)		57,578,260	342,728
11.3.18		tive Cost for preparation, implementation and oring of CDP	Lump sum	90,000,000	535,714
Sub-Tot	al (D)			147,578,260	878,442
Gra	and Tot	al Land Acquisition and Resettlement Costs (A)	+ (B+C+D)	2,106,866,070	12,540,869
		US\$1=PKR 168.02 as on August 15, 2021		USD	12.54 million

11.2 Cost Estimates: Sources and Explanations

- 324. The cost estimation for land is based on BOR Punjab decisions initially the BOR Punjab formed DPACs for the respective districts in 2006, the entire land acquired on the basis of price determined by the DPACs. Later on the same BOR decided (July 2020) to enhance the compensation for land at full replacement through the Current DC rate +15% CAS. The above land compensations are estimated on the basis of current government rates for crops, structures and livelihood allowances.
- 10 The Census and DMS surveys provided detailed measurements of units affected (i.e., land, structures, crops, trees) and other losses such as income and livelihood sources, and vulnerability and poverty status. The Department of agriculture provided crop production rates for the year 2020 provided the basis to establish per acre crop yield and market rate for the compensation against crop losses, forest department for trees, building department for housing and other structures and Punjab Development Statistics on poverty and vulnerability.

11.2.1 Parity in Valuation

325. As the valuation for lost assets is calculated by the district level government departments of Bhakkar and Layyah Districts, the unit costs calculated slightly differed. As the construction of Chaubara Branch System is one project encompassing rural areas of three districts and the resettlement issues will be settled by one resettlement unit, the project will maintain parity in valuation of losses.

11.2.2 Payments for Land and other Assets

326. As per LAR financing, PID as project implementation agency (IA), has since long submitted entire amount for the acquisition of land to the District Collector Office which in turn, through the AC/LAC will disburse the compensation for land to the APs. The loss of crops and trees and other resettlement related impacts such as housing/commercial structures, employment/ income losses and vulnerability allowances, etc. will be managed through the PID to PMO –Barrages, which will pay compensation allowances to the APs through the project implementation unit (PIU).

11.3 Description of Cost Items

11.3.1 Budget for Land Acquisition

327. The Project acquired 5615 acres of land; of this, 1205 acres Forest land and 4410 acres of private and provincial government land. The compensation for land assessed in Table 81 is for the entire 4410 acres acquired from both private and provincial government sources. L the Project. The compensation for land is obviously the major component of the estimated cost amounting to PKR 171,312,844 at 2006 DPAC rates with additional/supplementary grant of PKR 1,212,193,366. The total amount (including 2006 deposits and 2020 grant-in-aid) estimated at PKR 1383.5 million.

Tehsil	No of Awards	Area (Acres)	Compensation Amount (as per 2006 DPAC)	Grant-in-Aid at 2021 DC Rate+15% CAS (PKR)
Noorpur	2	77.3	4,599,281	0
Darya Khan	1	2.1	129,737	0
Mankera	61	2,690.3	102,276,844	809,290,553
Chaubara	32	1,640.3	64,306,982	403,902,813
Total	96	4,410.0	171,312,844	1,213,193,366

TABLE 81 Budget for Compensation of Land

328. The Project will also affect State owned Forest land, which will be replaced "Land for Land" by the Punjab Board of Revenue where the PID will compensate with the cost of plantation in 1205 acres of land in addition to provision of irrigation water permanently.

11.3.2 Compensation for Affected Crops

- 329. The Census and DMS survey estimates, and crop production rates of the Department of Agriculture for the year 2020, provided the basis to establish per acre crop yield and market rate for the compensation against crop losses for the LARP. Two major crops –Wheat and Chickpeas forming 99.5 of total crops will form the components of calculation for crop loss.
- 330. The total cropped area estimated at 4386.3 acres, 3930.7 acres (89.6%) is under Chickpeas and 437.3 acres (10%) under Wheat crop. Only 11.6% area is under tube well irrigation with higher per acre yield for both Wheat and Chickpeas. The FY 2020 average yield for both crops and the market price used as basis for calculation of compensation for the crops. Total compensation at current market rate for both crops is calculated at PKR. 171,181,625. Crop wise total area, per acre yield and market price is described in Table 82.

Сгор	Average Per acre yield	Market Price at Harvest	Total/Acre Income PKR	Affected Crop area (Acres)	Total Crop Compensation (PKR)
Wheat –Rain fed area	1050 KG	Rs.45/Kg	47250	383	18,096,750
Wheat – irrigated Areas	1300 Kg	Rs.45/Kg	60750	54.3	3,298,725
Chickpeas- Rain fed Areas	425 Kg	Rs.95/Kg	36550	3477.9	127,117,245
Chickpeas- irrigated areas	575 kg	Rs.95/kg	49450	452.9	22,395,905
Fodder			15,000	18.2	273,000

TABLE 82 Compensation for Crops

|--|

11.3.3 Compensation for Affected Trees

- 331. A total of 122,620 trees were counted falling in the ROW of the project. Of the 14% is nursery or pole crop; only 1% fruit trees and remaining 85% wood trees. Compensation for trees is assessed for 104418 wood trees and 2062 fruit trees. Total compensation for private trees estimated at PKR. 111,164,600, and private fruit trees is PKR 11,717,030. The cost of forest trees including replenishment cost is estimated at PKR 70,224,000. Thus, total estimate for compensation of trees is Rest. 193,106,330
- 332. The Forest Department rates were mentioned in PC-1 of the GTC. The Census and DMS survey calculated the number trees with girth size. The provincial government rates are overlapped with the number and size of trees to calculate the total compensation for trees. The owners of these trees will be compensated on the official compensation rate for trees at the implementation of the project.

11.3.4 Compensation for Privately Owned Structures

333. The acquisition of land for the construction of CBCS will impact on 90 small and mostly temporary structures that include residential structures (79) farm level animal sheds or shelters (9) and two community structures (Mosques). Total impact area of these structures is 17204 square feet. The construction type varies from Pukka, semi Pukka to Kutcha. Total compensation is assessed at replacement cost is PKR 12,244,645 (Table 83).

Detail of Structures	Number of Structures	Area (Sq. Ft.)	Unit Rate (Rs./sq.)	Total Cost (Rs)
A. Residential Structures	35	13978	Various	10570495
B. Livestock Sheds/Shelters	8	2476	Various	7450
C. Community Structures	2	750	Various	1,200,000
Total (A+B+C+D)	45	17204		12,244,645

TABLE 83 Compensation for Residential / Livestock and Community Structures

11.3.5 Dismantling and Re-installation of Farm /Irrigation machinery

334. The acquisition of ROW strip of land will cause dismantling and re-installing of 2 irrigation Tube wells, 25 hand pumps, 4 electric water pumps and 1 drip irrigation system of 13625 lengths. These systems will be re-installed in the neighboring agriculture plots, the dismantling will cause loss of Steiner pipes, foundation platforms, shelter huts/ engine room. The re-installation charges will include technical skills for boring charges, pipe, construction material etc. Total compensation cost for dismantling and re-installation of farm and irrigation machinery for 41 structures will be PKR 3,570,000.

11.3.6 Small Commercial Structures

335. A total of 3 village level commercial structures that include 1 grocery shops and 2 poultry farms will face demolition and will be replaced at some nearby place. Total demolition compensation of 2 local poultry farms and 4 grocery shops estimated at PKR 520,000.

11.3.7 Shifting/Relocation and Resettlement Allowances for structure loss

336. In total 38 AHs will face physical and economic displacement due to land acquisition. Of these 35 will face physical displacement due to lost shelter and other 3 will face economic displacement due to lost commercial assets (poultry farm and grocery shop,). Based on entitlement provisions explained in the EM (table 60) these AHs are allowed shifting/relocation allowance, sever impact allowance and business interruption cost (AHs facing commercial structures). The table below present all applicable shifting/relocation and Resettlement Costs for 38 AHs in structure loss category. Total budget for relocation/ shifting allowance, severity impact allowance and business disturbance allowance is PKR 10,800,000.

Relocation & Resettlement Allowance	No	Total Assessment
Shifting/Relocation cost	38 DP	1,140,000
Sever Impact Allowance (non-land based)	38 DP	9,120,000
Business loss allowance	3 DP	540,000
Total		10,800,000

11.3.8 Additional Assistance for Vulnerable Households

337. Based on the Census and DMS survey a total of 151 APs have been identified as vulnerable. Out of these, 65 APs are females and Women headed household. The bread winners of other 86 AHs include poor (43 DPs) with income below poverty line and other 43 DPs facing different parameters of vulnerability like elderly and differently abled etc. Apart from compensation of their structures/assets, these vulnerable AHs/DPs are provided vulnerability allowance equal to 3-month OPL based on minimum wage rate of 2021. The total amount of OPL allowances is estimated at PKR 9,060,000.

11.3.9 Severe Impact Allowance

338. The sever impact allowance for AHs facing physical relocation or loss of income due to lost nonland income source is explained in section above. The AHs losing agriculture based income due to 10% and above loss of their productive agricultural land are eligible fore severe impact allowance. In total 1570 DPs effectively cultivating land (1109 land owners/contesting lease rights and 461 share croppers) have provided agriculture land based severity impact allowance as pre EM provisions (RE EM-A.2). Total computed compensation amount PKR 141,300,000 is included in the budget table.

11.3.9 Social Development support and Community Development Program

339. Besides land acquisition and resettlement, the PID will also implement a social development plan for which cost is included in the PC-1 summary costs. Under the social development plan PID will rehabilitate schools, a health unit and provide vocational training to the affected communities. The breakdown of social development cost including in project cost summary is provided in (Table 49) below. This includes cost for up gradation of girls primary schools, and basic health units in the project area as well as cost for vocational training. It is planned that the project will also provide skill training to 900 male and female residents of the project area. Total budget for SDP activities is estimated at PKR 70,996,000 which is not included in CAP resettlement cost.

	Activity	Cost PKR
1	Up-gradation of Girls Primary Schools	20,000,000
2	Up-gradation of Basic Health Units	09,196,000
3	Vocational Training for 900 male and female residents	41,800,000,
	Total SDCSP Cost	70
		,9
		96
		,0
		00

TABLE 49 Budget for Social Development Action Plan

340. However, keeping in view the limited information available about the socio-economic profile, poverty and vulnerability incidence among affected household and local communities particularly the pastoral groups grazing their live stocks in range lands of Rakh areas, identification of poor and needy for targeting affected people and groups eligible for livelihood support programme under community Development program suggested in EM provisions. Additional surveys are proposed and planned for detailed assessment of project impacts on pastoral communities form restricted access to grazing lands in Rakh area and ii) poverty assessment and vulnerability profiling of the affected households. Following findings of additional studies, a Community Development Program (CDP) will be designed and implemented during execution of the project. For that purpose, in CAP budget PKR 90,000,000 is proposed as estimated but contingent cost which will be firmed up after completing additional surveys for Pastoral communities in Rakh areas and Poverty and vulnerability profiling of AHs and local communities.

11.3.10 Monitoring and Administrative Cost

341. Administrative cost for the implementation of RP is required and provision is made in the budget at 1% of the total cost. Similarly, the project is required to setup an external and internal monitoring system during implementation of the RP. Budgetary provision at the rate of 6% of the total cost is provided in the budget. Total budget for monitoring and administrative cost is PKR 33 million.

11.3.11 Public/Government Structures

342. Due to the project interventions, a limited number of structures, fixtures and electricity poles will be affected. The compensation and relocation cost of these structures as allocated in the budget of PC-1 is PKR 1.0 million.

11.4 Contingencies

343. Contingencies cost amounting to PKR 57,578,260 @ of 10% of the total Resettlement and monitoring cost has been added in the budget to cover unforeseen impacts and price escalation that may emerge during implementation of CAP.

11.5 CAP Budget: Financing and Allocation of Funds

344. The total budget for land acquisition and resettlement of project affecters is estimated at PKR 2106.9 million. Of this amount, land acquisition alone will cost PKR 1383.5 million (70%) while PKR 633.4 million is calculated costs for resettlement related activities including monitoring and evaluation and 10% contingencies. Additional contingent cost amounting to PKR 90.0 million is included in the CAP as line item for CDP. The Government of Punjab will finance the entire land acquisition cost (70%) as counterpart funding and the remaining 30% (PKR 633.4 million) as resettlement cost and 71.0 million for social development (refer table 85 above) will be financed by ADB under the project loan/ grant. The GOP part of the project financing is already available with the Revenue Department. The grant-in-aid part of the funds (PKR1.4 billion) is already approved by the Provincial Cabinet. The transfer of funds took place after the approval of 2021-2022 Provincial budget in July 2021.

CHAPTER 12: MONITORING AND EVALUATION

345. This chapter describes how the CAP will be monitored and evaluated, including the methods and techniques to be used in internal and external monitoring. The M&E system will involve representatives of APs/community members, local NGOs/CBOs to get a better and informed understanding of the project operations and ultimately make the implementation more effective and beneficial to the local stakeholders. Further, such participatory M&E will promote good governance, transparency, innovation, responsiveness, and development effectiveness.

12.1 CAP Monitoring Tasks, Review and Evaluation

346. The CAP monitoring tasks are broadly divided into:

- (a) **Project preparatory phase** (consultation with APs; disclosure; verification of AP for compensation; budget disbursement, institutional capacity building), and
- (b) **CAP implementation stage (**delivery of entitlements; grievance resolution; relocation; payments of allowances/benefits; income and livelihood assistance).
- 347. At the implementation stage, CAP monitoring means the collection, analysis and reporting and use of information/data about progress, based on the schedule. Monitoring will focus on physical and financial targets, and delivery of entitlements to the affected people on a monthly basis. This is largely considered as internal monitoring to assess both progress and performances.
- 348. The CAP internal monitoring will be supplemented by period review at key points in the project cycle for instance, at mid-term, and review the progress, including any course corrections, if required. The project will also undertake annual evaluation and ex-post evaluation of the CAP to assess the effectiveness of the CAP and its outcome.

12.2 Participation of APs/NGOs in M&E

349. The Project will devise a participatory M&E system involving APs, members of affected communities, elders and other stakeholders. It is expected that such a strategy will have two-fold positive outcomes: first, it will enhance ownership of the project among the APs/affected communities; and secondly, it will likely help to solve many day-to-day problems arising out of the project implementation, leading to effective implementation. Further, a participatory approach will reflect views and perspectives of all stakeholders in the monitoring results, just not the implementing agency alone.

12.3 Steps in Conducting Participatory M&E

- 350. For making participatory M&E to work, the SEU will decide on:
 - (a) how to form a team (or teams) consisting of project and non-project members;
 - (b) prepare scope of M&E work;
 - (c) conduct planning meetings through mini-workshops;
 - (d) conduct the monitoring/evaluation
 - (e) analyze the data and building consensus on the results, outcome and performance

- (f) prepare further mitigation or plan to fix problems identified through monitoring/evaluation
- 351. The Project will provide sufficient time, resources and funds for such participatory M&E and review lessons learned from the CAP implementation for future policy and projects.

12. 4 M&E Methods and Indicators

12.4.1 M&E Methods

352. The M&E methods will be mixed to allow use of a wide range of tools and techniques in data collection to (I) assess the ongoing progress during project implementation and (ii) *pre-* and *post-* project conditions of the APs and affected communities. Table 50 provides a list of data collection tools with brief explanation.

	Tool	Description
	1001	Description
1	Pre-selected sample households	Collection of socio-economic data from a set of pre-selected sample households (at least 5% or more of the total affected households from baseline survey data) and consistently follow up on their conditions, including delivery of entitlements/benefits as per the CAP.
2	Key Informant interviews	Interviews of local elders, <i>Malik's</i> , and community leaders with informed knowledge and experience of the CAP operations and activities in the project area.
3	Focus group discussion	Open-ended group discussion on CAP progress – for instance, payment of compensation, relocation assistance, livelihood support, gender issues; separate FGDs for women and vulnerable groups .
4	<i>Jirga</i> /Community public meetings	Local <i>Jirga</i> /Community meetings at project sites to collect information on project performance of CAP activities, responses/complaints and suggestion from the affected communities
5	In-depth case studies	In-depth case studies of good and bad examples of project performance and delivery of services to affected households; key issues and view of the respondents
6	Structures direct observations	Field observations by SEU staff on the status of CAP implementation, and individual group responses to project performance
7.	Informal surveys and interviews	Informal and unstructured interviews of non-sampled APs, village leaders, Malik's, community leaders, project staff, implementation agency staff.

TABLE 50	Methods to	be used in	M&E	System
				,

12.4.2 CAP Indicators for M&E

- 353. The CAP includes indicators and benchmarks for achievement of the objectives under the resettlement program, which can be categorized as follows:
 - (i) **Process indicators**, which include project inputs, expenditures, staff deployment;
 - (ii) **Output indicators or results** in terms of numbers of Affected persons compensated for their Affected assets (land, crops and/or trees etc.), and,

(iii) **Impact indicators** related to the long-term effect of the subproject on people's lives in the Subproject-Affected area.

12.5 Internal Monitoring

- 354. The first two types of indicators, related to process and immediate outputs and results, will be monitored internally by PMO. The GTC-PIU will be responsible for internal monitoring. The Resettlement Specialist will provide necessary technical assistance in implementing and monitoring the resettlement activities. Local inputs will be taken in the form of consultation with the affected communities and participation of APs/representative(s) in the monitoring team. The information will be collected from the subproject site and assimilated in the form of a monthly progress report to assess the progress and results of CAP implementation, and adjust the work program, where necessary. In case of any delays or problems in implementation of CAP, the following specific activities will be monitored:
 - (i) Information campaign and consultation with AHs on a continued basis;
 - (ii) Status of land acquisition and payments/ compensations of lost assets (land crop, trees and other assets).
 - (iii) Status of restoration of damaged community infrastructure (Irrigation channels / watercourses, roads etc. if any)
 - (iv) Status of relocation of affected households and specially the vulnerable households
- 355. The PIU will be responsible for monitoring the day-to-day resettlement activities of the subproject. The socio-economic, census and land acquisition data will provide the necessary benchmark for field level monitoring. A performance data sheet will be developed to monitor the project at the field level. Quarterly reports will be received from the field offices; the PMO will forward the Quarterly progress report to the ADB. Further, the PMO will be responsible for overall project level monitoring.
- 356. At the early stage of project implementation, the PMO will submit quarterly monitoring report at least during the implementation of CAP schedule. Later on after the successful implementation of CAP the reporting frequency with the consent of the ADB can be relaxed to bi-annual.

12.6 External Monitoring

- 357. As mentioned earlier, an External Monitoring Agency (EMA) will be engaged to carry out independent monitoring and evaluation of the CAP implementation. Independent evaluation will be undertaken bi-annually till the end of the project. The EMA will be selected by the PMO with advice and concurrence of ADB.
- 358. Upon mobilization, the EMA will design a participatory evaluation framework and conduct workshop prior to start of the monitoring work in light of the targets, budget and duration that had been laid down in this CAP. The key tasks during external monitoring include:
 - Provide guidance to the PID, PMO (SEU and I&C Adhikot) to improve management information system (MIS).
 - Recommend improvements and review and verify internal monitoring systems and findings.
 - Identify, through field verification, any gaps in the resettlement baseline data and suggest steps to update the data,
 - Conduct independent monitoring of the implementation of the CAP in terms of

- (a) the efficiency of compensation for land acquired;
- (b) adequacy in compensation assessed before acquiring the assets;
- (c) relocation and adequacy of allowances provided to the vulnerable groups;
- (d) timeliness of compensation disbursement; and
- (e) effectiveness of consultation and grievance redress mechanisms with focus on how the concerns of affected persons, especially the female and other vulnerable groups are recorded and addressed;
- 359. The EMA will prepare independent reports based on monitoring visits and suggest recommendations for remedial actions, where needed; identify lessons learned; maintain separate database of independent surveys; support capacity development efforts; and share the major lessons from the process both in terms of success and failure.

12.7 Indicators for Monitoring and Evaluation

- 360. The following indicators may be considered in the M&E of the CAP. The EMA can review and use new indicators after proper review of the CAP and other project documents, and in consultation with community members who are expected to provide inputs in the evaluation processes. Some key indicators include the following:
 - Institutional arrangements;
 - Adequacy of the Management Information System;
 - Payment of compensation, adequacy of budget and timeliness of payment.
 - Land and other assets inventory, updating of revenue records and record keeping;
 - Consultation and information dissemination;
 - Delivery of entitlements, relevance and adequacy;
 - Preparation and adequacy of relocation arrangements if any;
 - House reconstruction if any;
 - Provision of employment, its adequacy, and income levels;
 - Training;
 - Gender impacts;
 - Rehabilitation of vulnerable households and groups
 - Infrastructure repair, relocation, or replacement;
 - Enterprise relocation, compensation and its adequacy; and Transition allowances

12.8 Resettlement Database

361. All information concerning resettlement issues related to land acquisition, socio-economic condition of affected households and inventory of the acquired land, crop and tree losses of AHs, information regarding compensation and entitlements and disbursement of payments will be collected by field staff and the Consultant. This data will be computerized by ESU–PMO and I&C Adhikot. This database will help in implementation, monitoring and reporting purposes and facilitate efficient resettlement management.

12.9 Reporting Requirements

362. The PMO will be responsible for supervision and implementation of CAP and will prepare monthly progress report on resettlement activities and submit the same to the ADB for review and approval. These monthly monitoring reports will assess implementation of the CAP, also highlight the bottlenecks and recommend ways and means for improvement in any problematic situations.

363. The EMA will also conduct monitoring of the CAP implementation independently and submit biannual reports to the PMO and ADB. The EMA submit the review reports directly to ADB and determine whether or not resettlement goals have been achieved, more importantly whether livelihoods and living standards have been restored/enhanced. Monitoring reports will be submitted at regular intervals as specified. Both monitoring and evaluation will form parts of regular activities and reporting on this will be extremely important in order to undertake mid-way corrective steps. Table 51 provides details on the content and timing for various report associated with M&E. The M&E documents and independent evaluation reports will be publicly available, including posting in project website.

Activity	Content	Timeline	Responsibility
CAP Progress Report (Monthly)	Narrative as per the guidelines; the format must provide details on activity, results, issues affecting performance and variance if any and reason for same and corrections recommended	Submitted within 10 days of the next month	ESU
Bi-annual CAP Monitoring Report	Bi-annual overview of the progress covering compensation, relocation, livelihood, gender etc.; financial statements (expenditure vs. budgeted amount by CAP budget heads); assessment of progress, and remedial measures, if needed.	Submitted within 30 days after each cycle	ESU/CSC
Ex-post Evaluation of CAP	Narrative as per monitoring program on CAP as final Report at the completion of the Project.	Submitted within 60 days of the completion of CAP activities	ESU/CSC
Bi-annual External Monitoring report	As per the TOR and narrative in the M&E of CAP with detail results of the evaluation results, including issues affecting performance, bottlenecks, if any and reason for same and corrections recommended	Submitted within 30 days after each cycle In addition to the routine bi-annual report	EMA
Final Independent Evaluation Report	A full assessment of CAP achievements, failures and impacts; lessons learned from CAP implementation.	Submitted within 90 days of end of the project	EMA

CHAPTER 13: COMMUNITY DEVELOPMENT PROGRAM

- 364. Construction of canal system aimed to improved agriculture productivity in arid and water scarce landscape is a big step towards community development and social uplift of rural communities living in the canal command area. However, acquisition of ROW land will cause physical and economic displacement of the affected households and disruption of community facilities. Also, canal system will impede movement of herds across the canals traversing through the grazing rangeland in Rakh areas. For detailed assessment and analysis of likely adverse socio-economic impacts on affected households and on pastoral communities, additional surveys have been planned to: i) assess poverty and vulnerability profile among affected households; asses loss of income due to acquisition of productive agricultural land and /or productive non-land assets; ii) identify and document design measures to be included for hassle free across canal movement of the herds in rangelands, and iv) suggest measures to be embedded in the community development program for livelihood restoration and uplift of living standards of affected communities.
- 365. Based on findings of above explained additional studies on poverty assessment and vulnerability profiling of affected households and pastoral communities facing restricted access and use of grazing lands, community development program will be designed and implemented. This community development plan will include livelihood restoration measures as per EM of this CAP for all vulnerable AHs losing land or non land-based livelihood sources. It will also include provisions for providing canal crossing and water drinking facilities for livestock grazing in the range lands of Rakh areas as well as financial support needed to restore livelihood and living standard of adversely affected pastoral community facilities like mosques and schools in project hit settlements will be included in the community development program.
- 366. It is planned that, all additional surveys and studies about poverty assessment and profiling of the affected households and due diligence study for affected pastoral communities will be started immediate after clearance of this CAP. The community development program including livelihood support plan will be prepared and submitted to ADB well before award of the civil works contract. The CDP will include specific provisions with and needed costs and responsibility for livelihood restoration and community development activities to be implemented as below. The CDP costs will be financed by ADB.

A: For AHs/APs facing severe impacts and vulnerable ones, CDP will include following activities with applicable costs, implementation responsibility and time line.

- Provisions for project-based job opportunities for willing AHs with preference to the vulnerable AHs.
- Provisions and corresponding costs for livelihood support to be provided in cash as per EM in CAP.
- Training opportunities including applicable costs and technical guidance / support for one willing member of AH to adopt alternative income sources.
- Any other support as per recommendations of the Poverty Assessment and Vulnerability profiling study.

B: For Pastoral Communities facing restriction to access the grazing lands, the CDP will include key actions below:

- Provisions with implementation responsibilities for canal crossing and livestock drinking facilities to be designed and provided in each affected Rakh area.
- Livestock health care facilities with requisite costs and responsibilities to be provided in 1 selected settlement for each Rakh area.
- Provisions with requisite for livelihood support in cash for the pastoral households facing significant impacts.
- Any other support as per recommendations from the due diligence study of Rakh Areas.

C: For Farming Households and affected settlement in canal command, the Canal Command Area Development (CAD) is a key output with budgetary provision under the project that will help to invest in improving living standard of the farming communities through enhanced productivity potential of irrigated land. In addition to investing on developing irrigation system (tertiary water channels from canal to farm gate) and on land leveling for overall development of canal command area, the CAD also included:

- Provision for establishing farmers training school and imparting training on mechanized farming and irrigation techniques; and
- Provision of new and improved quality seeds for enhanced agricultural productivity and income.

In combination with the outlined community development actions included in CAD, the CDP will also include general provisions to rehabilitate or upgrade public facilities and implement vocational trainings for social development of local communities. In this regard, following provision with costs and implementation arrangement will be considered.

- Provision for construction of public water supply system for settlements in the canal command area.
- Provisions for rehabilitation and upgradation of existing public and community facilities like Schools and Mosques in surrounding settlements, and
- Provision of vocational training in different trades related to agricultural farming, animal husbandry and allied services.

ANNEXES

Annex-1	Technical Note on Impacts of Canal Realignment in Rakh Areas along Chaubara Branch and its Distributary System-Rev.2
Annex-2	Price of Land Determined by DPACs By Award, District and Village
Annex-3	Summary table 96 Awards- Number of BOR AHs , Compensation Paid Unpaid
Annex-4	No of APs and Affected Land by Canal System and ownership category
Annex-5	Provincial Government Land for GTC-Phase II
Annex-6	Government of Punjab's P Decisions and calculations for Land payments July-Dec 2020
Annex-7	Fact Finding Visit Report on three Rakhs in GTC

APPENDICES

APPENDIX-1 DATABASE OF 15690 BOR –AHS BY AWARD, CANAL AND VILLAGE APPENDIX-2 DATABASE OF ALL DIRECT AFFECTEES OF LAND TAKE, CROPS, TREES AND STRUCTURES

Note: Appendices are organized under a separate Volume -2 and submitted separately