

Resettlement Plan

June 2022

Cambodia: Integrated Urban Environmental Management in the Tonle Sap Basin Project Part 1

Kampong Chhnang Sewerage, Flood Protection, and Wastewater Treatment
Subproject

Prepared by the General Department of Resettlement of the Ministry of Economy and Finance with the assistance of project implementation management support consultants engaged under the Project. This is an updated version of the draft originally posted in November 2020 available on <https://www.adb.org/projects/documents/cam-42285-013-rp-1>.

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Detailed Resettlement Plan

Project No. 42285-013
Grant 0454-CAM, Loans 3311-CAM and 8295-CAM
June 2022

CAM: Integrated Urban Environmental Management in the Tonle Sap Basin Project

Kampong Chhnang Sewerage and Wastewater Treatment Subproject

Prepared by the General Department of Resettlement of the Ministry of Economy and Finance
with the assistance of project implementation management support consultants engaged under
the Project.



ABBREVIATIONS

ADB	- Asian Development Bank
AH	- affected household
AHH	- Affected household head
AP	- affected person/people
BRP	- Basic Resettlement Plan
COI	- Corridor of impact
DP	- displaced person
DED	- detailed engineering design
DMS	- detailed measurement survey
DRP	- Detailed Resettlement Plan
EM	- entitlement matrix
GDR	- General Department of Resettlement
IOL	- inventory of loss
IRC	- Inter- Ministerial Resettlement Committee
IRP	- Income Restoration Program
LAR	- Land Acquisition and Involuntary Resettlement
MEF	- Ministry of Economy and Finance
MPWT	- Ministry of Public Works and Transport
PGRC	- Provincial Grievance Redress Committee
PMIS	- Project Management Implementation Support Consultant
PRSC	- Provincial Resettlement Sub-Committee
RGC	- Royal Government of Cambodia
RCS	- Resettlement Cost Study
RD3	- Resettlement Department 3
RF	- Resettlement Framework
ROW	- right of way
RP	- Resettlement Plan
SFPWT	- Sewerage, Flood Protection and Wastewater Treatment Subproject
SES	- Socio-Economic Survey
SOP	- Standard Operating Procedures
WG	- working group
WWTP	- wastewater treatment plant

NOTES

- (i) In this report "\$" refers to US dollars.

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DEFINITION OF TERMS

- Affected Household** – In the case of an affected household (AH), it includes all displaced/affected persons residing under one roof and operating as a single economic unit, who are adversely affected by the project or any of its components.
- Affected Persons** – In the context of involuntary resettlement, affected persons 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 (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
- Compensation** – Refers to payment in cash or in kind for an asset or resource that is acquired or affected by a Project at the time the asset needs to be replaced. All compensation is based on the principle of replacement cost, which is the method of valuing assets to replace the loss at current market rates, plus any transaction costs such as administrative charges, taxes, registration and titling costs. In applying this method of valuation, depreciation of structures and assets should not be considered.
- Corridor of Impact** – (i) Permanent. Is the area which is required to be permanently acquired by GDR for easement of the civil works and their unhindered operation & maintenance (O&M) in the future, and it is agreed and demarcated by the executing agency (EA). The exact location of the permanent boundaries of the easement may be required for formal confirmation of boundaries in the cadastral records.
- (ii) Temporary. Is the area within which the temporary construction activities and movements of equipment will take place during the Project implementation. The extent of the area is somewhat dependent on the types of construction method and machinery used by the contractor. Such impacts and associated remedial measures and costs are typically borne by the contractor at his own expenses depending on the contractual details.
- Consultation** – A process that (i) begins early in the project preparation stage and is carried out at different stages of the project and land acquisition and involuntary resettlement cycle; (ii) provides timely disclosure of relevant and adequate information in Khmer Language that is understandable and readily accessible to AP; (iii) is undertaken in an atmosphere free of intimidation or coercion with due regard to cultural norms; and (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; enables to consider the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures and implementation issues.
- Cut-off date** – This refers to the date after which people will not be eligible for compensation or assistance. Those persons occupying or using the project prior to the identified date are eligible to be categorized

as AHs and to receive compensation and/or assistance. Persons not covered in the census are not eligible for compensation and other entitlements unless they can show proof that (i) they have been inadvertently missed out during the census and the inventory of losses (IOL); or (ii) they have lawfully acquired the affected assets subsequent to the completion of the census and the IOL and before the conduct of the detailed measurement survey (DMS).

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| Detailed Measurement Survey | - With the aid of detailed engineering design, this activity involves the finalization of the inventory of losses, severity of losses, measurement of additional losses, and 100% coverage of Socio-economic Survey and 100% census of APs. |
| Displaced Persons (DPs) | - In the context of involuntary resettlement, DPs 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 (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. |
| | The SPS uses the term 'affected person' (AP) in a broader sense in the context of consultations, disclosure, and grievance redress mechanism that includes persons not directly affected by an ADB project. However, the EA understands and uses the term AP as what the SPS calls DP. Accordingly, the term AP is used in this DRP. |
| Economic Displacement | - Refers to loss of land, assets, access to assets, income sources, or means of livelihood because of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. |
| Eligibility | - Refers to any person or persons, household, firm, private or public institution who has settled in the project area before the cut-off date, that (i) loss of shelter, (ii) loss of assets or ability to access such assets, permanently or temporary, or (iii) loss of income sources or mean of livelihood, regardless of relocation will be entitled to be compensation and/or assistance. |
| Entitlement | - Refers to a range of measures comprising compensation, income restoration support, transfer assistance, relocation support, etc. which are due to the APs, depending on the type and severity of their losses, to restore their economic and social base. |
| Grievance Redress Mechanism | - Refers to an established mechanism to receive and facilitate the resolution of affected persons' concerns and grievances/ complaints about physical and economic displacement and other project impacts, paying particular attention to the impacts on vulnerable groups. |
| Income Restoration | - Refers to re-establishing productive livelihood of the APs to enable income generation equal to or, if possible, better than that earned by the APs before the resettlement or of pre-project levels. |
| Inventory of Losses | - This is the process where all fixed assets (i.e. lands used for residence, commerce, agriculture, including ponds; dwelling units; |

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stalls and shops; secondary structures, such as fences, tombs, wells; trees with commercial value; etc.) and sources of income and livelihood inside the project right-of-way are identified, measured, their owners identified, their exact location pinpointed, and their replacement costs calculated. Additionally, the severity of impact to the affected assets and the severity of impact to the livelihood and productive capacity of APs will be determined.

- Involuntary Resettlement
- Refers to when displaced persons have no right to refuse land acquisition by the state that result in their displacement which occurs when land is acquired through (i) expropriation by invoking the eminent domain power of the state, or (ii) land is acquired through negotiated settlement when the pricing is negotiated, and the failure will result in expropriation through invoking the eminent domain of power of the state.
- Land Acquisition
- Refers to the process whereby individual, household, firm or private institution is compelled by a public agency to alienate all or part of the land it owns or possesses to the ownership and possession of that agency for public purposes in return for compensation at replacement costs.
- Major Impacts
- Refers to AHs who will (i) lose 10% or more of their total productive land and/or assets; (ii) have to relocate; and/or (iii) lose 10% or more of their total income sources due to the Project.
- Physical Displacement
- Refers to relocation, loss of residential land, or loss of shelter because of (i) involuntary acquisition of land; or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
- Relocation
- This is the physical relocation of a displaced person from their pre-project place of residence and/or business.
- Replacement Cost
- Replacement cost involves replacing an asset at a cost prevailing at the time of its acquisition. This includes fair market value, transaction costs, interest accrued, transitional and restoration costs, and any other applicable payments, if any.
- Depreciation of assets and structures should not be taken into account for replacement cost. Where there are no active market conditions, replacement cost is equivalent to delivered cost of all building materials, labor cost for construction, and any transaction or relocation cost.
- Where land market conditions are absent or in a formative stage, the APs and host populations will be consulted with to obtain adequate information about recent land transactions, land value by types, land titles, land use, cropping patterns and crop production, availability of land in the project area and region, and other related information.
- Replacement Cost Study
- This refers to the process involved in determining replacement costs of affected assets and land and performed by an independent qualified national consultant (firm or individual) with necessary

expertise to carry out asset valuation.

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| Resettlement Framework | - The Resettlement Framework sets out the criteria for screening subprojects on their resettlement impacts and provides guidance in preparing Resettlement Plans for eligible subprojects with insignificant resettlement impacts. It defines the objectives, principles, eligibility criteria and entitlements for displaced persons based on (i) Asian Development Bank's Safeguards Policy Statement, 2009; and (ii) the Royal Government of Cambodia laws, rules and regulations. |
| Resettlement Plan | - This is a time-bound action plan, with budget, setting out the resettlement objectives and strategies, entitlements the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and implementation schedule. The outline Resettlement Plan is in Annex to Appendix 2 of the ADB Safeguard Policy Statement (2009). |
| Right-of-Way | - It is a government owned strip of land following a centerline (such as for roads, canals, etc.) providing an area of access. |
| Vulnerable Groups | - These are distinct groups of APs who are likely to be more adversely affected than others and who are likely to have limited ability to re-establish their livelihoods or improve their status and specifically include: <ul style="list-style-type: none">(i) all the household living below the national poverty rate established by the Government;¹(ii) female headed households with dependents living below the national poverty rate,(iii) disabled household heads with no other means of support,(iv) elderly households who are landless and with no other means of support,(v) landless poor living below the national poverty rate, and(vi) indigenous people (who often have traditional land rights but no formal titles). |

¹ This includes squatters and those without land titles.

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I. EXECUTIVE SUMMARY

A. Project and Subproject Description

1. The Integrated Urban Environmental Management in the Tonle Sap Basin Project (the Project) funded by the Asian Development Bank (ADB) will enhance the urban environment, improve public health, and contribute to better quality, coverage and reliability of services to over 100,000 residents in the two cities of Kampong Chhnang and Pursat Provinces. This will be achieved through an integrated program of physical and non-physical investments in priority infrastructure rehabilitation, improvement and extension, organizational development, and capacity building.

2. The Kampong Chhnang city subprojects include: (i) Sewerage, Flood Protection and Wastewater Treatment (SFPWT) and (ii) Solid Waste Management (SWM). The components of the SFPWT subproject include construction of: (i) Sewerage collection network; (ii) Wastewater Treatment Plant (WWTP); (iii) Site preparation by raising land for the construction of WWTP; (iv) Access Road to WWTP; and (v) Storm water drainage improvement. The SFPWT subproject has been categorized as Category B for involuntary resettlement (IR) impacts for which this DRP has been prepared.

3. The components of SWM subproject include: (i) development of a new controlled landfill site of about 12 ha; (ii) provision of equipment for solid waste collection; and (iii) landfill management, including equipment. The landfill, located about 6 km southwest from the city, will be constructed on government-owned land, which has partially (10 ha private land acquired, 2 ha public land) been acquired through a fully documented process of negotiated land acquisition. The entire land area is idle non-productive and non-used land. The SWM subproject does not have any IR impacts and is classified as Category C² and a separate report for ADB's due diligence was prepared and cleared by ADB in November 2019. The SWM subproject is under implementation.

B. Scope of Land Acquisition and Resettlement

4. Kampong Chhnang SFPWT (the Subproject) has IR impacts for two of its components: (i) WWTP site and (ii) WWTP access road:

- The WWTP site in Boeng Alum freshwater estuary in the Kandal is on public land. The site is located outside the existing river embankment but is used by farmers to grow lotus seeds, resulting in loss of land use.
- The improvement of the access road to the WWTP site (570 m construction and 250 m resurfacing only) will have IR impacts because the existing road requires rehabilitation, raising and widening. The works will be done mainly within the existing road right-of-way (ROW) or on public land (Tonle Sap floodplain), but significant raising of the road for flood proofing causes the widening of the corridor of impact (COI). The access road widening requires land acquisition of private residential and agricultural land, and secondary structure (a temporary house) of one (1) affected household (AH)/five (5) affected persons (APs). The other IR impacts will be permanent loss of livelihoods to farmers due to agricultural land use loss and restrictions on access to land use within the corridor-of-impact (COI), and minor loss of trees and secondary structures.

² Integrated Environmental Management in the Tonle Sap Basin, Kampong Chhnang Solid Waste Management, Safeguards Due Diligence Report, November 2019 (<https://www.adb.org/sites/default/files/project-documents/42285/42285-013-sddr-en.pdf>).

5. The sewerage and storm water drainage networks in the City Center area has no IR impacts as the sewer lines will be constructed next to or under existing road pavement or in the center of the carriageway within road width. The sewerage and storm water drainage network alignment will not impact on land, structures, crops and trees. Household connections will be supplied via connection boxes built for set of houses on the public pavement free of encumbrances or behind row of houses. Pavements, walkways, and temporary structures will be rebuilt and re-established by the construction contractor. Business disruption will be avoided by undertaking the construction works during the night along busy roads/streets and the market areas, as well as using pipe jacking method for construction of the drainage networks at the main market area.

6. Limited acquisition of private residential and agricultural land is required for the Subproject for the WWTP access road. No private land for the construction of WWTP is required as it will be constructed on public state land. All the sewerage and storm water network pipelines will be within the existing ROW or public land, hence not requiring land acquisition. However, compensation will be paid to AHs/APs for any impact on structures, trees, crops and loss of land use and employment as per the Entitlement Matrix. The anticipated scope of impact, based on the detailed measurement survey (DMS) and socio-economic survey (SES) conducted from October to November 2021, is summarized in Table 1.

Table 1: Summary of LAR Impact Type under the Subproject

No.	Impact Type	Quantity (measurement units)
(a) WWTP site and access road		
1	Affected Households/Affected Persons	31 AHs/152 APs
2	Major Impact on AHs/APs	11 AHs/58 APs
3	Vulnerable AHs/APs	1 AH/6 APs*
4	Residential land (private)	105 m ² of 1 AH/4 APs
5	Agricultural land (private)	3,492.62 m ² of 15 AHs/63 APs
6	Loss of land use (active agricultural use)	176,177.00 m ² of 11 AHs/58 APs
7	Temporary residential structure	1 structure of 1 AH/5 APs
8	Secondary structures	3 structures of 2 AHs /4 APs
9	Perennial (fruit) trees	4 trees of 3 AHs/10 APs
(b) Sewerage and storm water drainage network		
1	No impact anticipated	None

Source: DMS, November 2021

7. This Detailed Resettlement Plan (DRP) has been prepared based on final detailed engineering design (DED), completed detailed measurement survey/socio-economic survey (DMS/SES) and replacement cost study (RCS). This DRP updates the basic resettlement plan (BRP) which was prepared and cleared by ADB in November 2020.

C. Socio-Economic Information and Profile of Affected Households

8. The SES was conducted simultaneously with DMS from October to November 2021 with a total of 31 AHs/152 APs, comprising 22 males and 9 female household heads, and representing 100% of the AHs impacted by the WWTP site and its access road. As for age, most of AH heads (AHHs) are between 46-64 years (39%) and over 60 years (35%). Much of the age group of household members is between 26-45 years (49%), followed by 17-25 years (22%), 46-59 years (16%) and 6-16 years old (16%). Average family size is 4.9 persons/AH. Out of the total 31 AHHs, 15 AHHs or 48% have secondary level of education. With respect to the sources of livelihood, 9 AHHs or 29% are farmers, 8 AHHs (26%) are self-employed and 6 AHHs (20%) work as government officers. Out of 31 AHHs, 12 AHHs or 39% have secondary occupation. Majority, or

30 APs, work as farmers (20%) and 23 APs as self-employed (15%). Majority of APs (40%) are not working, as they are not at school age, are attending school, unemployed or have retired. With respect to monthly income levels, 11 AHs or 35% earn between \$150-\$299, followed by 10 AHs or 32% between \$72-\$149, then 4 AHs or 13% between \$300-\$399 with 2 AHs each or 6% between \$400-\$499 and over \$700. Only 2 AHs or 6% reported earning monthly income less than \$71 or below national poverty rate.³ They declared their income levels verbally without substantiating any documents or ID Poor Cards AHs during the DMS interviews. Only 1 AH/6 APs substantiated ID Poor Card and was identified as poor, hence categorized as vulnerable.

D. Information Disclosure, Consultation and Participation

9. Consultations, public meetings and village discussions with the AHs and the local authorities were conducted during preparation of the DRP. The first public consultation at Subproject preparation stage was conducted on 29 May and 5 August 2020, followed by second consultation on 4 October 2021 with 21 participants (16 male and 5 female) and 12 November 2021 with 15 participants (6 male and 9 female), third consultation on 17 November 2021 with 14 vendors. The public consultation meetings provided good opportunity to the AHs to express their concerns mainly about actual impacts on land and livelihoods, DMS/SES, compensation payments, grievance redress mechanism (GRM) and construction schedule. All issues were fully discussed and addressed, consistent with the Project's participatory approach.

10. For information disclosure to illiterate people, suitable other communication methods were used based on the discussion and in consultation with the AHs. The updated PIB translated in Khmer was distributed and explained in detail to the 31 AHs and was posted at the Sangkat and Municipal Office notice boards. This DRP and all associated documents (updates, corrective action plans etc.) approved by the IRC and cleared by ADB, and semi-annual social safeguards monitoring reports, will be disclosed on MPWT and ADB websites.

E. Grievance Redress Mechanism

11. The grievance redress mechanism (GRM) will follow the 3-Step process as described in the Royal Government of Cambodia (RGC) Standard Operating Procedures (SOP) for Land Acquisition and Involuntary Resettlement for Externally Financed Projects in Cambodia promulgated under Sub-Decree No. 22.ANK.BK on 22 February 2018. Aggrieved AHs/APs can lodge a complaint at the District, GDR, and Provincial levels to seek timely resolution. The authority is vested with the Provincial Grievance Redress Committee (PGRC) to make the final administrative decision in the event that AH/AP is not satisfied with the resolution at the District or GDR level. If the AH/AP is not satisfied with the decision of the PGRC, s/he is free to file a lawsuit in the competent court (Municipal or Provincial court, as applicable).

12. The GRM was re-established on 4 October 2021 and is fully functional and operational. The PGRC comprise representatives from the relevant provincial authorities, MEF and municipality, district and community representatives. The AHs were made fully aware of their rights through public consultations and updated Public Information Booklet (PIB). In addition, the GDR conducted a comprehensive training workshop in October 2021 for the members of PGRC and the other local authorities on the GRM to strengthen the capacity of the members of the PGRC for effective functioning of the GRM.

³ The ID Poor is the authoritative and official document to determine if an AH is living below the poverty level.

F. Legal and Policy Framework

13. In Cambodia, the Expropriation Law (2010) is the main legal framework that governs land acquisition and involuntary resettlement. Under the Article 3 of the Expropriation Law (2010) that governs the provision for projects financed by development partners in Cambodia, the RGC issued in 2018 the SOP for Land Acquisition and Involuntary Resettlement. The GDR of the Ministry of Economy and Finance (MEF) is responsible for providing guidance and clarification to users of the SOP. Given that the Project is funded by the ADB, the SOP is the guiding RGC sub-decree for land acquisition and involuntary resettlement and should be read together with this DRP. This DRP also complies with the ADB Safeguard Policy Statements (SPS) 2009 on Land Acquisition and Involuntary Resettlement. There are some, but no significant, gaps between the policies of the SOP and ADB's SPS, which are addressed and clarified in this DRP.

G. Entitlements, Assistance and Benefits

14. The AHs will be entitled to compensation based on the updated Entitlement Matrix (EM) in this DRP for Kampong Chhnang prepared following the results of the DMS. For this Subproject, the entitlements comprise (i) loss of private land; (ii) loss of secondary structures; (iii) loss of fruit trees; (iv) loss of land use; (v) support to vulnerable AHs and AHs with loss of land use of 10% or more for IRP; (vi) temporary loss of income; and (vii) unanticipated impacts. The compensation for lost assets is based on the principle of replacement cost as determined by an independent consultant. The RCS was conducted by an independent firm during update of DRP, which established the current market prevailing compensation and replacement rates for affected land, structures and trees.

15. The cut-off date for eligibility to the subproject entitlements is **5 August 2020**. Following the IR screening and assessment of IR impacts, the Subproject has been classified as category "B" for IR impacts. As there are no indigenous peoples in the Subproject area, or impacted either negatively or positively by the Subproject, it is classified as category C for indigenous peoples impacts.

H. Income Restoration Program and Vulnerable AHs

16. The DMS/SES has identified 11 AHs/58 APs as having major impact on their productive assets and only 1 AH/6 APs substantiated the ID Poor card was identified as poor and classified vulnerable. All these AHs are entitled to participate in the IRP. The AHs will receive this special assistance in addition to other entitlements accruing to the AH, which is in addition to compensation at full replacement cost with no depreciation to affected structures and compensation for loss of trees. The vulnerable AH will receive double the cash assistance offered under the IRP, the training under the IRP or cash assistance for the IRP, depending on the AH's preferred choice.

I. Resettlement Budget and DRP Implementation Schedule

17. The total resettlement and compensation cost for the Subproject is estimated at **\$212,247.53**. This includes compensation for land, structures, trees, IRP, RCS, other entitlements and allowances of the AHs, management costs for DRP implementation, and contingency. All the costs will be financed from the national budget and no financing will be required from the ADB loan and grant. The MEF will be responsible in ensuring the timely availability of funds.

J. Institutional Arrangements

18. The Subproject will be implemented by the Ministry of Public Works and Transport (MPWT) as the executing agency (EA) through a Project Management Unit (PMU), which will support the EA to undertake overall oversight and management of the Project. However, under the oversight of the Inter-ministerial Resettlement Committee (IRC), the GDR of the Ministry of Economy and Finance (MEF), through its Resettlement Department 3 (RD3), will be the lead agency directly responsible for updating, implementing, reporting and monitoring the planning and implementation of resettlement. A project level Inter-ministerial Committee Working Group (IRC-WG) has been established to provide overall guidance and oversight and ensure effective coordination among various line ministries on matters related to land acquisition and resettlement (LAR) activities. At the provincial level, the MPWT and IRC are assisted by the GRC, PRSC and PRSC-WG. A Project Implementation Unit (PIU) has been set up in PDMPWT in Kampong Chhnang city to work with the IRC-WG and PRSC-WG in guiding, supporting, and endorsing the work.

K. Detailed Resettlement Plan Implementation Schedule

19. All resettlement activities will be coordinated with the civil works schedule. The implementation of resettlement will commence after the clearance of the DRP by IRC and ADB, and the resettlement budget by MEF. The compensation payments will be carried out for all AHs prior to site clearance. MPWT will not allow construction activities at affected sites until all resettlement activities have been satisfactorily completed, compensation has been paid, and the site is free of all encumbrances. However, construction that is confined to the ROW and where there are no AHs will proceed based on agreement between MPWT and ADB. Table 2 details the activities and their schedule in implementing the resettlement for the Subproject.

Table 2: Implementation Schedule

Activities	Schedule
Conducting DMS and SES	October-November 2021
Conducting and approval of RCS	December 2021
Preparation of DRP	November 2021-May 2022
Approval of DRP by IRC	June 2022
Submission and ADB clearance of DRP	June 2022
Disclosure of DRP on ADB and MPWT Websites	June 2022
Approval of Budget by RGC	July 2022
Contract Offer and Contract Signing with AHs	August 2022
Disbursement of Compensation to the AHs	August 2022
Vacation of Land by AHs (one month after compensation payment)	September 2022
Handover of Land to MPWT by GDR (with a copy to ADB)	September 2022
ADB's No Objection to Civil Works	October 2022
Signing of Contract and Mobilization of Contractor	November 2022
Submission of internal Quarterly Monitoring reports (to MPWT/ADB) ^a	June 2022, September 2022, December 2022, March 2023, June 2023, September 2023, December 2023, March 2024, June 2024
Submission of Semi-annual Social Safeguards Monitoring Reports (both internal and external) ^a	15th July 2022, 15th January 2023, 15th July 2023, 15th January 2024, 15th July 2024

^a The report submission will cease after the completion of the civil works.

Source: PMU/GDR

L. Monitoring and Reporting

20. **Internal Monitoring.** The Department of Internal Monitoring and Data Management (DIMDM) of GDR will be directly responsible for carrying out internal monitoring. The objectives of the internal monitoring are to (i) measure and report of the progress in the preparation and implementation of the DRP; (ii) identify problems and risks, if any and the measures to mitigate them; and (iii) assess if the compensation and rehabilitation assistance are in accordance with the provisions under the DRP. DIMDM will also prepare the semi-annual social safeguard monitoring reports on the implementation of the DRP and submit to Director General of GDR for approval and endorsement before submitting to ADB, and separately by the PMU/MPWT with support of PMIS on construction related matters for disclosing on its website.

21. In compliance with loan agreement an **external monitoring organization (EMO)** has been engaged to verify information produced through the DRP monitoring process.



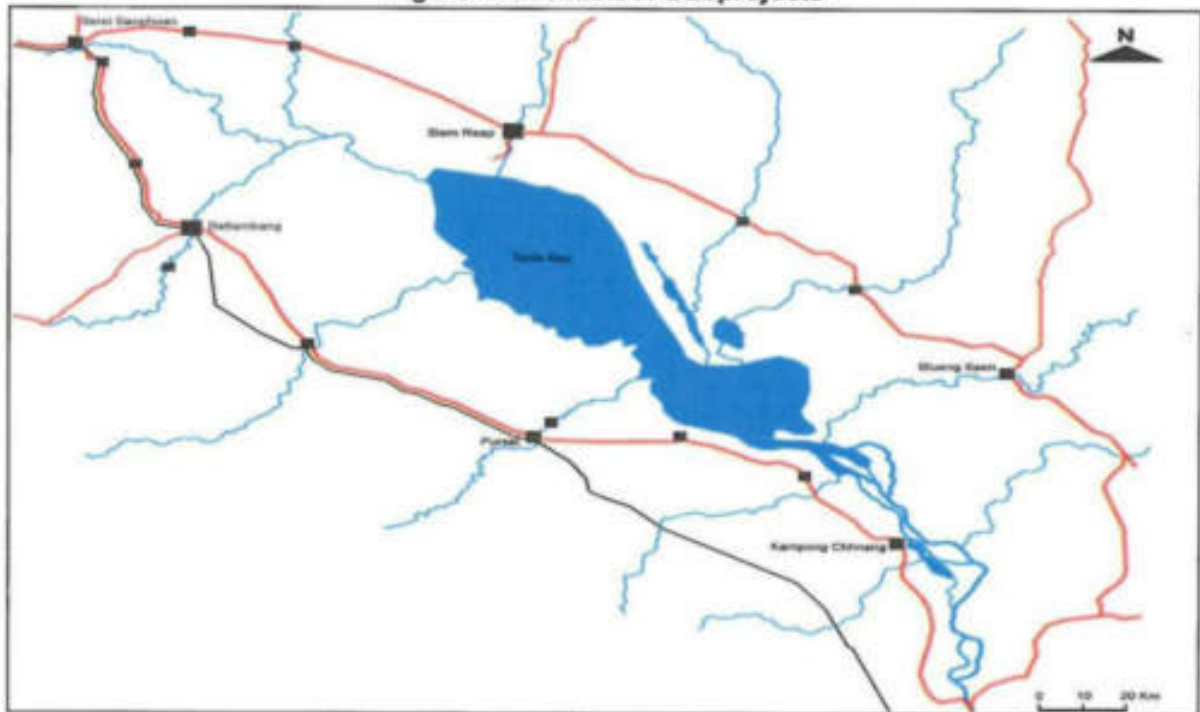
II. PROJECT AND SUBPROJECT DESCRIPTION

A. Project Background

22. The Integrated Urban Environmental Management in the Tonle Sap Basin (the Project) will finance environmental infrastructure (sewerage, drainage, wastewater management and treatment, and solid waste management) in Kampong Chhnang and Pursat. The loans and grant were approved by ADB on 10 November 2015, the loans and grant agreements were signed on 22 December 2015 and the loans and grant were declared effective on 02 March 2016. Major scope change for the project was approved on 30 June 2021 for removal of Kampong Chhnang Flood Embankment subproject and replacing it with Kampong Chhnang Sewerage, Flood Protection and Wastewater Treatment (SFPWT) Subproject. At the same time, the closing of the loans and grant was extended from 30 April 2023 to 30 April 2024.

23. The Project will support the RGC to increase economic growth and environmental protection in the cities in the Tonle Sap Region. Specifically, the Project will enhance urban environment, improve public health, and contribute to better quality, coverage, and reliability of urban services to over 100,000 residents in the two cities of Kampong Chhnang and Pursat (Figure 1). This will be achieved through an integrated program of physical and non-physical investments in priority infrastructure rehabilitation, improvement and extension, organizational development, and capacity building.

Figure 1: Location of Subprojects



Source: Feasibility Study PPTA

24. The outcome of the Project investments will be improved urban environment, climate change resilience and urban management in the cities around the Tonle Sap. This will in turn: (i) ensure that

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Kampong Chhnang and Pursat cities can support and benefit from economic growth along the GMS Southern Economic Corridor, (ii) stimulate improved economic competitiveness of urban areas, and (iii) enhance the sustainability of socio-economic gains. The outcome will include enhanced quality, coverage, and reliability of drainage, wastewater, solid waste management, and reduced incidence of flooding due to storm water events.

25. The Project outputs are:

Output 1: Kampong Chhnang Urban Area Environment Improvements

- a. Improved solid waste management (SWM) collection, and disposal by controlled landfill.
- b. Wastewater treatment, sewage network and storm water drainage.

Output 2: Pursat Urban Area Environment Improvements

- c. Improved SWM collection, and disposal by controlled landfill.
- d. Wastewater treatment, sewage network and drainage.

Output 3: Community Mobilization and Environment Improvements.

Output 4: Strengthened Sector Coordination and Operations.

Output 5: Strengthened Capacity for Project Implementation, Operation and Maintenance.

26. A draft resettlement plan (RP) was prepared and approved for Kampong Chhnang Subprojects in April 2015, covering Flood Embankment and Solid Waste Management Subprojects. However, as the Flood Embankment Subproject was cancelled through a major scope change on 30 June 2021 and replaced by the SFPWT Subproject, a new basic resettlement plan (BRP) was required for the proposed SFPWT for the processing of major change in scope. The BRP for SFPWT was prepared from May to November 2020, and it was endorsed by IRC and cleared by ADB in November 2020. The BRP included a due diligence on past, present and future social impacts, including any outstanding claims. This detailed resettlement plan (DRP) is an update of the SFPWT BRP, taking into account the detailed engineering design (DED) finalized in September 2021, detailed measurement survey (DMS) conducted between October-November 2021 and replacement cost survey (RCS) conducted in December 2021.

27. The Solid Waste Management (SWM) Subproject is categorized as C for IR and IP impacts, and construction for the Subproject is on-going. No impact is anticipated on the SWM Subproject.

B. Subproject Description

(i) Kampong Chhnang Sewerage, Flood Protection and Wastewater Treatment Subproject

28. The components for the SFPWT will improve sanitation in the Kampong Chhnang city center and provide enhanced flood protection from storm events (Table 3). Currently, the city has no sewage collection or treatment; sewage is discharged untreated into storm water outfalls across the city. Decision for separate system was made because separate systems convey all the sewage to the treatment plant, while in combined systems, during high rainfall periods, overflows allowing all pollutants to be discharged to the nearby water bodies. The improvements will include cutting off sewage inflows into the storm water network and providing household connection to the sewerage network. As such, the Subproject, covering a total service area of 247 ha and population of 42,600 people, will significantly contribute to improving the quality of life for the Kampong Chhnang city residents.

Table 3: Subproject components

No.	Subproject Components	Descriptions
1	Sewage collection network	<p>The following structures will be constructed under the component: Main sewer line in diameter 600-1,000 mm, 3.38 km, COI of 3 m Main sewer line in diameter 300-600 mm, 13.06 km, COI of 2 m Lateral or collector lines diameter 150-250 mm, 24.9 km, COI of 0.6 m Household connection chambers/boxes (about 1,800) RCC manholes (about 479) Pavement restoration for 19,398 m² and sidewalk restoration 38,800 m²</p> <p>The main lines will be installed under the existing roads, whereas lateral/collector lines are under communal paths, pavement or walkways free of encumbrances. In city center the sewer installation will be done using trenchless technique of horizontal directional drilling (i.e. pipe jacking).</p> <p>The lateral or collector lines will provide for the connection to the individual houses/buildings through installation of household collection boxes in areas without IR impact. They will be installed behind the houses, under the sidewalks or in road shoulders. In sections where other underground utilities are installed under the sidewalk or in narrow roads the lateral lines will have to be installed close to the houses. In the commercial center with no space between adjoining buildings the collector lines will be as much as possible installed at the back of the building to limit disruptions on the sidewalks and maximize connections to the sewer system in cases where it is difficult or impossible to bring the sewer connection to the front of the buildings.</p>
2	WWTP	<p>Construction of WWTP treatment design flow of 5.4 m³/d and peak flow of 12.76 m³/d with:</p> <ul style="list-style-type: none"> • Pretreatment with mechanical bar screen and grit chamber • Primary and Secondary Sedimentation Tanks • Sludge Digester • Sludge drying Bed • Moving Bed Biofilm Reactor (MBBR) • Vertical Reed-Bed • Disinfection facility to comply with E-coli standard for discharge • Buildings. Administration Building, Equipment/Vehicle Shed, Blower & Equipment Building, Storage Building, Compost Building, Guard House. <p>The WWTP will include landscaping comprising a double row tree screen at the perimeter of the site.</p>
3	Land backfilled and raised for the construction of WWTP	<p>An area of 6.4 ha. located east of an existing raised road embankment will be backfilled and raised to a level of 13 m above mean sea level (amsl) for the construction of the WWTP for a 50-year return period flood level of 11.8 m.</p>
4	WWTP access road	<p>Access road will be constructed on an embankment raised up to 13 m amsl for distance of 570 m and paving existing road surfacing for 250 m. The road COI varies between 10 m at the beginning of the road and 31 m for the section with road embankment construction at WWTP site end. Right of Way (ROW) for existing road is 12.5 m and for existing flood embankment section ROW is 100 m. The total land area of the access road embankment is 0.71 ha.</p>
5	Storm water drainage improvement	<p>Within the service area of the sewerage system the storm water drainage will be improved. Following components will be constructed:</p> <ul style="list-style-type: none"> • Installation of 19.12 km of new drainage pipelines (400 - 600 mm) • Maintenance of 22.00 km of existing drainage lines

	<ul style="list-style-type: none"> • Construction of 899 rain inlets/manholes • 1 existing outfall improvements • 5.8 km of concrete pavement for unpaved roads (150 mm thickness)
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29. The service area and network for wastewater collection and treatment is shown in **Figure 2**. The entire city area covers about 1,500 ha, whereas a priority area (492 ha) was identified for first phase of construction under the ADB assistance. During DED process the service area was first reduced to 314 ha due to increased cost of the WWTP site backfilling and finally during finalization of DED the service area was confirmed at 247 ha. The Subproject will include sewage collection network consisting of (i) Main sewer line for 16.44 km; and (ii) Lateral or collector lines for 24.9 km. The lateral or collector sewer lines will provide connection to the individual houses/buildings either via household connection boxes placed at the back of the houses (where typically toilets and kitchens in Cambodian houses are located) when there is access to the back of the buildings, or alternatively on the front of the houses. In front of the houses, they will be installed under the sidewalks, in road shoulders or close to the houses, depending on where space is available free of encumbrances. The construction contractor, households and Social Mobilizers (part of the PMIS construction supervision team) will identify and agree on suitable locations for connection boxes and design for household connection in way that have no IR impacts.

Figure 2: Service Area for Wastewater Collection System



The Subproject will include WWTP of an area of 6.4 ha located outside the existing embankment of the Boeng Alum freshwater estuary in the Kandal village (**Figure 3**). The WWTP site will be protected from flooding by land filled and raised up to 13 m above mean-sea level (amsl) as per 50-year return period floods based on existing climate change predictions. The maximum flood level for a 50-year return period is 11.8 m based on Mekong River Commission climate change model.

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30. The mechanized WWTP to be constructed will utilize a combination of physical, biological, and chemical processes to achieve the treatment objectives. This system is selected because expected expansion of the city urban areas to the proximity of the WWTP site in the future which makes the Aquatic Treatment Technologies (facultative lagoons) not suitable because of the large area required, potentially bad smell and high effluent solids content (Figure 4). This will also allow to reduce the operation & maintenance costs of the WWTP.

Figure 3: Proposed WWTP and Access Road Locations



Source: PMS Team, 2021

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Figure 4: Proposed WWTP Lay-out



Source: PMIS Team, 2021

31. The road to the WWTP site will be strengthened, raised up to 13 m amsl for flood proofing and surfaced. A section of 250 m is located in the floodplain outside the old flood embankment requiring construction of the highest embankment, and subsequently has the widest COI between 20 m and 31 m (COI width including carriageway, shoulders, and slopes). The land on the floodplain is public land. The middle section from the old flood embankment to the nearest residential housing requires some raising and widening of the existing road beyond the existing ROW (12.5 m) of the road along as the COI here is between 10 m and 19 m (Figure 5). The raising of the road level, and subsequent widening starts on each side of the road (left or right) only after the houses, thereby minimizing the impact on structures (Figure 6). The existing width of the road in the middle section is between 3.5 and 6 m wide, hence this widening of the road will impact private land and crops. The final 250 m of road will be surfaced only without any widening, and therefore does not have IR impact. A detailed map showing the location of the houses in relation to the COI of the access road is in Annex B1.

32. The WWTP access road construction and widening will affect total of 3,492.62 m² of 15 AHs/63 APs for private residential and agricultural land, four (4) structures of 3 AHs/9 APs and four (4) trees of 3 AHs/10 APs. Access ramps will be built for farmers to access their paddy fields by the construction contractor at the time of access road improvement. The design and BOQ has reserved for a number of ramps along the WWTP access road, and they will be placed in areas where access to the fields below will be required. The assessment for the need for access ramps will be made after construction contractor has been mobilized and it is clear which areas along the WWTP access road are going to be backfilled. There is no need to construct access ramps to backfilled areas which are raised to same level as the WWTP access road. The PMU/PMIS will monitor and report on the number of ramps to be constructed, and if there is any impact on income or land, will alert GDR.

33. The WWTP and its access road construction will cause loss of access to land use for lotus seed production on 176,177.00 m² (17.61ha) located on public state land. The cropping is conducted during the dry season only, as the area is heavily flooded during the rainy season (Figure 3). As a result, 11 AHs/58 APs will be affected by loss of land use.

Figure 5: WWTP Access Road Route Overview



Source: PMS Team, 2021

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Figure 6: WWTP Site Access Road Widening Near Housing



Source: PMS Team, 2021

34. In the urban core, flooding from rainstorms will be reduced through improvements to the stormwater drainage network (Figure 7). Many of the current drainage channels are totally blocked from a lack of maintenance and have manholes which cannot be lifted. Therefore, the Subproject will also improve one key outfall at the Spean Thmor Bridge in the NR 5 and provide maintenance to 22 km of existing drainage lines enabling the stormwater to more efficiently flow away from the city. The manholes will be cleaned and covered to ensure they can be maintained in the future. Additional 19.12 km of concrete storm water drainage will be built with 899 stormwater inlet/manholes. Drainage will be limited to those sectors where these interventions do not affect existing structures, any removal of existing structures will be strictly avoided, and therefore no IR impact caused by drainage works. The drainage outfalls will be enhanced to avoid ponding and erosion, and garbage traps will be installed to them.

35. Paving of unpaved dirt roads will be done to protect the storm water drainage system, as in case the roads are left unpaved the drainage lines will again fill up with soil (see pictures below). Therefore, the Subproject will construct 5.8 km of concrete pavement for unpaved roads (150 mm thickness). The pavement works will not entail any IR impacts.

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Figure 7: Roads to be Paved for Sewerage and Storm Water Drainage System Networks



Source: PMS Team on Google Earth imagery

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Pictures: Dirt Roads to be Paved



36. Temporary impacts concern mainly disruption of the use of roads, tracks, footpaths, and/or property access points along the public ROW caused by sewerage system construction works and the movement of construction materials and will be addressed during subproject implementation based on actual impacts and in accordance with the national laws and ADB's SPS (2009). The sewerage and storm water networks have minimal working widths and will be installed on the edge of road shoulders or easements, and installation at city center will be done using trenchless sewer installation using horizontal directional drilling (HDD) construction method. After the installation of sewer pipes is completed, the civil works contract and EMP will require contractors to reinstate the ROW to its original condition for any minor temporary impacts⁴ which remained after permanent structures have been compensated by GDR and site clearance has been completed. Effective construction supervision and monitoring at all stages of the Subproject implementation will ensure this outcome, whereas community engagement and facilitation activity will ensure no IR impact in design and installation of household connections as part of PMIS construction supervision utilizing Social Mobilizers contracted for facilitation and coordination of household connection designs between contractor and the households.

C. Measures Adopted to Minimize Resettlement

37. The Project Management Implementation Support (PMIS) consultant resettlement specialists and engineering design team cooperated closely to avoid and mitigate IR impacts for the Subproject. During the design (August 2020) it was estimated 521 AHs may have impact on their secondary structures or businesses based on roof count conducted on geographical information system (GIS) based on preliminary sewer network COI overlaid with recent drone imagery. All structures which were on top of the COI were counted in the 521 AHs. This number was revised to 315 AHs when the sewer network service area was reduced in size. At the same time, pumping station initially designed to service the northern end of the service area was no longer required. In November 2020, the PMIS team with PIU, conducted a field verification of the remaining impacts by visiting the locations identified earlier during the GIS roof count. Based on the PMIS/PIU field verification, none of the 315 AHs have impact on permanent structures or business. This also confirmed the surveyor team's previous conclusion of no impact along the sewer network in August 2020⁵, which was conducted at the same time as topographic survey of the sewer network

⁴ Minor temporary impacts refer to driveways, pavement and walkway as well as lightweight, removable and easily re-installable extended eaves and umbrellas, signposts and spirit houses.

⁵ Integrated Urban Environmental Management in the Tonle Sap Basin Project. Topographical Study for the New Sewerage System and Selective Improvement of the Existing Drainage System in the Town of Kampong Chhnang. August, 2020. Topo Group.

alignments. The impact mitigation and avoidance conducted during the preparation of the BRP resulted in impact on land, structures and business disruption being completely avoided for the sewerage network. The design has not changed since preparation of BRP; hence no IR impact is expected in this DRP either as all network works and reinstatement of pavement will be on unencumbered COI.

38. Bidding documents and Subproject budget include Field Engineering for Collector/Lateral Sewers and Service Connections for the contractor, including but not limited to: (i) aligning collector lines and laterals on side walk avoiding impact on private property, (ii) aligning collector lines behind houses on communal or private property in consultation with the owners, (iii) separating sewer and rain water flow from existing house/building connections to the existing drainage lines, including the design of properly dimensioned flow separators in these connections, (iv) design of in-house plumbing requirements for new house/building connections. The summary of impact avoidance and mitigation are detailed in explained in **Table 4** and details on the design changes for impact avoidance is in **Annex A**.

Table 4: Impact Avoidance and Mitigation

No.	Type of Works	Expected Impact	Avoidance/mitigation Measures Applied
1	WWTP	WWTP site and access road from the north along existing embankment causing loss of land use and relocation of 9 primary structures (7 AHs)	Relocation of 8 primary structures / AHs avoided through relocating WWTP site further into the floodplain and re-aligning the WWTP access road directly from the West rather than from the North.
2	Sewerage	Sewer collector line impact on structures and causing business disruption along walkways near market areas	In high density areas around the markets and busy streets and roads decided to connect households to main/secondary sewer by placing connection boxes at the back of the rows of shop houses via communal access alleyways (typically toilets and kitchens are located at the back of the houses). For houses which cannot be connected from the back, install household connection boxes in the front of houses in locations free of encumbrances (two houses at each location). All connection boxes to be directly connected from the box to the secondary sewer under the main road/street. To facilitate the design and agreement on household connection installation options and design, the construction supervision team will have a Community Engagement and Facilitation Specialist mobilized to facilitate the process and ensure avoidance of all IR impacts.
3	Sewerage	Sewer collector and secondary lines impact on businesses and temporary business disruption along walkways of National Road 5	Walkways along the National Road are wide with no permanent secondary structures or privately owned trees. However, the walkways are used for storing mobile temporary structures used by businesses. To avoid temporary business disruption and provide safer working conditions for contractor along the busy national road, the construction will be conducted only during night-time work schedule (Figure 8).
4	Sewerage	Sewer collector line impact on secondary structures and trees along existing concrete roads	Use single sewer with fish bone structure and install household connection boxes at the front in locations free of encumbrances (two houses at each location).

5	Sewerage and drainage	Sewer and drainage line impact on secondary structures and trees along existing dirt roads	Construct shallow storm water drains on both sides of the roads strictly within the existing road width free of encumbrances and connect houses directly to secondary sewer under the middle of the road. Road to be surfaced with DBST or concrete once completed.
6	Sewerage	Temporary business disruption on mobile vendors near market (temporary business impact)	Mobile vendors operating from evening to late at night will be provided two optional temporary market locations at Kampong Chhnang Bus Station parking lot (150 m distance) and wide intersection 100 m north of the market, in case needed. Temporary market site requirement will be reviewed and agreed once construction contractor is mobilized and construction method and schedule is known. PMU to ensure that the agreement to be made with the construction contractor should be monitored and reported on in the contractor's monthly report/s or the QPR, and in semi-annual social monitoring report. Minutes and photographs as well scanned signatures from the meetings with the mobile the vendors should be attached to the relevant report/s.
7	Sewerage	Temporary business disruption on street vendors near market areas	The works in sensitive business areas will be carried out during night only (8 pm to 4 am) so that there is no businesses disruption (see example pictures below and Figure 8) and using HDD construction method.
8	Sewerage	Temporary impacts on COI	Any temporary impact on minor and movable secondary structures within COI and construction area will be responsibility of the construction contractor, as detailed in bidding documents and updated EMP. The contractor is to conduct recording of the status of the temporary impacts prior to start of construction, report to PMU/PIU, and restore and rebuild the temporary impacts to their pre-project condition.

Source: PMS Team, 2021.

Pictures: Market area at day and night time



Pictures: Market area businesses during the day (left) and night (right). PMS Team, 2020

Figure 8: Night-time Work Areas



Area for night-time work schedule marked in blue. Source: PMIS Team, 2020.

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III. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

39. DMS in 2021 confirmed the results of IR screening conducted in 2020, and the Subproject is still classified as category "B" for IR impact as it includes land acquisition and resettlement impacts which were not deemed significant along the WWTP site and its access road. This DRP is updated based on BRP (November 2020) and the detailed engineering design (DED), RCS and complete DMS/SES. The DRP is consistent with the ADB's SPS (2009) and relevant laws and regulations of the RGC.

A. Methodology

40. The Inter-ministerial Resettlement Committee Working Group (IRC-WG) conducted the DMS and SES on AHs/APs from October-November 2021 to determine the potential impacts on land and physical and economic assets of the AHs/APs. The scale of impact assessment on land and other physical assets was done following the DED/COI. The calculation of impacts was done by the DMS team via two methods: (i) via a transect walk-through of the entire stretch of the WWTP access road to demarcate the COI, and (ii) using drone imagery and GIS to delineate parcels for cropping at the WWTP site. The latter method was used due to heavy flooding at the time of DMS/SES at the WWTP site making it impossible to conduct land survey on site. After the parcels were identified a separate public consultation with AHs identified as cropping on the floodplain was organized. In the meeting a map was presented (Annex B2) for the AHs to identify the plot they have been cropping.

41. For WWTP site and access road the COI was defined and all assets within COI, such as primary and secondary structures, business disruption, and other assets such as trees among others were measured. The IRC-WG, PRSC-WG and PIU measured the areas of affected structures, identified their types of materials, and assessed the viability of the remaining structures for continued use for living. They identified the types of trees to be impacted and established their productive ages. The DMS data obtained information on the names of the AHs and all assets that are within the COI. The DMS included 100% of the AHs. The SES was conducted in parallel with DMS by employing a survey questionnaire which contained questions on demographic and socio-economic profiles of AHs and APs. There are 31 AHs/152 APs which represent 100% of the AHs.

42. A due diligence review (DDR) was conducted for sewer and storm water drainage network as no IR impacts are anticipated. The DDR verified no IR impact based on the COI as well as extensive avoidance methods. All assets and businesses within COI, such as privately owned land, public land used for production, primary and secondary structures, and other assets such as trees, as well as business disruption, were screened. The households located along the sewer and storm water drainage network alignments do not have any IR impact or business disruption.

43. Earlier restrictions on public meetings and gatherings caused by COVID-19 pandemic were lifted before DMS/SES, and hence public consultation meetings were conducted with the AHs/APs in the Subproject areas. Public Information Brochure (PIB) was updated, distributed and explained to all households and Sangkat offices during DRP preparation. The updated PIBs have been posted on Sangkat notice boards.

B. Summary of LAR Impacts

44. Summary of LAR impacts are in Table 5. The Subproject will cause impact on assets and/or economic displacement of 31 AHs/152 APs. A total of 1 AH/4 APs will lose private residential (105 m²) and 15 AHs/63 APs agricultural (3,492.62 m²) land. At the same time, 11 AHs/58 APs will lose

access to public state land (176,177.00 m²) used for active farming. Total of 11 AHs/58 APs will lose more than 10% of their productive land, and hence will experience major impacts on their livelihoods. One (1) AH/5 APs temporary residential structure used seasonally will be affected and 2 AHs/4 APs will have impact on three (3) secondary structures. Three (3) AHs/10 APs have impact on 4 perennial (fruit) trees. 1 AHs/6 APs are poor and categorized as vulnerable AHs.

45. Based on due diligence, there is no IR impact caused by the sewer or storm water drainage networks.

Table 5: Summary of LAR Impact Type under the Subproject

No.	Impact Type	Quantity (measurement units)
(a) WWTP site and access road		
1	Affected Households/Affected Persons	31 AHs/152 APs
2	Major impact on AHs/APs	11 AHs/58 APs
3	Vulnerable AHs/APs	1 AHs/6 APs
4	Residential land (private)	105 m ² of 1 AH/4 APs
5	Agricultural land (private)	3,492.62 m ² of 15 AH/63 APs
6	Loss of land use (active agricultural use)	176,177.00 m ² of 11 AHs/58 APs
7	Temporary residential structure	1 structure of 1 AH/5 APs
8	Secondary structures	3 structures of 2 AHs/4 APs
9	Perennial (fruit) trees	4 trees of 3 AHs/10 APs
(b) Sewerage and storm water drainage network		
1	No impact anticipated	None

Source: DMS/SES, October-November 2021

C. LAR Impacts by Type

(i) Impact on Land

46. The Subproject will impact a total of 3,597.62 m² of private land of 15 AHs/63 APs. This includes 3,492.62 m² of private agricultural and 105.00 m² of residential land. It will also impact 176,177.00 m² of public state land is used by 11 AHs/58 APs for growing lotus flowers. Therefore, a total of 176,177.00 m² of land will be impacted by the Subproject (26 AHs/121 APs). A total of 3,597.62 m² of land will be acquired for widening of the WWTP access road impacting 15 AHs/63 APs and 176,177.00 m² for WWTP site impacting 11 AHs/58 APs (Table 6). The AHs using the public state land will be compensated for permanent loss of livelihoods (loss of land use), but not for the land. One (1) AH/4 APs has impact on private agricultural and residential land along WWTP access road, as well as public state land at WWTP site (AH ID 22). Therefore, the number of AHs impacted is without double counting.

47. Based on due diligence, there is no land acquisition or loss of land use caused by the sewer or storm water drainage networks.

Table 6: Summary of Impacts on Land

No	Component	Type of land	Private land		Loss of land use		Total	
			m ²	AH/AP	m ²	AH/AP	m ²	AH/AP
1	WWTP access road	Agricultural	3,492.62	15/63*			3,492.62	15/63*
2		Residential	105.00	1/4*			105.00	1/4*
<i>Sub total</i>			3,597.62	15/63*			3,597.62	15/63*
3	WWTP site	Agricultural	0	0/0	176,177.00	11/58*	176,177.00	11/58*
Total			3,597.62	15/63*	176,177.00	11/58*	179,774.62	26/121*

Source. DMS/SES, October-November 2021

* One (1) AH/4 APs losing both private agricultural and residential land along WWTP access road, as well as State land at WWTP site (AH ID 22).

(ii) Impact on Structures

48. All impacts are on secondary structures. One (1) temporary house of 1 AH/5 APs will be impacted by the Subproject (21 m²) due to the access road construction (AH ID No.16). The temporary house is made of light-weight structure built on public land without a permit and is not occupied during rainy season due to flood (May to November) as the fields where the AH works as hired laborer are entirely flooded. The AH has two agricultural plots of land: (i) 12 m x 20 m (45 km from current site⁶) and (ii) 20 m x 22 m (45 km from current site⁷). On both plots of land, the AH has an existing house. The AH has options of (i) the house being moved back along the existing embankment away from COI of the access road to continue with temporary stay at the site to avoid impact on the AHs employment and income, or (ii) to be relocated back to his existing permanent house on either of the two plots. These options were discussed with the AH during the BRP stage. During the DMS, the IRC-WG discussed the options further with the AH. The AH was informed that option (i) was not available as the land outside the COI was very low and will be flooded during the rainy season and therefore, the site location was not suitable to rebuild the temporary structure. On option (ii) the AH did not accept it as he was getting regular income working as hired laborer than he would generate income from the two plots of land. The AH's preferred option was that he will rent a place in the nearby village and will continue with his current employment. Therefore, the AH will not lose his source of livelihood and will be compensated only for loss of the temporary structures and provided with transition and transport allowances.

49. The other impacts on secondary structures are of 2 AHs/4 APs on concrete slab (10.56m²), wooden gate/barbed wire fence (37m) and steel gate with wire mesh (10m²). The impact on gates and fences are all on one (1) AH/3 APs only (Table 7).

50. There is no impact on secondary structures for the sewer or storm water drainage networks.

Table 7: Summary of Impacts on Secondary Structures

No	Affected secondary structures	Unit	Quantity	AHs / APs
1	Temporary house	m ²	21	1 / 5
2	Concrete slab	m ²	10.56	1 / 1
3	Wooden gate, barbed wire	m	37	1 / 3
4	Steel gate with wire mesh	m ²	10	
	Total			3 / 9

Source. DMS/SES, October-November 2021

(ii) Impact on Trees and Crops

51. WWTP site and access road will have impact on 4 perennial trees, made of one (1) jujube tree and 3 palm trees of 3 AHs/10 APs (Table 8). No timber trees are impacted by WWTP site and access road construction. There are no affected trees between 0–1-year-old. There is no impact on standing crops of rice and lotus flower as both the WWTP site and the sides of the WWTP access road are heavily flooded. Cropping only takes place during dry season, and construction is expected to start prior to planting.

⁶ Boutu Village, Koh Chum Commune, Chuikiri district, Kampong Chhnang Province

⁷ Koh Thkov Commune, Kandeang district, Kampong Chhnang Province

52. No impact on trees is not anticipated for the sewer or storm water drainage networks.

Table 8: Summary of Impacts on Trees

AH ID No	APs	Perennial trees	Type of tree	Age of tree*
2	4	1	Jujube tree	1-3 years
10	1	2	Palm tree	Over 6
12	5	1	Palm tree	4-5 years
Total	10	4		

Source: DMS/SES, October-November 2021

*There are no affected trees between 0-1-year-old.

(iii) Impact on Businesses

53. The Subproject will also cover the market areas and the shops along the National Road 5. There are about 100-150 market and mobile vendors selling goods along the streets around Kampong Chhnang market (see pictures below). Some of the shops around the market also use the walkway to present their wares for customers during the daytime only. The street vendors around the market area have movable tables/stalls made of light-weight material which can easily be transported, whereas mobile vendors have wheeled carts. The mobile vendor carts are moved on daily basis by the vendors to their place of business. The market area will be constructed using pipe jacking method with careful selection of operational excavation pit locations, thereby avoiding all impact on the shops and mobile vendors. In addition, the market area, busy streets/roads with shops, and National Road 5 sewer and storm water drainage alignments will be only constructed during the night to avoid all business disruptions. However, during construction and if necessary, the mobile vendors near the market working in the evening and nights will be located to a temporary market site at Kampong Chhnang Bus Station car park and large intersection (currently also used for parking) as verbally agreed with the PIU and City Hall during the due diligence undertaken for the preparation of this DRP. Therefore, they can continue with their sales without any disruption to their livelihoods during the night-time construction. Temporary relocation for the mobile vendor is expected to be between 4-6 weeks during construction. The agreement on temporary relocation will be done after mobilization of the construction contractor when the exact construction method (such as location of truck routes and pipe jacking shafts) and construction schedule is known. After construction completion, they can move back to their original locations for their business. This temporary arrangement and location of temporary business place was agreed with market management and the mobile vendors in public consultations during due diligence consultations (**Annex D**).



Pictures: Temporary market sites for market vendors (PMIS, 2020)

54. To minimize any inconvenience for all market area and mobile vendors, they will be given advance notice of minimum 2 weeks before the start of civil works in the streets where they conduct their routine businesses.

(iv) Major Impact

55. The April 2015 draft RP for Kampong Chhnang Subprojects defines major impact for those who would lose 10% or more of their total productive land and/or assets and physical relocation. A total of 11 AHs/58 APs will lose 10% or more of their productive agricultural land (Table 9) and are eligible for the income restoration program (IRP). Only 2 AHs (9 APs) have privately owned agricultural land impacted for more than 10% located along the WWTP access road, whereas the remaining 9 AHs/49 APs have 10% or more of their agricultural state-owned land impacted at the WWTP site.

Table 9: Productive Agricultural Land Loss

No	AH ID No.	AP	Productive agricultural land (m2)				Agricultural land loss (%)
			Private	Land use on State land	Total	Impacted	
1	AH6	5	1 670		1 670	263	15,72
2	AH17	7		25 000	25 000	13 750	55,00
3	AH18	4		35 000	35 000	8 000	22,86
4	AH19	3		27 500	27 500	17 500	63,64
5	AH20	5		21 000	21 000	9 000	42,86
6	AH21	4		31 802	31 802	21 702	68,24
7	AH22	4	37 000	40 000	77 000	40 719	52,88
8	AH25	6		50 000	50 000	5 200	10,40
9	AH26	6		35 850	35 850	13 750	38,35

10	AH27	8		100 000	100 000	12 500	12,50
11	AH31	8		60 000	60 000	20 000	33,33
TOTAL		58		464 822	464 822	161 665	

Source. DMS/SES, October-November 2021

(v) Impact on Vulnerable Groups

56. During the DMS/SES interviews, all AHs were requested substantiate their ID Poor Cards to determine their poor status. Only one (1) AH/6 APs substantiated the ID Poor Card (AH ID No. 25). This 1 AHs/6 APs are therefore all eligible for IRP on this basis alone (Table 10).⁸ The income data during the DMS/SES (October-November 2021) on the AHs was obtained only on verbal interviews without substantiation of ID Poor Cards. The data collected verified 2 AHs/12 APs income below \$70.58/month/AP income, hence living below the poverty line established by the RGC. Since these 2 AHs/12 APs did not substantiate their ID Poor Cards, they will not be entitled for compensation assistance under the vulnerable category. The 6 vulnerable APs will be provided with a special package which includes doubled lump sum amount for loss of livelihood, transition allowance or subsistence allowance. They are also entitled to participate in the IRP depending on their preferred choice.

57. There is one (1) disabled affected household head (AHH) (4 APs) but has means of support from the family. There are also 11 elderly AHHs (48 APs), however, none of them are landless and all have other means of support for themselves and from their family. There are no single female-headed households, no landless and Indigenous Peoples (or ethnic Cham or Vietnamese) are affected by the Subproject.

Table 10: Summary of Vulnerable AHs/APs

No.	AH ID No.	APs	No. of Poor households living below the national poverty rate (<\$70.58/month/AP) / ID Poor	No. of Female headed households with dependents living below the national poverty rate/ID Poor	No. of Disabled headed households with no other means of support	No. of Elderly headed households who are landless and with no other means of support	No. of Landless poor living below the national poverty rate/ ID Poor	No. of IP
1	25	6	0/0	1/0	0	0	0/0	
Total		6	0	1	0	0	0/0	0

Source. DMS/SES, October-November 2021

D. Temporary Impact

58. The sewerage and storm water drainage works will be carried out within existing road ROW, therefore, the public facilities such as existing bituminous surface roads and walkways will be temporarily impacted during construction. Design of and bill of quantities (BOQ) for the sewerage and storm water drainage includes permanent reinstatement and improvement of roads and sidewalks along the alignments. Thus, these temporarily affected public facilities will not only be restored but will be enhanced after construction as part of the Subproject design. This temporary impact also concerns the movement and storage of construction equipment and materials, and any unanticipated impacts. These will be addressed during the Subproject implementation based on actual impacts and in accordance with the national laws and ADB's safeguards policy statement (SPS, 2009).

⁸ Draft Resettlement Plan April 2015. Cambodia: Integrated Urban Environmental Management in the Tonle Sap Basin (Kampong Chhnang).

59. Some of the private houses and shops have either extended their properties illegally on the walkways or are temporarily using the walkway for businesses or as storage area. Majority of these private assets are of light-weight material or mobile (shop shelves or display tables). The households will be given advance notice to move their mobile assets away from the COI prior to construction. The civil works contract (included in BOQ also) as well as EMP will also require the construction contractor to reinstate the extended properties or private structures within the COI and any impacted structures along the construction works area to their pre-Subproject condition after the installation of sewer and storm water drainage alignment is completed, including pavements/walkways, roadside kerbs, signposts, spirit houses and extended eaves. The contractor is to record the pre-condition of the roads and assets with drawings and georeferenced pictures and/or video. No permanent encroachment of the public walkways will be covered under temporary impact reinstatement or rebuilding by the construction contractor, as this is covered under permanent impacts on secondary and other structures and compensated accordingly, if any. Due diligence confirmed that no impact is caused by the construction, as it is done at market area utilizing pipe jacking and otherwise using night-time construction schedule.

60. Mitigation and reinstatement of impacts caused by construction works incorporated in the BOQ include: (i) additional minor works to avoid impact; (ii) temporary removal of minor structures on sidewalks such as roadside advertisements, movable stalls, display cases etc.; (iii) removal and reinstatement of existing walls/fences; (iv) reinstatement of private access to properties such as driveways, walk ways, stairs, and; (v) all other repair/reinstatement works not covered under the provisions for day-works.

61. For any temporary site installation or other area, the contractor will have to propose in a site installation and access plan and obtain approval from the PMU. Where possible, unoccupied, and unused public land will be used for temporary land use or storage. The contractor shall rent the private space with agreed rental fee (written contracts to be prepared). Both private and public space shall be returned in the same or improved condition compared with pre-Subproject situation. Through a transparent and contractual approach, the PMU will provide the contractor with the Subproject's land acquisition and compensation principles in the form of this DRP to ensure that (i) official compensation rates are applied, (ii) re-instatement of affected assets contractually defined, (iii) consultation takes place throughout the Subproject, (iv) the grievance mechanism is followed, (v) the EMP is applied, and (vi) other items specified are complied with, in compliance with the ADB SPS and RGC's SOP.

E. Unanticipated Impact

62. In case there are changes in the Subproject's scope and/or location during the Subproject implementation, social impact assessment of new impacts shall be conducted, and update or amendment of the DRP or formulate a new resettlement plan covering all applicable requirements specified in ADB SPS (2009)⁹. Unanticipated impacts will be documented and mitigated based on the principles provided in this DRP. Any new APs that will be identified (i.e., those who will be included among the adversely affected because of changes to the Subproject design or alignment prior to or even during construction works) are entitled to the same entitlements as those of the other APs. The new APs will not include any occupant entering the COI or construction area after the cut-off date.

⁹ Any changes or additions in design/scope of the Subproject during construction will be screened and validated for IR impact only in case the changes and/or additions are outside the original COI or WWTP site area.

IV. SOCIO ECONOMIC INFORMATION AND PROFILE

63. A SES of the 31 AHs/152 APs located on the WWTP site and along the WWTP access road was conducted in October-November 2021 by the IRC-WG, which covered 100% of the AHs of the Subproject. The DMS/SES did not cover for AHs along the sewer and drainage networks and pump station as there is no IR impact caused by the sewer and drainage networks. The SES respondents consisted of affected household heads (AHHs) and household representatives. The SES questionnaire contained demographic variables (age, marital status, employment, and gender of respondents), means of employment of APs, households' monthly income and expenditures. The SES provides baseline information on the socio-economic situation of the AHs/APs in gender disaggregated format.

A. Demographic Information of the AHHs

64. **Gender and Age.** Out of the 31 AHHs of the Subproject, the majority or 22 AHHs are males (71%) and remaining 9 AHHs are females (29%). As for age, the largest groups of AHHs are 46-49 years (39%), followed by over 60 years (35%) and 31-45 years (23%). Average AH size is 4.9 persons/household. Largest age group in household members (APs) is 26-45 years (49%), followed by 17-25 years (22%) and 46-59 years and 6-16 years old (16% each). Table 11, Table 12 and Table 13 summarizes gender of AHHs, age of AHHs and APs members respectively.

Table 11: Summary on Gender of AHHs and APs

Category	Male		Female		Total	
	No.	%	No.	%	No.	%
AHHs	22	71	9	29	31	100
APs	69	45	83	55	152	100

Source: DMS/SES, October-November 2021

65. The elderly household heads (over 60 years) are considered vulnerable in case they are landless and with no other means of support. Based on the SES, none of the elderly AHH is poor and without any support. The elderly AHHs (total of 11 AHHs, including 6 female AHHs) still have employment their own income, or support from their family.

Table 12: Summary on Age of AHHs

Gender (AHH)	Under 20 yrs	21 – 30 yrs	31 – 45 yrs	46 – 59 yrs	Over 60 yrs	Total	
	No.	No.	No.	No.	No.	No.	%
Male	0	1	5	11	5	22	71
Female	0	0	2	1	6	9	29
Total	0	1	7	12	11	31	100
Percentage	0	3	23	39	35	100	

Source: DMS/SES, October-November 2021

Table 13: Gender and Age of APs

Age	Gender	<5 yrs	6-16 yrs	17-25 yrs	26-45 yrs	46-59 yrs	>60 yrs	TOTAL
AP	Male	2	10	12	25	13	7	69
	Female	3	15	21	24	12	8	83
Total		5	25	33	49	25	15	152
Percentage		3	16	22	33	16	10	100

Source: DMS/SES, October-November 2021

66. **Marital Status.** Majority or 22 AHHs (71%) are married and 9 AHHs (29%) are widowed. One widowed female AHH is with ID Poor Card (AH ID No. 25) with 6 APs is living below the national poverty rate. None of the AHH are divorced or single. Table 14 summarizes the civil status of AHHs.

Table 14: Summary of Marital Status of AHHs

Gender	Divorce/separate	Married	Single	Widow or Widower	Total
Male	0	18	0	4	22
Female	0	4	0	5	9
Total	0	22	0	9	31
Percentage	0	71	0	29	100

Source. DMS/SES, October-November 2021

67. **Education Attainment Levels.** 15 AHHs (48%) have secondary education level, followed by primary education 6 AHHs (16%) and 4 AHHs (13%) have high school/university education level. Four (4) AHHs are illiterate or do not have any educational level attainment (2 male and 2 female). The updated PIB has been explained to them in detail during DMS/SES. The male AHHs of the Subproject generally are better educated than females. 63 APs (41%) have secondary education level or are in process of attaining it, followed by 46 APs (30%) attaining high school and 24 APs (16%)attaining primary education. 19 APs (13%) have not started school, have no education or are illiterate. Table 15 summarizes the education levels of the AHHs by gender and Table 16 of the APs by gender.

Table 15: Summary of Education Levels of AHHs by Gender

Gender (HHH)	None	Primary School	Secondary School	High school / University	Vocational Training	Total
Male	2	2	12	4	0	22
Female	2	4	3	0	0	9
Total	4	6	15	4	0	31
Percentage	13	16	48	13	0	

Source. DMS/SES, October-November 2021

Table 16: Summary of Education Levels of APs by Gender

Gender (HHH)	None or has not started school	Primary School	Secondary School	High school / University	Vocational Training	Total
Male	9	10	25	25	0	69
Female	10	14	38	21	0	83
Total	19	24	63	46	0	152
Percentage	13	16	41	30	0	100

Source. DMS/SES, October-November 2021

B. Occupation, Income and Expenditure

68. **Occupation.** For the Subproject, 9 AHHs (29%) are farmers, 8 AHHs (26%) are self-employed or in business and 6 AHHs (20%) are government employees. Out of 22 AHHs, 12 AHHs (39%) have secondary occupation, mainly as farmers. The most common occupation amongst the APs is also farming (30 APs or 20%), the second is self-employed or in business (23 APs or 15%) and the third government employment (18 APs or 12%). For APs farming is predominantly a male occupation, whereas self-employment and business are largely done by females APs. Largest group of APs (40%) are not working, are at school or have not started school, or are retired.

69. The Subproject will address through the IRP the significant social impacts on the farmer AHs, given majority AHs are impacted by loss of land use for agriculture farming while their primary occupation is also farming. Table 17, Table 18 and Table 19 summarizes the primary and secondary occupation of the AHs and APs, respectively.

Table 17: Summary of Primary Occupation of AHs

Primary Occupation of AHs	Male	Female	Total	%
Farmer or fisherman	3	6	9	29
Construction/Casual Labor	1	0	1	3
Self-employed/business/trade	5	3	8	26
Private sector employee	1	0	1	3
Government employee	6	0	6	20
Services, tourism or hospitality	1	0	1	3
Others	5	0	5	16
Total	22	9	31	100

Source. DMS/SES, October-November 2021

Table 18: Summary of Secondary Occupation of AHs

Primary Occupation of AHs	Male	Female	Total	%
Farmer or fisherman	5	0	5	16
Self-employed/business/trade	3	0	3	10
Services, tourism or hospitality	0	0	0	0
Others	1	3	4	13
No secondary occupation	13	6	19	61
Total	22	9	31	100

Source. DMS/SES, October-November 2021

Table 19: Summary of Primary Occupation of APs

Primary Occupation of APs	Male	Female	Total	%
Farmer or fisherman	17	13	30	20
Self-employed/business/trade	8	15	23	15
Private sector employee	6	10	16	11
Government employee	12	6	18	12
Services, tourism or hospitality	1	0	1	1
Student, retired or unemployed	24	38	62	40
Others	1	1	2	1
Total	69	83	152	100

Source. DMS/SES, October-November 2021

70. **Income.** Regarding income, majority or 11 AHs or 35% reported household monthly income between \$150- \$299/month/AP, followed by 10 AHs or 32% between \$72-\$149/month/AP, while 2 AHs/12 APs or 6 % reported income less than \$71/month/AP but could not submit ID Poor Card to substantiate their income levels and therefore cannot be considered vulnerable. One AH/6 APs with ID Poor Card reported income above the national poverty rate. Table 20 summarizes the monthly income of the AHs.

Table 20: Summary of Monthly Income of AHs per person

Income Bracket (\$)	Male	Female	Total	%
Below 71	2	0	2	6
72 – 149	7	3	10	32
150 – 299	8	3	11	35

300 – 399	2	2	4	13
400 – 499	2	0	2	6
500 – 599	0	0	0	0
600 – 699	0	0	0	0
Over 700	1	1	2	6
Total	22	9	31	100

Source. DMS/SES, October-November 2021

71. **Expenditure.** Household expenditure for most, or 24 AHs (78%) is under \$150/month/AP. Table 21 summarizes the monthly expenditure of the AHs per person.

Table 21: Summary of Monthly Expenditure of AHs per person

Expenditure Bracket (\$)	Male	Female	Total	%
Below 71	6	4	10	33
72 – 149	10	4	14	45
150 – 299	5	1	6	19
Over 300	1	0	1	3
Total	22	9	31	100

Source. DMS/SES, October-November 2021

C. Poverty

72. Cambodia uses an absolute poverty line definition. The Ministry of Planning (MOP) poverty lines from 2013 were updated in November 2021. The update to the poverty lines included: (i) National and Phnom Penh poverty line of 10,951 riels per person per day (\$2.69); (b) Other urban area's poverty line of 9,571 riels per person per day (\$2.35); and (c) Rural area's poverty line of 8,908 riels per person per day (\$2.19). The poverty lines are based on Cambodia Socio-Economic Survey 2019-2020.

73. As part of the social impact assessment conducted during the preparation of the DRP, the poor and vulnerable AHs who may be differentially or disproportionately affected by the Subproject have been identified based on the criteria established by the RGC. The household living below the poverty are identified based on the national criteria established by the RGC. Each household which is assessed by the Government and found to be poor and vulnerable is issued with an official ID Poor Card with a distinct number. The self-reported or declared income status by the AHs during the DMS/SES is not used for poverty classification. The interviews conducted during the DMS/SES all the AHs were requested to substantiate their ID Poor cards to determine their poor status. Only one (1) AH/6 APs (AH ID No. 25) substantiated her ID Poor Card, thus classified as living below the poverty line of \$70.58/month/person. Therefore, only this AH is classified as vulnerable and is eligible for the vulnerability assistance. Two (2) AHs/12 APs have declared annual income below the poverty line but could not submit ID Poor Card to substantiate their status and are therefore not considered as poor and vulnerable. None of the vulnerable households are disabled, elderly, landless or belong to indigenous peoples.

74. Targeted measures have been designed for the vulnerable household under the IRP (Chapter X) to ensure the adverse impacts do not fall disproportionately on them and they are not disadvantaged in relation to sharing the benefits and opportunities resulting from development under the Subproject. The Subproject will ensure that vulnerable groups are not disadvantaged and that they are equal beneficiaries of the Subproject's infrastructure.

75. Table 22 summarizes AHs below and above the updated national poverty line.

Table 22: Summary of AHs below and above Poverty Line

Poverty line	AHs			
	Male	Female	Total	%
Poor below Poverty line (<\$70.58 /person/month)	2	0	2	6
Not Poor above poverty line (>\$70.58/person/month)	20	9	29	94
Total	22	9	31	100

Source. DMS/SES, October-November 2021

D. Gender Considerations

76. The Subproject in general is expected to have highly positive impacts on both households' sanitary circumstances, health and the local environment with reduced flooding that will be felt both by the residents, businesses, and visitors. However, it is anticipated that women more than men are affected by flooding impacts, because they have to be more mobile and provide daily food for their households despite rain and flooding; e.g. women have to go to the market to buy food and pick up their children from school or even take them to hospital and to doctors. Also, due to women's daily domestic responsibilities, they come into frequent contact with dirty flood water during the rainy season, which can lead to foot fungus, scabies, and skin infections.

77. The Project has a separate Gender Action Plan (GAP). The purpose of the GAP is to ensure that women and vulnerable households will benefit from the proposed urban wastewater and drainage system improvement, services and enhanced sanitation through women's and vulnerable households' equal participation and consultation in project preparation, implementation and management, in improved access to wastewater and drainage infrastructure and services, and capacity building opportunities. The GAP promotes women's participation in capacity building in the implementation, operation and management organizations. At the same time, the Project will include public awareness raising in sanitation and hygiene and is expected to contribute to a reduction of health ailments related to rainy season flooding in the Subproject area.

78. Key strategies in GAP to ensure women's involvement include ensuring that:

- there is no discrimination to raised issues, concerns, feedback by the female-headed households (FHHs) during consultations, and that all FHHs affected assets are correctly recorded.
- FHHs will receive the same opportunity or compensation amount for enhancing capacity in restoring their livelihood.
- sanitation grants are provided to ID Poor 1 and 2, including at least 20% female-headed households, if categorized as ID Poor 1 or ID Poor 2 as identified separately from DMS by Community Mobilization Environment Improvements of the project output 3.
- the urban infrastructure will better respond to the specific design considerations of all intended project beneficiaries (men, women, boys, girls, people with disabilities and other marginalized groups) through (i) meaningful consultation with women on detailed designs to ensure their needs and preferences are incorporated, and to include woman and child safety measures (e.g., sidewalk and drainage covers during construction, lighting during night work, appropriate construction barriers, child-safe stormwater drain covers, fencing around wastewater treatment lagoons, kitchen, bathroom, lockers and changing facilities and personal protective equipment at landfill sites where waste pickers may present; and (ii) meaningful consultations with women in Kampong Chhnang and Pursat on priority small scale infrastructure improvements (e.g., gender-specific requirements for public infrastructure, such as separate latrines for women with trash bins, if appropriate).

E. Indigenous Peoples

79. There are no indigenous peoples (IP) and ethnic minorities adversely impacted by the Subproject. Any IP households living in Kampong Chhnang will benefit positively from the project environmental and public utilities improvements to Kampong Chhnang in general.



V. INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

80. Public consultation and participation aim to develop and maintain avenues of communication between the Project, stakeholders, and AHs. To ensure that the views and concerns of the AHs are considered in Project/subproject preparation and implementation and to reduce or offset adverse impacts and enhance benefits from the Project, a strategy of meaningful participatory has been adopted by and implemented under the Project for information disclosure, consultation and participation. All consultations have been presented verbally in Khmer language for illiterate to fully understand and be able to participate, while using visual tools such as maps and drawings. During the IOL consultations, the PIU/PMIS team explained the project scope and distributed the PIBs. For the illiterate people, the PIU/PMIS team assisted the illiterate AHs by reading out all the information in the PIBs to them.

A. Consultation and Participation

81. The first public consultation in Kampong Chhnang was conducted during the feasibility study and preparation of BRP of the Subproject on 29 May 2020 with AHs living along the embankment and on 5 August 2020 with AHs along the access road¹⁰.

82. The second public consultation was conducted with AHs along the access road to the WWTP site on 4 October 2021 with 21 participants (16 male and 5 female) (Annex C1) and at the WWTP site on 12 November 2021 with 15 participants (6 male and 9 female) (Annex C2). The consultations were conducted by IRC-WG, PRSC-WG and PIU prior to the commencement of DMS/SES. During the public consultation meetings, the AHs and/or participants were informed about the Subproject and its scope, mitigation measures applied, entitlements, and compensation for lost assets, cut-off date, GRM, including contact persons, DMS/SES process, and use of drone imagery for DMS for WWTP site due to deep flooding preventing access.

83. The third public consultation was conducted by PIU and assisted by PMIS consultants on 17 November 2021 at the market area with 14 vendors as part of the due diligence for the wastewater and drainage networks which are not having any IR impact (Annex D1) with market and street vendors, and market chief and officers. Due to Covid-19 restrictions on public meetings at the time of the consultations, the number of market vendors were kept limited. Further consultation will be organized after mobilization of the construction contractor to ensure wider consultation. During the public consultation meeting, the AHs and/or participants were informed about the Subproject and its scope, mitigation measures applied, EM, compensation policies, cut-off date, GRM, including contact persons, and the use of pipe-jacking and night-time work schedule at market area.

84. Another public consultation meeting was conducted by IRC-WG with the participation of the PRSC-WG, Project Technical Consultants, Representatives from External Monitoring Organization, local authorities (villages and municipalities) on 21 February 2022 with 16 AHs experiencing major impacts. During the consultation meeting, the AHs and participants were informed about their entitlement for the income restoration program (Chapter X and Annex D2).

85. Table 23 summarizes the public consultations undertaken with the participants. No NGO/CSO participated in the public consultation meetings.

¹⁰ Details and minutes of meeting for first consultation available in BRP, 2020



Table 23: Summary of Public Consultations

No.	Date	Location	Topic and Summary of Discussions	Participants
1	10.10.2021	Kampong Chhnang Municipality compound	Consultation and explanation of the Subproject scope of works and standard procedure on resettlement policies. Consultation explained mitigation and avoidance of involuntary resettlement impacts, technical design of subproject components, EM, cut-off date for eligibility, GRM, PIB and DMS/SES process. It was also explained that the WWTP site is located on the floodplain/lake, and hence is State land.	2 chief of village (2 female), 1 commune councilor (M) 21 AHs (16 male and 5 female)
2	2.11.2021	Damnak Porpol Village, Kampong Chhnang Municipality	In addition, 12.11.2021 consultation also detailed the use of drone imagery to define plot boundaries and sizes for DMS due to the WWTP site being flooded.	1 chief of village (F), 1 commune councilor (M) 15 AHs (6 male and 9 female)
3	7.11.2021	Phsar Leu, Kampong Chhnang Municipality	Consultation and explanation of the Subproject scope of works and standard procedure on resettlement policies. Consultation explained mitigation and avoidance of IR impacts for network and especially market area, contractor responsibilities for reinstatement of COI, pipe-jacking and night-time work schedule, EM, cut-off date for eligibility, GRM and PIB. Separate simplified one-to-one interview was organized with 5 vendors on the South side of the market, with the project explained briefly to all of them as above.	9 vendors (2 male and 7 female) and market chief & market tax collector (2 male) 5 vendors (gender not disclosed due to sensitivities by interviewed vendors).
Total				52 participants (28 male, 24 female)

86. Table 24 summarizes the key discussion points on the questions from the AHs and responses provided at various consultative meetings.

Table 24: Summary of key Discussion Points

No.	Date	Question	Response
1	4.10.2021	(i) Can I continue to grow crops after part of land has been compensated and handed over? (ii) What is the ownership of land for WWTP site where people have been growing crops for long time? (iii) How much is compensation price for land?	(i) Yes. (ii) State land, as this is classified as floodplain/lake. (iii) Unit price is not known yet, as RCS has not taken place. The unit prices will be explained in consultation with affected households at the time of compensation contract negotiations.
2	12.11.2021	(i) Can we have the drone map? (ii) When we can get the compensation, and the compensation will be multiplied for how many years?	(i) PIU administration will make print outs for all AHs. (ii) It may take between 1 and 2 months before compensation is paid. The working group team stated that for seasonal crops the compensation will be only one season, but for perennial crops such as mango, coconut, jackfruit, etc. This can be multiplied by the number of years to be harvested from the beginning of planting.
3	17.11.2021	(i) Construction should avoid major traditional holidays and ceremonies. (ii) When is construction expected to start and how long it will take?	(i) The project has noted down the request and this will be explained to the contractor to be taken into account in construction schedule. (ii) The construction will start in 2022 and it will take 1-2 months for the market area.

	(iii) Can vendors return to their original location if needed to temporarily move?	(iii) If anyone is temporarily moved, they can return to the same original location after construction. Market management will follow up with this.

B. Consultation During DRP Implementation

87. In situation where Covid-19 is not a safety risk, a follow up consultation will be conducted after approval of this DRP to disclose the information in the DRP, and in preparation of the compensation payments. It will be undertaken jointly by the IRC-WG and PRSC-WG. The meeting will be held in a public place at the commune or village for all AHs and commune/village representatives and the PIB for compensation package and estimated construction schedule will be provided and explained to all AHs. All consultations and disclosure during implementation will be presented verbally in Khmer for illiterate to fully understand and be able to participate. Updated PIBs will be distributed and explained after consultations to illiterate if needed. The schedule for AHs contract signing with deadlines and the legal requirements to receive the compensation (national ID, evidence of land ownership etc.) will also be explained. Each AH will be provided with the draft contract and the compensation amounts explained to the satisfaction of the AH on one-to-one basis. The AHs will be given option to sign the contract there and then or given 3 working days to submit the signed contract to the IRC-WG through the village council office. For those AHs who are unable to participate in the public meeting on contracts, best efforts will be made to visit them at their houses or seek the assistance of the village office to contact them to complete the contracts.

88. In case Covid-19 situation in Cambodia changes to worse again and hence causes increased risks, number of precautions will be adopted in the Subproject consultations, preparation and implementation. Social distancing, face masks and hand washing will be compulsory for all staff and experts conducting the consultations, and for all participants to public consultation meetings. In situations where public consultation meetings are too risky, either one-on-one individual consultations will be conducted during the contract offer, signing and disbursements.

89. The final consultative meeting will be conducted when the compensation payments are ready to be disbursed and will be undertaken jointly by IRC-WG and PRSC-WG. The schedule for compensation payments will be informed to all the AHs at least one week in advance through the commune and village offices. The meeting will be held in the commune or village and prior to the commencement of compensation payment, all AHs will be again informed about the GRM under the Subprojects, the setup of the local GRM committees in their province and the procedures that will be followed in case they have any complaints about the compensation payments. Compensation payments will be made on household-to-household basis and each AH will be provided an opportunity to seek clarifications about the compensation package prior to receiving the payment.

C. Information Disclosure

90. Updated PIB was published in Khmer was distributed and explained to the AHs during the DMS (Annex F). Updated PIB was read out and explained to all illiterate AHs during DMS/SES. This DRP will be translated in the Khmer language and posted at town and Sangkat offices for easy and free access to the AHs and the affected communities. For illiterate people, suitable other communication methods will be used based on the discussion and in consultation with the AHs (as explained above). The DRP will also be disclosed on website of the MPWT both in Khmer and English.

91. Public information and disclosure about the Subproject will be continued during the DRP implementation in the Subproject areas. The updated PIB, including final Subproject information, construction schedule and contacts of the contractor, will be distributed after contract award to update the AHs especially regarding the expected works construction schedule and any potential temporary impacts. The updated PIB will also contain information about the Project and Subproject, entitlements, or compensation for the AHs, the local GRM, PGRC members, including agencies (i.e., ADB, MPWT/PMU, etc.) so that AHs are clear about whom they should contact their concerns.

92. Particular attention in disclosure will be given to women, the poor and other vulnerable AHs. Most of these were already part of the one-to-one interviews conducted by GDR during income restoration program planning during DMS preparation, and they will be separately consulted at the time of compensation payments. The consultation and disclosure activities have been properly documented; minutes of meetings, photos, and attendance sheets have been prepared and recorded.

93. For the Subproject, the GDR will submit the following documents to the ADB for disclosure on ADB's website after their approval by IRC and the ADB are obtained:

- (i) This DRP approved by the IRC and concurred by ADB;
- (ii) DRP updates, if any; a new RP, an updated RP, and corrective action plan prepared during the Subproject implementation, if any; and
- (iii) Semi-annual social safeguards monitoring reports.