# Resettlement Plan

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# Democratic Socialist Republic of Sri Lanka: Jaffna and Kilinochchi Water Supply and Sanitation Project

(JKWSSP-installation of seawater desalination plant at Thalaiyadi village in Maruthankerny Grama Niladhari Division)

Prepared by Ministry of City Planning and Water Supply, Government of Sri Lanka for the Asian Development Bank.

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#### **ABBREVIATIONS**

ADB – Asian Development Bank

CAARP - Conflict Affected Areas Rehabilitation Project

CBO – Community-Based Organization
GRC – Grievance Redress Committee
HDPE – High Density Poly-Ethylene

JKWSSP – Jaffna Kilinochchi Water Supply and Sanitation Project

JRO – Jaffna Regional Office LAA – Land Acquisition Act

LARC – Land Acquisition and Resettlement Committee
LARO – Land Acquisition and Resettlement Officer

MLGPC - Ministry of Local Government and Provincial Councils

NGO – Nongovernment Organization

NIRP – National Involuntary Resettlement Policy
NWSDB – National Water Supply and Drainage Board

NPC-PID – Northern Provincial Council-Provincial Irrigation Department

PIEC – Project Implementation Engineering Consultancy

PID – Provincial Irrigation Department
PIU – Project Implementation Unit

PMCIU – Project Management Coordination and Implementation Unit

ROW – Right-of-Way

RRP – Report and Recommendation of the President

STP – Sewage Treatment Plant WTP – Water Treatment Plant

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#### **EXECUTIVE SUMMARY**

- 1. The Jaffna and Kilinochchi Water Supply Project (JKWSP) is a project funded by Asian Development. The main objectives of the JKWSP are developing the water supply infrastructure, strengthening water resource management in the Jaffna Peninsula and building the capacity of the NWSDB to carry out project implementation. The Government of Sri Lanka and National Water Supply and Drainage board has designed a project to meet at least part of drinking water demand in Jaffna and its islands. This project will involve desalination of sea water through the development of seawater reverse osmosis (SWRO) plant to produce about 24,000 cubic meters (m³) of fresh water per day until other water source augmentation possibilities will become a reality in future.
- 2. This report aims at identifying the scope of land acquisition, resettlement and other due diligence related issues (existing or possible) due to implementation of the SWRO plant in Thalaiyadi village in Maruthankerny Grama Niladhari division of Vadamarachchi East Divisional secretariat.<sup>1</sup>
- 3. The main objectives of the JKWSP are (i) developing the water supply infrastructure; (ii) strengthening water resource management in the Jaffna Peninsula; (iii) and building the capacity of the National Water Supply and Drainage Board (NWSDB) to carry out project implementation.
- 4. The present water demand of entire Jaffna peninsula (including the islands) is around 50,000 m³/day, which will rise to about 88,000 m³/day in 2050. Currently the demand for water is being met by a limited supply from groundwater, which is fragile and severely stressed. To meet the present and future water demand, the Government of Sri Lanka and NWSDB have continually looked for other alternatives and have identified that implementing a SWRO desalination plant is a technically viable option for meeting part of the water demand in the Jaffna peninsula. Therefore, the present project is planned with the objective of supplying 24,000 m³/day of potable water through the SWRO desalination plant, which will provide relief and allow the groundwater aquifers to recover partially and will enable the NSWDB to supply high quality drinking water to the households in the project area. The proposed SWRO desalination plant will therefore significantly improve the overall quality of life of the community.
- 5. The Ministry of City Planning and Water Supply has been entrusted as the executing agency and NWSDB as the implementing agency for the JKWSP, and it is expected that the project will contribute to rehabilitating, reconstructing and developing areas affected by conflict.
- 6. The proposed SWRO project is located in Thalaiyadi village of Maruthankerny Grama Niladhari division. The project has 3 different components implemented to produce potable water for distribution among consumers. These 3 components include: (i) intake and outfall structures and associated pipeline connections to the SWRO plant;<sup>2</sup> (ii) SWRO plant constructed in a location about 1 km from the sea coast; and (iii) water transmission pipe line installed from the SWRO plant up to Puthukkadu junction to convey treated water to the existing pipe line delivering water to Jaffna area.

The pipe will traverse a stretch of the access road from Thalaiyadi to Chempionpattu Grama Niladhari area, and a coastal belt located alongside the road stretch.

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<sup>&</sup>lt;sup>1</sup> A Grama Niladhari ("village officer") is a Sri Lankan public official appointed by the central government to carry out administrative duties in a Grama Niladhari division, which is a subunit of a divisional secretariat

- 7. The proposed project will not trigger any involuntary resettlement impact, private land acquisition or evacuation of people. Nevertheless, there will be disturbances to the users of coastal road running along the coastal belt from Thalaiyadi village to Chempionpattu area. The land used for establishment of SWRO plant is a government land, not designated for economic or social purposes. The transmission pipe line will also be installed through public land and along the right of way of existing public road. There will be marginal disturbances for road users during the construction phase. The coastal belt or the sea areas demarcated for the proposed project implementation are not used for fishery activities. Prior to the 2004 tsunami there was one *madal* fishing<sup>3</sup> yard located within the coastal belt and shallow sea area identified for the project (refer para. 10)
- 8. Some fishermen in Thalaiyadi, Maruthankerny, and Chempionpattu areas pass the sea area demarcated for the project during the launching of boats for fishing. Some other marginal fishermen involved in fishery activities (using traditional methods)<sup>4</sup> are of the view that their fishery activities may get disturbed due to the construction of intake and the outfall. They perceive that there will be some impacts on their fishing operations. Therefore, due diligence monitoring is an essential requirement of this project to mitigate any negative impacts that the project may have on fishing activities of marginal fishermen. Several consultations have been undertaken with the fishing communities and their concerns are outlined in Tables 9, 10, 11 and Annex 5. In this context, this report is prepared as a resettlement plan<sup>5</sup> following the requirements of ADB's Safeguard Policy Statement 2009, and Government of Sri Lanka's laws (National Involuntary Resettlement Policy, 2001).
- 9. The data for preparation of this report was collected from both secondary and primary sources. The secondary data was obtained from project relevant divisional secretariat offices, *Grama Niladhari* offices and other relevant line agencies such as Road Development Authority, Department of Fisheries and aquatic resources and from the project management and implementation unit (PMIU) of the project. The primary data was collected from the interviews and group discussions with communities in the project implementing area- especially the fisher people's communities in Maruthankerny *Grama Niladhari* division.
- 10. The proposed project will not require acquisition of private land and/or relocation of houses or commercial operations. There is one beach seine fishing lot (*Madal Padu*) located within the project implementing area that is directly affected. The intake and outfall structures will be laid through this madal padu (buried in the beach) and the intake structure and outfall diffusers will be located within the fishing area of this madal padu. Mr. Arulanandan (79 years of age) who has the traditional fishing rights in this madal paduhas abandoned *Madal* operations after the tsunami in 2004. After the tsunami he went abroad to earn his livelihood and has returned to the village in 2013. He has provided a written consent addressed to the Project director, JKWSSP, NWSDB stating that: (i) he has not been undertaking madal operations in that lot since 204; (ii) he is happy to allocate this madal padu for project activities; (iii) the madal

<sup>&</sup>lt;sup>3</sup> Beach seine fishing uses a fishing net that hangs vertically in the water with its bottom edge held down by weights and its top edge buoyed by floats. This large net is pulled by the fishing crew (10-20 people) on the beach to catch the fish.

<sup>&</sup>lt;sup>4</sup> This involves putting tree branches at the bottom of shallow sea to attract fish population and throwing small nets which move with the sea current to catch these fish.

<sup>&</sup>lt;sup>5</sup> Covering land acquisition, resettlement impacts and other social impacts.

<sup>&</sup>lt;sup>6</sup> The coastal area of Jaffna is used for beach seine fishing (madal fishing). The Department of Fisheries and Aquatic Resources designated madal padus (lots) of 300m wide beach width (1.5 km into the sea) to the traditional fishermen from the area. The license for the Madal padu lots is renewed annually by the fishermen for a fee paid to the Department of Fisheries and Aquatic resources. The allottees of the madals are listed in the yearly Gazette notifications.

padu is not leased to anyone; (iv) neither he nor his children have any intention to undertaken madal fishing in this lot; and (iii) no activities of any kind will be undertaken in this madal padu (Annex 9). Even if he intends to start operations again he is prepared to shift to another location outside of the demarcated project area. The area demarcated for project implementation is hence not used for any livelihood related activities. However, some fishermen experience some disturbances in launching their vessels/ boats across project implementing area during its construction period. They perceive reduced mobility due to the intake structure being installed at the sea bed. Some community members in project implementing area (Thalaiyadi village) and its immediate impact area (Maruthankerny North and South villages) perceive certain negative impacts due to implementation of different components of SWRO plant project. Several consultations have been conducted with the fishermen communities to manage their negative perceptions and provide them accurate information about the project activities and impacts.

11. The main risk to the project would be the lack of sustained support from fishing communities on the desalination plant which will cause implementation delays and cost overruns. To address this risk several consultations have been undertaken with the local fishing communities over the last two years to understand their concerns and convey to them that they are an important stakeholder in the project. <sup>8</sup> The project design addresses concerns raised by the stakeholders, particularly the fishermen through specific design enhancements to the desalination plant and incorporation of livelihood improvements for the local fishing communities. A dedicated community outreach program will be conducted during the project implementation period to further provide explanation of the project and its' mitigation measures and address any negative perceptions that may continue to exist amongst the local community. The additional financing includes a community and awareness program (which includes production of various outreach media material) and a consultation and participation action plan to support this continuous engagement with the project stakeholders. Action plans identifying measures to address these concerns are also included in the communication and outreach strategy. The table below discusses how the ongoing and continued consultations with the local communities are addressing key concerns raised by them and other stakeholders.

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<sup>9</sup> The livelihood program is being supported under the ongoing loan.

<sup>&</sup>lt;sup>7</sup> During consultations, the Department of Fisheries and Aquatic Resources has provided assurance that he will be allotted another suitable madal padu should he wish to re-instate madal fishing operations.

<sup>&</sup>lt;sup>8</sup> Extensive consultations conducted by the EA with various stakeholders (annex 5 and 11). Consultations have been conducted throughout the project scoping and design period and the project includes a strategy for continued consultation and participation during project implementation period.

# How the ongoing and continued consultations with the local communities are addressing key concerns raised by them and other stakeholders.

Perceptions of stakeholders	Actual situation/ mitigation measures adopted in project design	How the consultation and outreach program will ensure their concerns are addressed.	Avenues available to resolve issue/s and compensations (if applicable)
Fishermen using intake and outfall areas to cross to other parts of the sea felt that their access will be disrupted and they may experience disturbances during construction period. Some fishermen were also concerned that the sea area will be declared as a high security zone and they will not be allowed to fish there anymore.	The project design takes into consideration these concerns. The EMP contains measures to ensure that contractor provides adequate access for the fishermen's boats to pass through the area during the construction period. During the operation period, a 50 meter (m) diameter area and a 15 m diameter area in the sea will be marked with buoys and lighting to clearly demarcate the intake and outfall structures respectively to enable fishermen to avoid these locations. The areas being demarcated are small enough to ensure that fishermen can continue their daily operations without having to undertake substantial diversions, which may impact their livelihoods by increasing the consumption of fuel for their boats. It was explained during the community consultations that the sea area will not be declared as a high security zone.	These measures will be communicated to the fishermen during construction and operation period through the community consultation and participation action plan and media materials produced under the communication and awareness program. The specific EMP mitigation measures will be finalized in close consultation with the communities. Negatively impacted fishermen will have access to GRM channel to redress their grievances.	GRM channel Compensations for livelihood loss for duration of impact will be made as per entitlements in the resettlement plan to affected fishermen (as decided by LARC).
Fishermen using small nets for fishing (which drift along the ocean bottom) raised concerns that their nets may get entangled in the intake and outfall structures	The surface of the intake structure will be smooth enough for the nets moving along with sea currents to pass over the intake structure without getting stuck to the intake. The diffusers located on the sea bed at the extremity of the outfall structure will be surrounded by a	These measures will be communicated to the fishermen during construction and operation period through the community consultation and participation action plan and media materials produced under the communication and awareness program,	GRM channel Compensations for loss of fishing nets and livelihood loss for duration of impact will be made as per entitlements in the resettlement plan to affected fishermen (as decided by LARC).

Perceptions of stakeholders	Actual situation/ mitigation measures adopted in project design	How the consultation and outreach program will ensure their concerns are addressed.	Avenues available to resolve issue/s and compensations (if applicable)
	bunding structure so that no nets get trapped within the diffusers. On the other hand, buoys with an illumination system (with bulbs) will be established to indicate the location of intake and outfall for fishermen so that they can avoid these areas when moving in the sea.		
Fishermen are concerned that waste from SWRO which will be discharged to the ocean will impact the salinity and water quality thereby leading to a reduction in fish catch	The detailed findings of the Environment Impact assessment were explained during community consultations. The brine effluent dispersion modelling was shown to the local communities (march 2017 consultation) and it was explained that the sea water would return to ambient salinity levels (100% dilution) at 50 -75 m from the location of the outfall diffusers, and that this is not expected to have any significant impact on the fish population. (GN level Baseline from Department of Fisheries and Aquatic resources have also been included in this report)	The outreach program will communicate specific monitoring measures that have been included in the EMP during the project design, construction and operation phase to monitor marine productivity (including establishment of baselines) and sea water quality. This will provide data to assess the impact of the SWRO on fishing yields.  Continued consultations will be undertaken with the fishermen and Department of Fisheries and Aquatic resources to assess whether there are any livelihood impacts on fishermen.	GRM channel In case the monitoring data shows a trend of reduction in fish population, a report will be made to assess the linkages between plant operations and the reduction in marine productivity. Contractor will be asked to remedy the situation through the provisions in the contract.
Madal padu operators in the project area who want to reinstate operations (this concern has not been raised by them but considered by the project)	The traditional allottees who have fishing rights in these madal padus (renewed annually through a paid license) will be provided an alternate suitable padu by the Department of Fisheries and Aquatic resources in case their madal operations in their existing lots are negatively affected after reinstating operations. Currently no madal fishing is being practices in	The provisions in the resettlement plan will be clearly communicated to the affected madals.	GRM channels Allotment of alternative madal padu to affected fishermen (who have fishing rights in those specific madals)

Perceptions of stakeholders	Actual situation/ mitigation measures adopted in project design	How the consultation and outreach program will ensure their concerns are addressed.	Avenues available to resolve issue/s and compensations (if applicable)
	the area.		
Local communities felt that the land for the SWRO plant could be allotted for the future growth of their villages.	It was explained to the communities that this land belongs to the government and has been allocated to NWSDB. They were informed that suitable institutional channels that exist to allot land for their village expansion/ future generations (land allotments are made by divisional secretariat). The divisional secretary of Vadamarachchi East is also of the opinion that Grama Niladhari area has enough land for future use. It was also explained that there is no legal provision to allocate replacement land since the SWRO plant land is not presently used by any community member.	The view expressed by a few community members was their opinion but, not for claiming replacement land. However, if the issue comes up again the mechanism for allotment of land for future generations will be explained again.	GRM channels This issue falls outside of the compensation remit as it conceptualizes a scenario in the far future.
Shop owners along the 8km stretch of transmission line expressed concern that their operations may be disrupted during laying of pipeline.  The shop owners and residence owners suggested to provide steel plates/ planks over the open trench excavated for pipe installation to provide access to their homes/ shops	The EMP provisions to maintain access via planks, manage dust, noise and vibration and undertake pipe laying in small sections were explained to the shop owners. (All shops and structures are outside of the ROW which is clear and free from encumbrances and informal activities)	The outreach program will ensure that shop owners and other community members are advised in advance regarding the construction schedules. They will also be advised regarding the final pipe alignment and their entitlements in case of any temporary livelihood losses due to the pipe laying works.	GRM channels Compensations will be given for number of days of livelihood loss. Compensations for temporary livelihood losses will be provided prior to start of construction works in that area.
Some community members have expressed their desire to gain employment during the construction and operation of the plant	It was communicated that the works will be undertaken under a DBO contract, and therefore this will be largely left to the market. They can however secure lower skilled jobs such as tree planting, cleaning etc.	The outreach program will help to raise this to the contractor, who will be encouraged to hire local labor for lower skilled jobs and possibly also provide training for their longer-term employment in the plant. There are	This is largely a factor of market forces and contractors' assessment of suitability of employment of local labor at the plant. The contractor is most likely to engage local labor for lower skilled jobs if they are slightly

Perceptions of stakeholders	Actual situation/ mitigation measures adopted in project design	How the consultation and outreach program will ensure their concerns are addressed.	Avenues available to resolve issue/s and compensations (if applicable)
		several youth and women who are interested in working at the plant.	qualified/ motivated to undergo training. This can be monitored under the outreach program.
The residents along the pipe transmission ROW suggested carrying out excavation work section by section to reduce magnitude of the disturbances. They recommend that one side of the road should be kept clear for road users at all times.	These measures have been incorporated into the EMP.	The outreach program will ensure that shop owners and other community members are advised in advance regarding the construction schedules and EMP mitigation measures to reduce construction related disturbances to them.  The excavation activities for pipe laying in front of common institutions such as schools, religious places will be carried out during holidays and during night time.  The outreach program will also help to assess any further concerns raised by the community members during the construction works.	GRM channel Losses to structures like boundary walls, fence etc. will be compensated per the entitlement matrix in the resettlement plan. Access and other noise, dust issues will be immediately remediated by the contractor. Compensations for temporary livelihood losses will be provided prior to start of construction works in that area.

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<sup>&</sup>lt;sup>10</sup> The resettlement planning survey team interviewed 25 persons from different categories such as residence owners, business men and other employers

12. Although the project does not involve any land acquisition, physical or economic displacement and/ or loss of assets for private individuals, the project is classified as category B for involuntary resettlement to provide the flexibility to undertake continuous monitoring and course correction in case of any unanticipated livelihood impacts, particularly on local fishermen, during the laying of the intake and outfall pipes in the sea. Any unanticipated resettlement impacts will be managed through the social safeguard provisions of the ongoing project. This document is prepared in accordance with the legal requirements of ADB and Government of Sri Lanka (Annex 5 - policy comparison). The NWSDB has established a separate PMIU in Jaffna NWSDB with staff excessively working for the project. They have been trained and equipped with skills for carrying out activates related to ensure social safeguard policies of the ADB and Government of Sri Lanka are properly planned and implemented. The PMIU has a dedicated sociologist with necessary skills, who has been assigned on full time basis being supported by an ADB consultant with wider experience on project reimplementation issues and administrative procedures of the Government of Sri Lanka. This will ensure that adequate technical support is provided to the sociologist of the project. Capacity building and awareness program for officers in relevant government agencies and community leaders has been initiated with the assumption that these officers will act as influencers for bringing the desired change to the communities in project area.

#### I. BACKGROUND

- 1. To support the Government of Sri Lanka's social and physical reconstruction in the north, which was subjected to almost two decades of internal conflict, the Asian Development Bank (ADB) developed the Conflict Affected Areas Rehabilitation Project (CAARP) in 2003. The resulting Report and Recommendation of the President (RRP) included a review of water resources in the Jaffna Peninsula and adjacent mainland, which led to preparation of a subsequent investment project to provide the peninsula with safe and reliable water supply and sanitation (i.e., the Jaffna and Kilinochchi Water Supply and Sanitation Project).<sup>2</sup>
- 2. ADB's loan for Jaffna-Kilinochchi Water Supply and Sanitation Project (JKWSSP) was approved in November 2010 and became effective in May 2011. The main objective of this project is to provide safe drinking water to 300,000 people in Jaffna and Kilinochchi districts in the Northern Province of Sri Lanka. Iranaimadu irrigation tank in Kilinochchi had been selected as the water source for the project. This tank is being used by farmers in Kilinochchi district to irrigate their cultivations. A memorandum of understanding (MOU) was signed in 2007 between the NWSDB and Ministry of Agriculture and Irrigation of North East Provincial Council to share water with farmers. The project planned to raise Iranaimadu tank bund by 2 feet to enhance water retaining capacity.
- 3. However, concerns have been raised by the farmers benefiting from the tank with regards to the water adequacy in the tank to share with drinking water needs in the Jaffna peninsula. Therefore, the present project is planned with the objective of supplying 24,000 cubic meters per day (m³/day) of potable water through the development of a seawater reverse osmosis (SWRO) desalination plant, which will provide relief by not diverting water from irrigation use and will simultaneously allow the groundwater aquifers to recover partially enabling the NWSDB to supply high quality drinking water to the households in the project area. The proposed SWRO desalination plant will therefore significantly improve the overall quality of life of the community.
- 4. This document is the resettlement plan. It was prepared by the Borrower in 2017 in compliance with ADB's Safeguard Policy Statement (2009) and the government's National Involuntary Resettlement Policy (2001). The document considers: (i) the project design; (ii) institutional arrangements; and (iii) social conditions in the project area.

#### II. PROJECT DESCRIPTION

5. The NWSDB is the project developer and Employer of the Project ("Employer"). The Asian Development Bank ("ADB") is providing assistance to NWSDB with project development and funding. The SWRO desalination plant site is located in a greenfield site at Thalaiyadi Village in Maruthankerny Grama Niladhari Division of Vadamarachchi East Divisional Secretariat in Jaffna District.

ADB. 2003. Report and Recommendation of the President to the Board of Directors on the Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Conflict-Affected Area Rehabilitation Project. Manila.

<sup>&</sup>lt;sup>2</sup> ADB. 2010. Report and Recommendation of the President to the Board of Directors on the Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Jaffna and Kilinochchi Water Supply and Sanitation Project. Manila



Figure 1: Proposed Desalination Plant Land Location

The project consists of three main components:

- (i) Intake /Outfall structures and associated pipeline connections to the SWRO plant:<sup>3</sup>
- (ii) SWRO Plant; and
- (iii) Water transmission line installed from the SWRO plant up to Puthukkadu junction to convey treated water to the existing pipe line delivering water to Jaffna area.
- 6. The seawater intake works will consist of: (i) intake tower; (ii) single intake pipeline connecting the intake tower to the SWRO desalination plant intake wet well (which will be located at the plant site); (iii) intake pump station; (iv) intake pipeline delivering the source seawater to the pre-treatment system; (v) and associated service facilities (electrical substation and instrumentation and control equipment). The conventional intake tower will have a coarse screen and the onshore intake pump station will include intake screens of 3 to 4 millimeters (mm) openings.
- 7. The intake system has been designed with plant recovery rate of 45%. The intake works will be designed for a total of 24 million liters per day (mld) potable water output capacity and constructed for the future expansion capacity of total 48 mld potable water output. The intake structure will be located 800 meters (m) from the shore.
- 8. The ocean bottom depth at which the intake structure (intake tower) is located will be at least 10 m from the ocean surface at mean water level. The lowest seawater entrance point of the intake tower will be at a minimum of 2 m above the ocean bottom and shall be designed such that it prevents the entrance of sand and silt. The entrance velocity of the water through the intake tower bars openings will be not more than 0.15 meters per second (m/sec) calculated at 50% of the installed water entrance surface area of the seawater screens.
- 9. The intake structure shall be supplied with a floating device equipped with a beacon light. The area around the intake is likely to be used for bottom drag net fishing by local

The pipe will traverse a stretch of the access road from Thalaiyadi to Chempionpattu GN area, and a coastal belt (beach stretch) located alongside the road stretch.

fishermen. In order to minimize the risk of net entanglements the intake structure will be designed such that it causes minimum obstruction to the fishermen's activities.

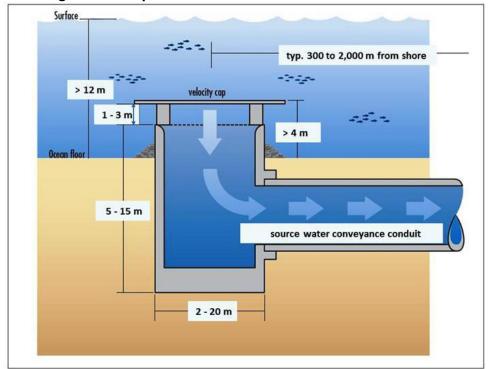


Figure 2: Sample Intake Structure for seawater Extraction

- 10. The intake piping (approx. 600-mm dia.) has been designed and constructed such that it is completely buried in the ocean bottom. The sea surface after construction will closely resemble the surface prior to the installation of the pipelines. The buried pipeline will have a minimum cover of 500 mm.
- 11. The seawater outfall works will consist of single outfall pipeline connecting the SWRO desalination plant to the sea. The outfall does not include any structure and only contains the pipeline with a diffuser system. The discharge diffuser system shall be designed and constructed such that the plant discharge is released into the ambient seawater at velocity of 3 to 4 m/sec, which will allow complete dissipation of the plant concentrate into the ambient seawater within a nominal 100 m from the top of the diffuser port. The discharge pipe (approx. 600-mm dia.) conveying SWRO discharge concentrate will be made of corrosion- and crush-resistant material. It shall be buried under the ocean bottom with a minimum coverage of 500 mm to prevent potential impact of the discharge structure on the local small-scale commercial fishing activities. Only the diffusers will be protruding 0.5- 1.0 m above the sea bed. These will be located about 500 m from the shore.



Figure 3: Waste water discharge system from the SWRO Plant.

- 12. The core reverse osmosis treatment system equipment will be arranged in four discrete membrane trains of individual production capacity of 6 mld with a total installed water production capacity of 24 mld and will be designed to produce between 6 mld and 24 mld of potable water per day. The reverse osmosis trains will be designed in such a manner that the 24 mld plant can be operated as a combination of four individual (independent) 6 mld trains if required to meet lower capacity.
- 13. The volume of all liquid waste streams generated by the SWRO desalination plant shall be determined by the contractor as the works are being tendered using a design build operate (DBO) modality, which gives the responsibility for process design to the contractor. All the water streams, except the brine concentrate from the SWRO system shall be collected (and treated if needed) in a discharge retention tank. After equalization of the plant waste streams in the tank (and their neutralization if the pH of the mixed water in the tank is outside of the range of 7 to 9), these waste streams will be blended with the SWRO system concentrate and discharged through the offshore plant outfall equipped with diffusers.
- 14. Supply and laying of potable water transmission line (DI pipe of diameter 800 mm) from potable water storage tank of SWRO plant to Puthukkadu junction (Figure 5), involves the laying of approximately 8 kilometers (km) of pipeline (including up to 5% increase in scope).

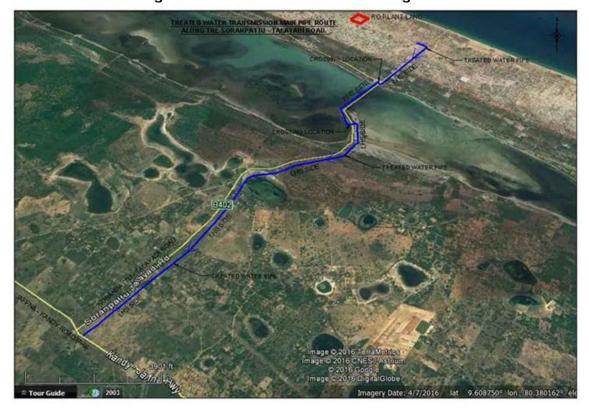


Figure 4: Water Transmission Line alignment

- 15. The contractor shall consult with the Employer throughout the design, procurement and construction activities involving the entire SWRO desalination plant and associated facilities. These include consultation on matters like access to existing public utilities, provision of power supply to the site as well as establishment of new approach roads (including upgrade of existing roads adjacent to the site), provision of new pipelines, provision of electrical services, provision of other facilities and other utility services in and around the plant.
- 16. The team preparing this report studied the area covering 2 km distance on both sides of the project site (left towards Chempionpattu *Grama Niladhari* area and right side on Maruthankerny (North) *Grama Niladhari* area). For study and monitoring purposes, this area is the project's area of influence. The details of each component of the project are shown in Table 1.

Table 1: Location of project components

Project Component and location	Relevant DS division (location)	Relevant GN division (location)	Relevant Villages	Purpose of the project component
Intake and out fall locations- 2 km distance on right side	Vadamarachchi East	J 428 Maruthankerny	-Thalaiyadi -Maruthankerny North -Maruthankerny south	Extraction of sea water and discharge of waste water (brine solution).

Project Component and location	Relevant DS division (location)	Relevant GN division (location)	Relevant Villages	Purpose of the project component
		J 426 Chempionpattu	-Chempionpattu North -Thanippanai -Mamunai	
The coastal land belt that will be used for installing intake and out fall pipe lines up to SWRO plant site	Vadamarachchi East	J428 Maruthankerny	-Thalaiyadi -Maruthankerny North -Maruthankerny south	Installation of Intake and Outfall pipe lines (which will traverse this belt) and to construct access road to the SWRO plant.
The land demarcated for establishment of SWRO plant	Vadamarachchi East	J428 Maruthankerny	Thalaiyadi	Construction of SWRO plant, distribution reservoirs and required infrastructure facilities.
Water transmission line- installed from	Vadamarachchi East	Maruthankerny	-Thalaiyadi -Maruthankerny North -Maruthankerny south	Installation of treated water transmission pipe line from SWRO plant to
SWRO plant up to Puthukkadu Junction on A9 Road.	Palai	Soranpattu Maasar	-Soranpattu -Mannaivindan -Karanthai - MaasarMuruganthanagar	Puthukkadu junction and connecting the pipe line to the existing pipe line on A9 road.

SWRO = seawater reverse osmosis.

## III. SCOPE OF LAND ACQUISITION, RESETTLEMENT AND DUE DILIGENCE

17. The project activities will not require private land acquisition or physical and economic displacement of people through impacts on related infrastructure such as buildings/ structures. The details of different components of the proposed project and possible impacts of land acquisition and resettlement are below (Table 2).

Table 2: The Possible Impacts of Land Acquisition and Resettlement

Project	Purpose of the		Existing income and	Poss	sible impacts
Component/area	project	Land availability for	livelihood activities of		
studied	component	the project	people	Direct impacts	Indirect impacts
Intake and out fall locations (2 kilometers [km] distance on right and left side of these locations is the project's area of influence)	Extraction of sea water and discharge of waste water.	Costal land comes under the purview of Coast Conservation Department. Project interventions will be limited to 500 meters (m) width of coastal area in front of intake and out fall structures (sea area within 1 km distance from the coastal belt will be used for installing intake and out fall structures)	There are 4 Madal Padu lots (beach seine fishing lots) existing on the 1.5 km long stretch of the beach in front of the SWRO. However, only 1 Madal Padu lot is located within the 500 m width of coastal area directly in front of the SWRO through which the buried intake and outfall pipes will traverse (direct project implementation area). But all these Madal Padus (including one common padu) are now abandoned and have not been operational since the 2004 tsunami. Two boat landing sites on the right side and one boat landing site on the left side of the project implementing area are presently available but they are located beyond 2 km distance from the project implementing area (outside of the project's area of influence)	Inability of 1 madal padu to undertake fishing operations.	The other 3 Madal parties located along the sea stretch close to the SWRO plant will not face any disturbances. There may be possible disturbances to the fishermen using the 3 boat landing sites. They may face difficulties in crossing the section of the sea in the project implementing area especially during the construction period. However, this will be managed through provisions in the contractor's environmental management plan for clear demarcation of intake and outfall locations and allowing for passage areas during construction so that fishermen's mobility is not restricted. The fishermen also perceive that even during operation phase their mobility (in fishing boats) will be disturbed due to the presence of the intake structure on the sea bed. During the operation period, a 50 m diameter area in the sea will be marked with buoys and lighting to clearly

Project	Purpose of the		Existing income and	Poss	ible impacts
Component/area studied	project component	Land availability for the project	livelihood activities of people	Direct impacts	Indirect impacts
					demarcate the intake and outfall structures respectively to enable fishermen to avoid these locations. The areas being demarcated are small enough to ensure that fishermen can continue their daily operations without having to undertake substantial diversions, which may impact their livelihoods by increasing the consumption of fuel for their boats.
The coastal land belt in front of SWRO plant which includes a road and access road to the plant.	Installation of buried intake and outfall pipe lines and the construction of access road to the SWRO plant.	This costal land belt comes under the purview of Coast Conservation Department and the land towards the SWRO plant area is also public land administered by the Vadamarachchi (East) DS division.	This lands are not used for any income generating activities. People use this coastal land belt as access (there is a road) to reach villages on the left side of the project area. The existing access road is being used by the people to go to the other villages like Thanippanai and Chempionpattu.	Possible disturbances to users of the coastal belt as access may be disrupted during construction activities. Access disruptions (both in land and sea) will be managed through provisions in the contractor's environmental management plan.	No indirect impacts expected.
The land demarcated for the establishment of SWRO Plant	Construction of SWRO plant, distribution reservoirs and required infrastructure facilities.	This 4-hectare land is state land allocated for the NWSDB by the DS in Vadamarachchi (East)	The entire land is vacant and not used for any economic or social purposes.	Some Thalaiyadi community members are of the view that the second-generation families will be losing this land, which can be used	No direct impacts expected and Divisional Secretariat, Vadamarachchi East informed that state lands are available for the future expansion of the village.

Project	Purpose of the		Existing income and	Poss	sible impacts
Component/area	project	Land availability for	livelihood activities of		
studied	component	the project	people	Direct impacts	Indirect impacts
				for their future village expansion.	
8 km water transmission line (from SWRO plant up to Puthukkadu junction on A9 road).	Transmission of treated water from SWRO plant to the existing distribution network point at Puthukkadu Junction on A9 road. The size of the pipes for the transmission main is 800 millimeters (mm) diameter.	The water transmission pipe line runs through Maruthankerny Grama Niladhari division in Vadamarachchi East and Maasar and Soranpattu Grama Niladhari divisions in Palai Divisional Secretariat division. This pipe line goes through public access road and Pradeshiya Sabha road and connects to the RDA road called Puthukkadu - Thalaiyadi Road. The transmission line will be installed in the existing right of ways of these roads. Pipes will be laid from SWRO plant site to lagoon along the lefthand side of the road and along the lagoon the pipe will be laid on the right-hand side of the road. From the lagoon to Puthukkadu junction the pipe will be laid on the lefthand side of the road.	The road reservation demarcated for installation of pipe is not encroached by any community member for economic or social activities. The resettlement team observed a few houses, shops, and other institutions located facing towards road edge. These properties are located at a minimum distance of 2 m from the RDA's road belt demarcated to install the water transmission line. These include 39 houses, 25 shops and 6 public institutions. There are 25 trees located in the road reservation (different sizes) and some of them may be required to be removed. These trees are not located on private lands. Open cut method will be used for the pipe lying along the transmission main. The pipeline will be laid in sections to avoid any adverse impacts.	Some trees (about 10 to 15) may have to be relocated/ replanted. These are located in public land (road reservation). No other direct impacts are expected under this component. The Environmental Management Plan contains provisions to design the pipe alignment in such a way to mitigate/ minimize the cutting of trees.	Disturbances to road users, shop keepers, access difficulties for some households, public institutions (during construction period only). The contractors will be required to follow environmental management plan which will have mitigating measures for reducing access disruptions (e.g provision of planks for temporary access etc.)

Project	Purpose of the		Existing income and	Poss	ible impacts
Component/area studied	project component	Land availability for the project	livelihood activities of people	Direct impacts	Indirect impacts
		The tail end section of the line will be			
		installed on the road managed by			
		Vadamarachchi			
		Predeshiya Saba and through a public land			
		nor used for other activities. The pipes			
		will be laid within the			
		existing right of ways of the roads, which are			
		free of encumbrances			
		or encroachments.			

18. The properties observed along the proposed transmission pipeline route are summarized in Table 3. Details of those properties and their location maps are given in Annex 1.

Table 3: Properties Observed alongside the Right of Way of proposed water transmission line (observed from Puthukkadu Junction)

Distance from	Hou	Ises	Shops Go			ent offices	Government offices Trees		Sub roads	
junction (km)	L	R	L	R	L	R	L	R	L	R
0-1	2	4	3	4	1	1	1	2	1	2 (gravel)
1-2	3	1	1	1	-	1	2	-	1	3
2-3	1	1	-	3	-	1	-	1	2	2
3-4	-	-	-	-	-	-	-	-	-	-
4-5	-	-	-	-	-	-	-	-	-	-
5-6	5	6	5	2	2	1	3	7	2	2
6-7	10	6	3	3	4	1	4	6	3	2
Total	21	18	12	13	7	5	10*	15*	9	9

<sup>\*</sup> These trees are on public land and are not privately owned. These can remove them with the approval from Divisional Sectretariat, Vadamarachchi East and Sri Lanka

Timber

Cooperation.

#### IV. SOCIO-ECONOMIC INFORMATION

- 19. The proposed sea water desalinization subproject is planned to be constructed at Thalaiyadi Village in the Maruthankerny Grama Niladhari Division of the Vadamarachchi East area. All three project components (the sea water intake/outfall, water transmission line, and SWRO plant) will be located within the jurisdiction of this Thalaiyadi village. 14 There are no human settlements located in the specific project implementing area. The intake, outfall and 500 m radius of these points in sea and the coast are free from human activities. This area was used for Madel fishing previously (refer para 35). Similarly, the 4 hectares (ha) land and its vicinity up to about 750 m radius are also free from human settlements. The entire are is scrubland. Human settlements are found only in an area located after 750 m radius from the boundary of the SWRO plant land. This entire area, including the project implementing area falls under the jurisdiction of J 48 Marathernkerney Grama Niladhari division. This division has 3 villages and the total populations in these 3 villages are 1,351 with 502 families and all the people in these villages are Tamils. These villages are Thalayadi, Maruthankerny North and Maruthankerny South. 15 The distribution of Maruthankerny Grama Niladhari's population in 3 villages per ethnic group is shown in Table 4. The religious affiliation of the population in this Grama Niladhari division is provided in Table 5.
- 20. Other adjacent village is Thanippanai which is located 2 km from the project area and falls under the Chempionpattu Grama Niladhari division. This village is located outside of the project's area of influence and has hence not been elaborated in this section.



Figure 5: Maruthankerny Grama Niladhari division M

<sup>15</sup> The latter 2 villages in Maruthankerny Grama Niladhari division (Maruthankerny North and Maruthankerny South) are also defined as indirectly project impacted communities because they are also using the vicinity of sea area of the intake and outfall for fishing activities.

The population in Thalaiyadi Village in Maruthankerny Divisional Secretariat is defined as project relevant population because the proposed project is located in Thalaiyadi village.
 The latter 2 villages in Maruthankerny Grama Niladhari division (Maruthankerny North and Maruthankerny South)

Table 4: Population in villages near the proposed project site (Marathernkerney Grama Niladhari division)

Village	Populat	Population by ethnic group						
	Sinl	hala	Tamil		Muslim		Total	
	No	%	No	%	No	%	-	
Talayadi	0	0	502	100	0	0	502	
Maruthankerny North	0	0	478	100	0	0	478	
Marathenkerney South	0	0	371	100	0	0	371	
Total	0	0	1351	100	0	0	1,351	

Source: Wadamarachchi East Divisional Secretariat and relevant Grama Niladhari offices.

21. Majority of population in the Grama Niladhari division is Tamil Catholic and the rest are Hindus. The information related to population by religious diversity is shown in Table 5.

Table 5: Population by religions in villages near the proposed project site

Villages	Population by religions								
	Buddhist		Hindu		Catholics		Total		
	No	%	No	%	No	%	-		
Talayadi	0	0	0	0	502	100	502		
Maruthankerny North	0	0	430	90	48	10	478		
Marathenkerney South	0	0	334	90	37	10	371		
Total	0	0	764	57	587	43	1351		

Source: Wadamarachchi East DS and relevant GN offices.

22. Except Maruthankerny (South) village the same percentage of male and female population is reported from other 2 villages. The data on population by Gender diversity is shown in Table 6.

Table 6: Sex disaggregated population data

1	rable of cox alonggregated population data								
Villages	Population by ethnic diversity								
	Fen	nale	Male	Total					
	No	%	No	%	-				
Talayadi	249	50	253	50	502				
Maruthankerny North	240	50	238	50	478				
Marathenkerney South	204	55	167	45	371				
Total	693	51	658	49	1351				

Source: Wadamarachchi East DS and relevant GN offices.

23. Majority of the population in the area (3 villages near the project site) falls under productive age, 31-55. The distribution of population in 3 village in terms of their age groups is shown in Table 7.

Table 7: Population by age diversity

villages	Population	Population by age diversity							
	0-15		16-30		31-55	31-55		55 <	
	No.	%	No.	%	No.	%	No.	%	-
Talayadi	125	25	151	30	186	37	40	8	502
Maruthankerny North	129	27	134	28	167	35	48	10	478
Marathenkerney South	85	23	115	31	145	39	26	7	371
Total	339	25	400	30	498	37	114	8	1351

Source: Wadamarachchi East DS and relevant GN offices

Table 8: Vulnerable households- income and expenditure details

	Vulnerable	Vulnerable Community Details						
Villages	FHH	Samurdhi Beneficiaries	Other assistance (Social Development)	Average Income/month	Average Expenditure (Rs)			
Thalaiyadi	26	53	19	54000.00	25567.00			
Maruthankerny North	18	110	24	50000.00	29895.00			
Maruthankerny South	16	128	15	48000.00	32286.20			
Total	60	291	58					

Statistical Hand Book, Vadamarachchi East: 2016)

24. According to the qualitative information expressed by the community members consulted, the education level in the area is very low compared to other Grama Niladhari divisions of Jaffna. This Grama Niladhari division is located in an interior area where government and nongovernment organizations (NGOs) have invested little for the post war rehabilitation activities. There are two schools located in the Grama Niladhari division- one school is limited to primary education and only 40 students study at present. The second school has classes only up to G.C.E. O- level and its student population is about 227.

#### A. Other Observations of the Socio-Economic Environment

25. The J48 Maruthankerny Grama Niladhari division is defined as an area with traditional population. The 3 villages in this Grama Niladhari division have suffered significantly during civil war period. The destruction due to tsunami in 2004 was far serious than civil war in this GN division. For example, all the houses in Thalaiyady and Maruthankerny North villages were destroyed by tsunami. These two villages were recreated in areas about 300 m away from the coast. Each family has been given new houses established in small plots of land (30-40 perch). The population in the project area is largely homogenous (Tamil) and the socioeconomic survey and consultations show that no distinctive and separate indigenous peoples live in the project area.

#### B. Vicinity of the Project Implementation Area

26. **Population.** the project implementing area comes under 2 divisional secretaries-Vadamarachchi east and Palai. The area located in the project's 2 km zone of influence falls under 4 Grama Niladhari divisions- Maruthankerny and Chempionpattu in Vadamarachchi East Divisional Secretariat division and Maasar and Soranpattu in Palai Divisional Secretariat division. The details of the population residing within this 2 km stretch from different project components is shown in Table 8.

Table 8: Population in 2 Kilometer Distance from Project activities (Sex disaggregated)

Table 6. Fopulation in 2 Knometer Distance nom Froject activities (Sex disaggregated									
Project	Administrative unit	Fema	le	Mal	е	Total			
component		No	%	No	%	No			
Intake, outfall,	Vadamarachchi East	8019	51	7805	49	15,824			
coastal belt	Divisional Secretariat								
between sea and	Maruthankerny Grama	693	51	658	49	1,351			
the SWRO plant,	Niladhari								
SWRO plant land	Chempionpattu Grama	698	55	568	45	1,266			
	Niladhari								
Water	Vadamarachchi East								
Transmission	Divisional Secretariat								
pipeline	Palai Divisional Secretariat	6277	52	5794	48	12,071			
	Division								
	Maasar Grama Niladhari	294	51	283	49	577			
	division								
	Soranpattu Grama Niladhari	481	53	426	47	907			
	Division								

- 27. In Vadamarachchi East Divisional Secretariat division the entire population is Tamil. In Palai Divisional Secretariat division 99.8% of the population is Tamil and the rest of them are Muslim.
- 28. In Vadamarachchi East Divisional Secretariat division 72% of the population comprises of Hindus and the rest are Christian. Eighty six percent (86%) of the Tamil population are Hindus and 14% of them are Christian in Palai DS Division.

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<sup>&</sup>lt;sup>16</sup> One perch equals 25 square meters.

#### C. Economic Activities

- 29. Four Grama Niladhari divisions, 2 in Vadamarachchi East Divisional Secretariat division and 2 Grama Niladhari divisions in Palai Divisional Secretariat division are failing under the vicinity of the project implementing area. The SWRO plant and intake and outfall structures are located in the Maruthankerny Grama Niladhari division of Vadramarachchi East Divisional Secretariat. The transmission pipe passes through the Palai divisional secretariat.
- 30. Maruthankerny Grama Niladhari division: The project implementing area is located in Maruthankerny Grama Niladhari division, which comprises of 3 villages—Thalayadi, Maruthankerny North and Maruthankerny South. 100% of households in Thalayadi village are engaged in fishing activities as a means of livelihood. In Maruthankerny North 90% of the families are fishermen and the other 10% are involved in agriculture. Maruthankerny South village has 60% fishery families and 40% families while involved in agricultural activities in high lands and cultivation of paddy and other field crops. About 85% of the families in these 3 villages are fishermen. The data related to fishing families in Muruthankerny Grama Niladhari division is shown in Table 9.

Table 9: Fishing population Maruthankerny Grama Niladhari division

Year	Fishing Families	Total population of fishing families	Active fishermen
2012	235	943	358
2013	307	886	255
2014	244	886	255

Source: Wadamarachchi Divisional Secretariat Office

31. There are 2 fisheries associations with the membership of fishermen in 3 villages of Maruthankerny GN division. About 180 fishermen are members of this fisheries association. The data on fish production (in kilograms) in these two fisheries associations is included in Table 10.

Table 10: Fish production in Maruthankerny GN area

G.N Division & Fishermen's Cooperative Society	2011	2012	2013	2014
Maruthankerny -North, Fishermen's Co- operative Society	415355	456600	403560	372840
Maruthankerny Thalaiyady Fishermen's Co -operative Society	NA	NA	NA	123600

Source: Wadamarachchi Divisional Secretariat Office.

#### D. Economic activity in vicinity of various project components:

32. **SWRO plant land.** This land in extent of about 4 hectares (ha) is not used for any economic or other livelihood activities. It is free of any encumbrances and only has scrub vegetation. It is public land which comes under the preview of Vadamarachchi East Division Secretariat.

- 33. **The coastal belt between sea and the SWRO plant land.**<sup>17</sup> this belt of land does not have any human settlements or other economic activities. This stretch only has one access road which connects to Chempionpattu Grama Niladhari division.
- 34. **Water Transmission line.** This pipeline will be laid in the right of way of public roads. The area in the RoWs is free from encumbrances and is not used for any economic activity. Some 25 shops are located along this alignment, which may suffer from access disruptions during the pipe -laying works. These negative impacts will be mitigated through provisions in the contractor's EMP. The head section of the water transmission line (section from Puthukkadu junction on A9 road) is falling within 2 Grama Niladhari divisions of Palai Divisional Secretariat division- Maasar and Soranpattu. The entire Maasar Grama Niladhari division can be regarded as an agricultural area. The major crop grown is coconut, which is grown in home gardens and other high lands. The land use in Soranpattu Grama Niladhari division is similar to land use in Maasar Grama Niladhari division. Most of the families are involved in coconut cultivation. The people in these 2 Grama Niladhari divisions are mainly from the agricultural community and some are employed in other activities. There are no people involved in fishery activities in these 2 Grama Niladhari divisions.
- 35. **Beach stretch through which Intake and outfall will traverse.** The project requires 50 m width<sup>19</sup> and about 1 km distance towards the sea for the establishment of intake and outfall structures. The 1.5 km stretch of the coastal land including the shallow sea on both sides of the intake is designated as a Madal fishing (beach seine fishing) area which is sub-divided into madal padus (lots) of 300 m each. These lots are allotted by the Department of Fisheries and Aquatic resourcesto the traditional local madal operators who are given an annual madal fishing permit for a fee. At present large scale Madal fishing activities have not been operational in the area for the last 13 years. This stretch in front of the SWRO plant is divided into 5 madal padus (lots), 3 of which were designated to local fishermen, with the remaining two lots are dedicated as a common padu.<sup>20</sup> Figure 6 shows the madal padu lots in relation to the SWRO plant and the location of the intake and outfall pipes. From the figure, it can be clearly seen that the intake and outfall pipes will be laid through one madal padu lot only.

<sup>&</sup>lt;sup>17</sup> This is the stretch of land between SWRO plant land and the beach area where madal padus are designated.

The field survey findings indicate that all the structures along the transmission pipe alignment are located more than 2 m away from the edge of the public roads.

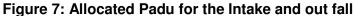
The actual width for pipe laying will be determined by the contractor during the design stage of the design-build

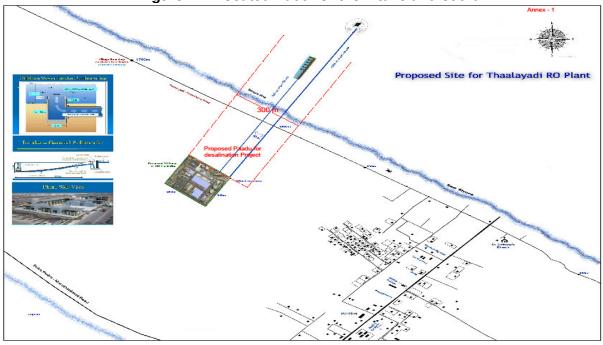
The actual width for pipe laying will be determined by the contractor during the design stage of the design-build operate contract. Lanka Hydraulic Institute has recommended a 50 m width as being adequate for laying of intake and outfall pipes. The intake and outfall will terminate approximately 800 m and 500 m from the shore respectively.
In the sketch, there are two madal lots which were designated as common padus. Initially one of these lots (on the

<sup>&</sup>lt;sup>20</sup> In the sketch, there are two madal lots which were designated as common padus. Initially one of these lots (on the other side of Thalayadi junction) was designated to Ponnuthurai before the 2004 tsunami. After the tsunami the person could not be traced so the Fisheries Department allocated this as a common paddu. The permit for this is allocated temporarily at the request of any local fisherman. This lot is generally left unused.



Figure 6: Madal padus located near project implementation area.





36. The resettlement study team obtained the details of the Madal operators involved in fishing activities prior to tsunami. The details of the Madal Padus form the Thalaiyadi area and both sides such as Chempionpattu and Maruthankerny North, on both sides of the intake were obtained from the Department Fisheries and Aquatic Resourcesin Jaffna.

Table 11: Details of previously existing 4 Madal Padu in Thalaiyadi area

Padu	Name of the	Date of 1 <sup>st</sup> commencement	Current situation
Number	operator	of padu operation	
1	Rasayya	Do not know	Presently abandoned, Permit holder has passed away. At present Mary Cristian has the permit, but no madal operations are being undertaken
2	Aliston sudha	Do not know	Presently abandoned and not operated in recent times. This person has left the area after tsunami and even villagers of Thalaiyadi are not aware of his present residence or other details.
3	Arunalandan	Do not know	This padu is located within the project implementing area designated for the proposed intake and out fall structure. Records from Department of Fisheries and Aquatic Resources indicate that he has not renewed his annual license in over 10 years. The owner abandoned the operations and left the country after the 2004 tsunami. The resettlement team met this person on 6-January2017 and Mr Arunalandan has categorically mentioned that he does not have intention to come back for fishing. Even if he comes back he indicated that he will be ready to shift to another location recommended by the project and the Department of fisheries and Aquatic resources
4	Ponnuthurai	Do not know	Permit holder has passed away; his son is not living in the village and is an employee in Colombo area. Thevillagers do not know where he is employed. His allotted padu has now been designated as a common padu.

Table 12: Details of Madal Padu in Maruthankerny (located outside of 2 Kilometer zone of influence of project)

Padu No	Name of the operator	Date of 1 <sup>st</sup> commencement of the padu operation	Current situation
1	T.Sakunthalairasa	Do not know	Presently he has the permit and is undertaking fishing operations.
2	R.Vettimaran T.Nesakulenthiran	Do not know	Presently he has given his permit to out siders and they doing fishing. However, they are uncertain if they will continue fishing operations due to paucity of fish.
3	P.Premaparan	Do not know	Presently he has the permit and is undertaking fishing operations.

Table 13: Details of Madal Padu in Chempionpattu (2 km away from project implementing area)

Padu No	Name of the operator	Date of 1 <sup>st</sup> commence the padu operation	Current situation
1	A.Veerakumar		
2	I.Punniyamoorththy		
3	K.Vethanayagam		
4	M.Jesu Logathas		

	Name of the	Date of 1 <sup>st</sup> commence the padu	
Padu No	operator	operation	Current situation
5	A.F.Nirmalraj		
6	T.Uthayalal		
7	A.Alfred	Do not know	Presently they have the permit and are
8	T.Uthayathas		undertaking fishing operations. The fishing
9	M.P.Pathinathar		permits are renewed annually.
10	A.Alanrose		
11	S.L.Mariyanayagam		
12	S.Sriskantharajah		
13	K.Chootta		
14	G.Regan		
15	M.L.Wasington		

- 37. The resettlement study team also interviewed the Assistant Director Department of Fisheries and Aquatic Resources (Mr. A. Aravindan), fishermen in Maruthankerny and S. Velayudan (President of Fishery Association in Maruthankerny) on 6 January 2017 and got confirmation that the 4 Madal fishing operators (near the project implementing area) have not been operating in the project implementing area and its immediate vicinity since 2004 (after the tsunami incident). The main reasons that madal fishing activities ae no longer undertaken include: (i) the villages do not have sufficient labour to undertake this labour intensive form of fishing because several youths are migrating to the cities for better employment activities; and (ii) the operators' fishing equipment got lost/ damaged during the tsunami, which they have not replenished. Therefore, currently there is no person involved in Madal fishing in the project implementing area which includes the intake and outfall areas. Per the same informants interviewed, other fishery activities are taking place that are located about 1.5 (kilometers) km to 2 km distance from the project implementing area. These fishing areas of the sea are close to the present boat landing sites on right and left sides of the project implementing area
- 38. The resettlement study team studied one small scale Madal fishing activity as a representative case study and its salient features are summarized in Box 1 below.

Box 1: One representative sample of madal fishing activity

Name of the small scale Madal Operator:

Location of the operation: Subramaniyam Aravindam.

Number of operations per day:

1.5 km distance from intake area on right side.

Number of assistants involved in his Madal

5-6 times he operates the net with his other assistants.

Activity:

Income of an assistant: About 18

Income of small scale Madal Operator: SLRs.1500.00 per day SLRs10000.00 per week Estimated Annual Catch

Institutional expenditure for operation: SLRs30000.00 per week

1500 kg

He has to pay some money to the fisheries association per year depending on the success of his fishery activity: In 2015 he paid SLRs20000.00 to the fishery association and in 2016 he paid only SLRs 5000.00

With regards to direct impacts, the intake and outfall pipes will traverse one single madal padu lot. These pipes will be buried in the ground. The person who owns this lot has abandoned fishing operations post the 2004 tsunami disaster.<sup>21</sup> The original owner (Mr. S. Arunalandan) has clearly indicated that he does not have any intention of beginning of fishing operations again. He has also confirmed via letter (Annex 9) that even if he intends to reinstate Madal Fishing operations, he is prepared to shift his location outside of the demarcated project area. The agreement with Mr.Arulanantham has been reached through letter where he grants consent for the project to use the madal area and also advises that he will not be using that madal padu in the future for fishing activities. The consent letter and third party report are provided in Annex -9 and Annex 14 respectively.

- 40. **Sea area in Maruthankerny Grama Niladhari division.** The information above reflects that the locations identified for project implementation are not significant in terms of their usage for livelihood activities (fishing). Nevertheless, the sea area where intake and outfall structures will be installed is being used by some fishermen for their mobility during the fishing season (not for fishing but to pass the project implementing area to reach other areas of the sea for fishing). These fishermen pass the project location especially, during February to November to reach the deep-sea area for fishing. The fishermen do not use the project implementing area mainly due to lack of large fish varieties such as tuna, blood fish etc. in this stretch of shallow sea. The provisions under the EMP will ensure that the contractor allows sufficient access for the safe passage of boats during the construction period (refer Chapter III- table2)
- 41. The entire Grama Niladhari area has only one in-boat fishing craft. Even the out-boat fishing crafts in the Grama Niladhari division are limited with only 34 such crafts available in the entire Grama Niladhari division. The number of nonmechanized fishing craft is about 62. This data indicate that fishing community in the Grama Niladhari division is poor due to the limited access to fishing crafts.
- 42. The engine boats are used to catch fish in deep sea. The common fish varieties they caught include Gal malu, Blood fish, Atawalla and Kudu Atawalla. The average value of the production in a day range from SLRs3000 –SLRs5000 but, they go for fishing only about 15-20 days per month.
- 43. Non-mechanized boats are also used to catch fish varieties such as Hurulla and Bollu in common. The daily income per boat ranges from SLRs2000-SLRs3000.
- 44. Some people also throw nets in shallow sea and these nets move horizontally in the sea and fishermen draw the nets to the coasts after getting some fish caught into the nets. This method is practiced by traditional fishermen with their long acquired knowledge. They also can catch about SLRs1500- SLRs2000 worth of fish in one event.
- 45. Madel fishing is also practiced along the sea coasts in the Maruthankerny Grama Niladhari area except about 1,700 m section in front of the sea demarcated to install intake and outfall pipes. About 15-20 persons are involved in one Madal party's operations and the value of fish they catch per day ranges from SLRs50000 SLRs.75000. About 50% of the income of a Madal party goes to the owner of the party and the rest goes to the other fishermen.
- 46. The details of fish production in the Maruthankerny Grama Niladhari division are provided below.

<sup>&</sup>lt;sup>21</sup> This person had gone to Switzerland after tsunami and since then up to 2013 this Madal Padu was neglected.

Table14: Fishing population and Fish Production - Maruthankerny Grama Niladhari division (GND)

				Fish Production/Per
No	Year	Families Fishery	Fishing population	Year
1.	2012	235	943	174000 Kg
2	2013	307	886	105000 Kg
3.	2014	244	886	86000 Kg
4.	2015	207	829	196000 Kg
5.	2016	221	885	340000 Kg

Source: Department of Fisheries and Aquatic Resources: 2017. As per the Department, no fishing is conducted in area of the 5 madal padus located close to project implementing area

47. The fishermen in Maruthankerny Grama Niladhari division are also involved in dry fish production in some months of the year. The total dry fish quantity produced during previous years in the Grama Niladhari division is provided below:

Table 15: Dry Fish production in Maruthankerny Grama Niladhari division

Year	(in Kilograms)
2010	295
2011	37,910
2012	17,400
2013	10,500
2014	8,600
2015	8200
2016	16500

Source: Department of Fisheries and Aquatic Resources: 2016

- 48. The most popular types of dry fish produced by the fishermen in Maruthankerny Grama Niladhari area include, Paraw and Soodai and the price of dry fish Paraw is about SLRs500/kg and the Soodai price is about SLRs 60/kg.
- 49. The EMP contains provisions for establishing baselines for marine productivity through sampling at various locations. This data will be corroborated with the baseline data as the above data is for the entire Grama Niladhari division and not specific to the project's immediate area of influence.

#### E. Fishing activities outside of the project implementing area

50. The details of the observed economic activities in the sea outside of the project implementing area are described in this section. There are no fishermen involved in fishing in the intake and outfall area even up to 1.5 km radius from the plant as per the officers of the Fishery Association in Thalaiyadi. Even though large scale Madal activities are not performed at present, many marginal fishermen (about 25 to 30) are involved in fishing using small scales nets for Madal fishing. Most of them are involved in this activity in shallow sea area located towards the right side of intake. These small scale Madal operators use the shallow sea area located about 1.5 km to 2 km distance from the intake and outfall area (located in front of 2 boat landing sites on right side of the intake area). The medium and small scale nets are used for fishing and these nets are drawn by a group of 6 to 7 persons to the coastal area. Most of the members involved in this kind of fishing activity are residing in Maruthankerny North village.

- 51. The fishermen operating in the area anchor their boats to boat landing sites in 2 locations- 1300m towards right side of the intake and other one is 600m in left side of intake. The boat landing site on the left side of intake is used to anchor 25 engine boats and 12 rafts. The boat landing site located towards the right side of the intake is used to anchor 39 boats and 10 rafts. Apart from these 2 boats landing sites located within 2 km radius there are other 2 boat landing sites beyond 2 km radius from the intake area. These are n the Chempionpattu Grama Niladhari division. One located towards the left side is used to anchor 20 boats and 10 rafts and the second one located towards the right side is used to anchor has 45 boats and 25 rafts.
- 52. The people in the villages located near proposed project area such as Thalaiyadi, Maruthankerny North and south, Chempionpattu, Thanippanai, Mamunai and Chempionpattu use these boat landing sites for launching their boats to the and pass the shallow sea area in front of the project implementing area. About 100-150 boats during fishing season pass the project area when they are launching their boats for deep sea fishing. The fishermen having rafts are involved in shallow sea fishing activities and they pass the sea intake area when they are roaming for catching fish. These people do fishing in the shallow sea area -usually not beyond 750 m to 1 km away from the area demarcated for the intake and out fall construction. They catch small fish varieties such as Bollu, Hurulla and other small fish varieties known as Gal Malu in local term. The perceive that the project may lead to disruption of their free movement through the project implementing area to reach other locations of the sea for fishing. They expect these disturbances during construction as well as during the post-construction period. These issues have been discussed during the consultations and project design and mitigation measures have been shared with them as well.



Figure 11: Fishermen going to sea in wooden raft

The Chempionpattu Grama Nildhari division in Vadamarachchi Divisional Sectretariat division has 416 families of which 320 (77%) are categorized as families involved in fishing activity. The rest of the families are dependent on limited agriculture activities in their home gardens, and others are in various modes of self-employment. About 23% of total families in this Grama Niladhari division are involved in non-agricultural income generating activities (96 of 416 families). Out of 96 families, 40 cultivate vegetables in their home gardens.



Figure 12: The boat landing site

Apart from fishermen involved in fishing using boats there are some fishermen using 53. traditional methods for fishing. These methods are practiced at a minimum distance of 1.5 km to 2 km distance from the project implementing area. The methods being followed are small scale fishing, fishing using gears, drift gill net fishing, long line fishing and bottom set gill net fishing (Annex 13. About 10 to 15 persons from Maruthankerny village are involved in these kinds of activity irregularly between February to November. These types of fishing activities are especially conducted in the shallow sea area located in front of 2 boat landing sites on the right side of the intake and out fall areas (location map is given in Annex 1). These fishermen will not face negative impacts during construction or operation periods of the project as the contractor's EMP has provision for granting sea access to the fishermen during the construction period so that they are not forced to undertake long detours to get to other parts of the sea for fishing. During the operation period, a 50 m diameter area and a 15 m diameter area in the sea will be marked with buoys and lighting to clearly demarcate the intake and outfall structures respectively to enable fishermen to avoid these locations. The areas being demarcated are small enough to ensure that fishermen can continue their daily operations without having to undertake substantial diversions, which may impact their livelihoods by increasing the consumption of fuel for their boats. However, the fishermen fear that their fishing area may be declared as area belonging to the project during its operation phase. They are also of the opinion that shallow sea fish population in the area as whole may go down due to operation of project activities.<sup>23</sup> Several consultations have been held on an ongoing basis to discuss these concerns and dispel the doubts of the fishermen with regards to the perceived negative impacts of the project (Annex 5).

54. The fish varieties they catch are small scale fish and they are sold in Vadamarachchi area. This group will not have any negative impacts during construction or operation stages of the project since the nets they use for fishing are not moving from the locations (these are static) and are laid in sea areas located far (at least 500 m) from the intake area. Nevertheless, some of the persons under this group believe that fish population in the shallow sea may go down due to the proposed project and their activities in the shallow sea will be negatively impacted.

#### V. EXPECTED IMPACTS OF THE PROJECT AND CATEGORIZATION

55. Although the project does not involve any land acquisition, physical or economic displacement and/ or loss of assets for private individuals, the project is classified as category B

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<sup>&</sup>lt;sup>23</sup> This was told to them by some persons in Maruthankerny village.

for involuntary resettlement to provide the flexibility to undertake continuous monitoring and course correction in case of any unanticipated livelihood impacts, particularly on local fishermen, during the laying of the intake and outfall pipes in the sea. There will be no direct negative impacts on the current income generation of the local people. Nevertheless, there will be some perceived indirect negative impacts due to implementation of the proposed project. These perceptions and the related mitigatory measures included in the project design and implementation schedule are provided in Table 16 below.

**Table 16: Potential /Perceived Negative Impacts by the Local Communities** 

		Views of the resettlement study	
Project component		team based on consultations with	Mitigatory measures suggested in
location	Negative impacts perceived	communities	project design and implementation
Up to 2 kilometers (km)	The, marginal fishermen are parking	The construction of intake and outfall	The sea area used for construction of
distance on right side	their boats on the right side of the	structures will take about 36 months	intake and outfall structures will be
from Intake and out fall	intake area. They perceive that they	to complete. Fishermen passing this	demarcated during construction and
locations	will have difficulties in passing the	area of the sea may face mobility for	operation phase for fishermen to
	intake area to reach other parts of sea	their daily operations may face	avoid potential disturbances. The
	for fishing (about 100 to 150 boats per	inconveniences (access restrictions)	contractor's EMP contains provisions
	day during fishing season). The other	during this period. Per the design	to ensure that the contractor provides
	group of fishermen also mentioned that	engineers the intake's surface is	adequate space for fishermen to
	the nets they use to catch fish may get	smooth enough so that the nets will	traverse this area during the
	entangled in thein the intake structure.	not get entangled within the structure	construction works. The surface of
	Some of the leaders of the fisheries	and can float un-encumbered within	the intake structure will be smooth
	association in Maruthankerny North	the sea. Therefore, there will not be	enough for the nets moving along
	village perceive that intake and out fall	negative impacts as perceived by the	with sea currents to pass over the
	pipes installed in the sea will become	fishermen. The resettlement study	intake structure without getting stuck
	barriers for their free mobility in the sea. The resettlement study team	teams are of the view that only few, members of the fishing community in	to the intake. On the other hand, buoys with an illumination system
	informed these community leaders that	Maruthankerny North village are	(with bulbs) will be established to
	the intake and out fall pipes will be	having this negative perception. An	indicate the location of intake and
	buried in the ground as well as in the	awareness program should be	outfall for fishermen so that they can
	sea area and therefore, this perception	implemented gradually to make them	avoid these area when moving in the
	in inaccurate.	aware of the proposed project and its	sea. The area marked in the sea will
	The same fishermen also perceive that	intake and outfall designs. Some	be very small (50 meters [m]
	waste water released to the sea	fishermen including the leaders of	diameter area around intake and a
	though outfall pipe may lead to	fishery association in Maruthankerny	15 m diameter area around outfall)
	reduction in fish population in the area	North are not aware that intake and	so as not to cause disruptions to
	around outfall structure. They believe	outfall pipes will be buried under the	current sea movement patterns of
	that that Madal padu operators may	bottom of the sea. They also don't	the fishermen. In any case, even with
	face difficulties in reinstating their	know that these pipe lines will not be	these measures if any net or boat get
	operations, should they wish to.	a hurdle for their operations. There	damaged due to the project's
		will be some disturbances only during	infrastructure such damages will be
		construction period of the intake and	compensated. If the previous Madal
		outfall during which fishermen can	padu operators (4 persons) come
		avoid the construction site. The area	back (highly unlikely), they will be
		will be demarcated with electrical	assigned with suitable areas outside
		illumination.	of the project implementing area for

		Views of the resettlement study	
Project component		team based on consultations with	Mitigatory measures suggested in
location	Negative impacts perceived	communities	project design and implementation
			them to continue their activities.
			However, the continuous awareness
			activities being carried out by the PMIU of the project will provide
			accurate information for the local
			fishing community to get clarity on
			some of their misconceptions about
			the project.
			The project will not declare any area
			of the sea as high security zone
			demarcated for the project. A small
			15 The fishermen can have the same
			mobility but, they will be compelled to
			avoid the intake structure.
			Specific monitoring measures have
			been included in the EMP during the
			project design, construction and
			operation phase to monitor marine
			productivity (including establishment
			of baselines) and sea water quality.
			This will provide data to assess the impact of the SWRO on fishing
			yields. The brine discharge is
			expected to return to ambient salinity
			level in 50-75 meters which is not
			expected to have zany significant
			impact on the fish population. The
			brine discharge modelling has been
			discussed with the fishermen during
The exected level better	The communities in the in the consist.	A stratab of the read from The letter of	consultation held in March 2017.
The coastal land belt that will be used for	The communities in the in the project area and its vicinity are not against the	A stretch of the road from Thalaiyadi to Chempionpattu passes through	The project will construct bi-pass access for the users of the coastal
installing intake and out	use of the coastal belt for installation of	this land belt which will be used for	road to maintain their access to
fall pipe lines up to	pipes underground. They are aware	installation of intake and outfall from	reach desired destinations. The
Reverse Osmosis plant	that disturbances will be confined only	Reverse Osmosis plant towards the	existing access road will be opened

Project component location	Negative impacts perceived	Views of the resettlement study team based on consultations with communities	Mitigatory measures suggested in project design and implementation
	to the construction period. For example, there will be disturbances to users of the coastal road to reach villages in Chempionpattu Grama Niladhari area and there can be some disturbances to the fishermen walking along the coastal belt.	sea. The communities were explained that these 2 pipes will be buried and therefore they will not become a hurdle for the road users. Some disturbances can be expected only during pipe installation period.	for users after completion of the installation of intake and outfall pipe lines across the coastal road.
The land demarcated for establishment of SWRO Plant	Some community members argued that the 10 acres land demarcated for the proposed project is a resource for the village even though it belongs to the government. They assumed that their second generation can use this unutilized land area for their residences. There can be some disturbances to the communities in Thalaiyadi villages due to clearing of land (dust) and plant operation activities of the plant (noise), If there is no separate power line the existing power supply in the area may get disturbed. There can be some disturbances to road users due to frequent passing of project vehicles during the operation period.	The land designated for the SWRO plant is common property belonging to the Government. The community members do not have the right to encroach this land. However, they can request the DS (Vadamarachchi) to consider issuing permits under Land Development Ordinance (LDO) for their residential purposes. This situation was explained by the resettlement team to the community members who raised this issue and the community subsequently understood the legal position of this common property. The Maruthankerny Grama Niladhari division has significant extent of unutilized public land which can be given for the residences of the second generation of the village community. The divisional secretary of Vadamarachchi East is also of the opinion that Grama Niladhari area has enough land for future use. The Divisional Secretariat division holds land allocation meetings from time to time known as "Land Kachcheri" to consider allocation of land for landless villagers. There is no legal provision to allocate replacement	The situation with regards to the land already being allocated legally for the NWSDB to construct the SWRO plant was explained by the PMIU to the local communities and also to the Divisional secretary Vadamarachchi East and the respective Grama Niladharis. The community concerns on power supply will not be triggered because of the project's plan to have separate power line with adequate capacity. Management of construction related impacts such as dust and noise mitigation measures have been included in the EMP.

		Views of the resettlement study	
Project component		team based on consultations with	Mitigatory measures suggested in
location	Negative impacts perceived	communities	project design and implementation
		land since the SWRO plant land is not presently used by any particular community member (it is a land already allocated by DS Vadamarachchi for the project). The view expressed by a few community members was their opinion but, not for claiming replacement land.	
The transmission line for water distribution installed from SWRO plant up to Puthukkadu Junction on A9 Road.	The proposed transmission line from SWRO plant up to the Puthukkadu Junction on A9 road runs through public land and public roads. The local community residing on either side of the ROW is well of the transmission line construction. No one in this area expressed negative comments on the plan of laying the transmission line. There can be access difficulties for about 39 houses, 25 shops and some public institutions (Vadamarachchi DS office, Police, RC and TMS schools and Pradeshiya Saba office) located near ROW of the transmission line. There can be some disturbances to the road users, residences and shop owners during rehabilitation of the pipe lines if any damages take place during operation phase.	The immediate vicinity of transmission, line is not intensively utilized for development. Nearly 70% of the land on the immediate vicinity of transmission ROW is unutilized. Most of the building structures are not close to the edge of the ROW and therefore installation of transmission pipe line will not be a problem except some possible disturbances to the road users and the communities adjacent to the transmission line during installation period of the pipe.	The PMIU will inform the communities residing near the water transmission line 30 days prior to construction work. The construction schedule will also be disseminated to the communities. The disturbed access to houses and business establishments will be addressed by providing steel plates to have alternative access if need arise. Excavation activities in front of common institutions will be carried out during holidays and during night time. One side of the road will be kept undisturbed at all times for the users of the road.

<sup>56.</sup> The local communities also highlighted some positive impacts that they expect from the proposed project in their area. The positive impacts they highlighted are summarized in Table 17.

**Table 17: Positive Impacts highlighted** 

		<u>-</u>
Project component location	Positive impacts perceived	Views of the resettlement study Team
2 kilometers (km) distance on	There can be opportunities for the local community	This is possible even at the PMIU, which has hired 2
right side from Intake and outfall	members to gain employment in the plant operation	youths from the area to support its' operations.
locations	activities. In addition, the project will deliver safe	
<u></u>	drinking water to the people of Jaffna.	
The coastal land belt that will be	The presently neglected bare land area that is not	The section of the road (running through this coastal
used for installing intake and	suitable for agriculture can be utilized for productive	land belt) which will be dug up to lay the intake and
outfall pipe lines up to the	common development activities	outfall pipes will be reinstated by the contractor.
SWRO plant		There will be no restrictions for the users during
		operation phase of the project to use this road and
The level demonstrated for		the costal belt.
The land demarcated for	The presently neglected land will be used for a much-	Some community members in Thalaiyadi village also
establishment of SWRO Plant	needed development project. The Maruthankerny area will become popular due to this project. There will be	complained about the use of this land area by some community members for socially unacceptable
	potential to attract visitors and tourists which will help	activities. Socially unacceptable activities means
	improve the local economy.	some people collect Jambul tree branches from the
	improvo trio local cochomy.	site (not only in the SWRO land) to catch the cuttle
		(fish) in the sea area. This is illegal and prohibited by
		Fisheries Department. This community members feel
		that the problem can be effective arrested by the
		development of the proposed project.
The transmission line for water	The road from Puthukkadu to Thalaiyadi and then from	The roads from Puthukkadu to Thalaiyadi may be
distribution installed from	Thalaiyadi towards Chempionpattu will get improved	improved under a different the ADB funded road
SWRO plant up to Puthukkadu	due to influence of the proposed project. These roads	project and the proposed project expects to improve
Junction on A9 Road.	will become roads that are regularly maintained by the	the other interior section of the roads from Thalaiyadi
SMDO conveter reverse comesia	respective parties.	towards Chempionpattu.

SWRO = seawater reverse osmosis.

## A. Possible Impacts on Communities Located Outside of the Project Implementing Area

57. Some members of the fishing community especially in Maruthankerny north village in Maruthankerny Grama Niladhari division expect some potential negative impacts on their livelihood activities. The details of these perceived negative impacts on their income generation activities are summarized in Table 18 below.

Table 18: Negative Impacts perceived by community in Maruthankerny north village

Project component location	Positive impacts perceived	Negative impacts	Mitigatory measures suggested in project design and implementation
Up to 2 kilometers (km)	The project will plan and	If a larger area around the intake and	The area around intake and outfall
distance on right side from	implement livelihood assistance	outfall location is declared as a security	structures will be clearly demarcated at
intake and outfall locations	program in Maruthankerny GN	zone, then fishermen will not be able to	all times, including night time
	area and majority of fishermen	use that area for fishing or for their free	illumination with bulbs, so that
	will have some direct and	movement to other areas of the sea.	fishermen can stay clear of this area.
	indirect benefits to enhance	This will become a permanent impact.	This area will be minimal so that
	their livelihoods activities. The	The boat operators presently passing	fishermen do not have to undertake
	livelihood Assistance plan/	the intake and outfall area will be	substantial diversions (hence costing
	project is attached in Annex – 2.	compelled to travel a longer distance to	additional fuel) to travel to other parts of
		reach some of their desired areas of the sea. This will involve additional cost	the sea.
		for fuel.	The intake structure is designed to be smooth so that their fishing nets will not
		The fishermen who practice traditional	get entangled in it.
		net fishing (these nets drift with the sea	If madal padu want to reinstate
		current) will be disturbed and their	operations in the project area they will
		production may go down.	be assigned suitable area outside of
		There will be no opportunities for <i>Madal</i>	the project implementing area to
		Padu operators to use the area	continue their activities.
		demarcated for the proposed project,	
		although currently no madal padus are operating in the project area.	
The coastal land belt that	There may be possibilities for	- operating in the project area.	Construction related employment for
will be used for installing	some limited number of		local people may be considered by the
intake and outfall pipe	unemployed persons in the area		contractor
lines up to SWRO plant	to get involved in construction		
	work (for example: laying of the		
	intake and outfall pipes,		
	construction of new access road		
The land demarcated for	etc.)  Possibilities for employment	Come community members argued that	A SLR 127.5 m livelihood development
establishment of SWRO	Possibilities for employment during construction and	Some community members argued that this 5-hectare land could have been	program is being implemented under
Plant	operation phase for the local	used for employment generation project	the ongoing loan to help with economic
	community members (45 skilled	such as the setting up of a garment	livelihood development of the
	and unskilled laborers can be	factory. The resettlement team	communities in this area. This includes
	utilized during the construction	explained the degree of significance of	development of mini-projects (like road
	phase from the project area)	the proposed project in addressing one	improvements, street lighting,

Project component			Mitigatory measures suggested in	
location	Positive impacts perceived	Negative impacts	project design and implementation	
		of the critical needs in Jaffna and they informed a few community members who raised this issue that this land has already been legally allocated to the project by the DS in their area.	refrigeration facilities etc.) which will be developed in consultation with the communities.	
The transmission line for water distribution installed from SWRO plant up to Puthukkadu Junction on A9 Road.	The local community will have an improved road but access disruptions during the construction period.	There will some disturbances to the shops located near the road edges during construction period. The disturbances will not be significant because these shops are located about 10-15 m distance from the road edges. The resettlement team informed them that whatever disturbances occur due to the project will be minimized by the project during construction period. Contractors will be required to follow environmental management plan which will have mitigating measures for reducing access disruptions (e.gprovision of planks for temporary access etc.)		

SWRO = seawater reverse osmosis.

- 58. Apart from the specific mitigatory measures suggested in the above tables, the following measures will also be implemented to address other issues not mentioned above.
  - (i) The interior access road proposed towards Chempionpattu Grama Niladhari area will be constructed along with the construction work in SWRO plant;
  - (ii) During construction period, measures will be carried out to control potential dust in the SWRO plant site. Measures also need to be taken to reduce potential noise from the SWRO plant during its operation phase using modern technologies (sound barriers)/ green buffer zones. These measures are incorporated in the EMP section of the Environmental Impact Assessment. The EMP will be updated by the contractor prior to starting construction works:
  - (iii) All possibilities should be explored to provide employment opportunities in the project construction or operations for the unemployed second and third generation youths in Maruthankerny GN division;
  - (iv) Installation of water transmission pipe line in Puthukkadu Thalaiyadi road should be carried out section by section minimizing the potential access disturbances to the local community members- especially the business community operating alongside the roads;
  - (v) Intensive and scientific monitoring will be carried out during operation phase of the SWRO plant to observe the implications of brine solution/ waste discharged on fish population in the sea, near the outfall area;
  - (vi) The project design and EMP provide measures to ensure that fishermen's mobility is not negatively impacted. The intake and outfall structures will be designed with the view of minimizing the chances of accidental entanglements of fishing nets (smooth surfaces, bund protection around diffusers located on sea bed etc.);
  - (vii) Arrangement should be made for regular maintenance of Puthukkadu-Thalaiyadi road under the proposed project; and
  - (viii) If the water transmission line on public road get damaged due to any reason such problem should be attended with no delays.

#### B. Entitlements, Assistance and Benefits

#### 1. Legal Frame Work

- 59. The resettlement plan of this sub-project is developed based on the principles and legal provisions laid down in The Land Acquisition Act, 1950 (LAA, amended from time to time) and the National Involuntary Resettlement Policy, 2001 (NIRP). The principles of the NIRP are largely consistent with ADB's Policy on social safe guard, ADB SPS 2009.
- 60. The Project's core principles will be applied to involuntary resettlement defined as follows: involuntary resettlement addresses social and economic impacts that are permanent or temporary and are (i) caused by acquisition of land and other fixed assets; (ii) by change in the use of land, or (iii) restrictions imposed on land because of the Project. The core involuntary resettlement principles for the Project include those which are categorically outlined in NIRP (Annex 3).
- 61. An additional two principles from ADB's Safeguard Policy Statement (SPS) ,2009 are not clearly covered by NIRP. These are considered in preparation of this report. These two additional principles include, (i) affected people are to be identified and recorded as early as possible to establish their eligibility through a population record or census that serves as an

eligibility cutoff date, preferably at the project identification stage, to prevent a subsequent influx of encroachers or others who wish to take advantage of such benefits; and (ii) the full resettlement costs are to be included in the presentation of project costs and benefits. With regards to (i) the resettlement study was conducted with project related communities on 7 -01 - 2017 and this date is considered as cut-off date for identification of affected people. This message has been conveyed to the community leaders and other stakeholders consulted during the resettlement study in project area. With regards to (ii) at this stage the resettlement plan does not envisage any resettlement impacts (including physical or economic displacement, loss of productive assets and structures). In terms of (ii) the entitlement matrix considers the full range of possible land acquisition and resettlement impacts and project cost includes budget for resettlement plan implementation (Table 23) and cost of continuing ongoing consultations with the community.

#### 2. Entitlement Matrix

62. The proposed project will not trigger negative impacts such as land acquisition, relocation of people or negative impacts on their livelihood assets. Any unanticipated resettlement impacts will be managed through the social safeguard provisions in the ongoing loan. The entitlement matrix (Table 19) is provided in the case of unanticipated impacts to fishermen.

**Table 19: Entitlement Matrix** 

	Definition of Entitled		Implementation				
Type of Loss	Person	Provision/entitlement	Issues/	Responsible Agency			
Temporary Losses	Temporary Losses						
Temporary disruption of livelihoods	Legal titleholders, Owners, tenants, leaseholders, sharecroppers, employees/ agricultural workers, owners and operators of businesses, hawkers or vendors (non-titled, business community)	<ol> <li>30 days advance notice regarding construction activities, including duration and type of disruption.</li> <li>Compensation of any lost income based on minimum wage rates/ average business income.</li> <li>Where Contractor's actions cannot Ensure there is no income/access loss, Affected Persons will be assisted to temporarily shift for continued economic activity, Identification of alternative temporary sites to continue economic activity. Provision of alternative sites for hawkers and vendors for continued economic activity will be part of project design.<sup>24</sup></li> <li>Additional compensation for vulnerable households.</li> </ol>	Harvesting prior to acquisition will be accommodated to the extent possible. Work schedules will avoid harvest season. Market value of crops and fruit trees should be determined.  During construction, PMIU will identify alternative temporary sites for vendors and hawkers to continue economic activity. NWSDB will ensure civil works are phased to minimize disruption.	PMIU will determine business persons entitled to assistance through survey and will be provided with identification cards. Land Acquisition and Resettlement Committee (LARC) will determine wage rates and lost income by survey and consultation with affected persons. PMIU will identify alternative sites for economic activity. PMIU will identify vulnerable households.			
Temporary disruption of access to residences, business establishments	Legal title holders, non- titled immovable business owners/operators	30 days advance notice regarding construction activities, including duration and type of disruption.  Contractor's to finalize and implement EMP which will contain provisions for maintaining access (temporary planks etc.). In case access disruptions, cannot be mitigated		Affected persons will be determined by the PMIU through survey and will be provided with identification cards. The survey will determine income			

During detailed design, the incorporation of additional avoidance measures in construction tender and contract documents will be evaluated if losses in income for the majority of affected persons could be potentially significant (more than 10%). These measures may include: (i) specifying trenching and pipe-laying activities to occur outside of active business periods; (ii) specifying the need to utilize steel plates or similar devices to cover open trenches and enable roads and pavements to be trafficked and business premises to be accessed during business hours; and (iii) limiting the extent of trenches that can be left open at any given location or limiting the period it can be left open. Resettlement Budget and Financing Plan.

	Definition of Entitled		Implementation	
Type of Loss	Person	Provision/entitlement	Issues/	Responsible Agency
		through EMP in ongoing section of digging then, affected persons will be provided compensation for lost income or a transitional allowance for the period of disruption whichever is greater.		loss.
Losses to Vulnerable gr				
Impacts on vulnerable affected persons (APs) <sup>25</sup>	Vulnerable APs (livelihood impacts)	1. Livelihood. Further to item 5, vulnerable households will be prioritized in project employment. Skills training and a subsistence allowance of SLRs10,000 will also be provided for three months to augment current livelihood. The PMIU will consider them as special group to be entitled for special assistance during project implementation	Vulnerable households will be identified during the census conducted as a part of the resettlement plan (if this will be prepared).	PMIU will determine vulnerable APs and provide information on all project construction employment opportunities.
Impacts specific to fisher	ermen			
Permanent inability to conduct madal padu operations	The fishermen who previously had rights for Madal Padu operations in the project implementing area and may want to reinstate operations.	Providing equally useful alternative locations near the previous locations for Madal operations	Assistance for loss of livelihood supporting opportunities (income generation opportunities)	PMIU of the project, Divisional Secretariat of Vadamarachchi East, Assistant Director's office of Department of Fisheries and Aquatic Resources and respective Fisheries Associations in the village/s will assign suitable alternate locations if madal

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The following vulnerability criteria are identified: (i)households headed by a female; (ii) households with incomes below the official government Poverty Line; (iii) landless and non-titled affected persons; (iii) the elderly; (iv) household with disabled family members; and (iv) households living in shack type (semi-permanent) dwellings. The official poverty line for Jaffna district in May 2017 is SLR 4223, whereas the Official Poverty line at National level for May 2017 is SLR 4284. Source: Department of Census and Statistics Sri Lanka.2017. http://statistics.gov.lk/poverty/monthly\_poverty/index.htm

	Definition of Entitled		Implementation	
Type of Loss	Person	Provision/entitlement	Issues/	Responsible Agency
				padu operators want to re-start their operations.
Temporary disturbances to fishing activities in the vicinity of the project's intake and outfall locations (in the sea)	All types of fishermen who use this area (demarcated for construction of intake and outfall structures) to pass to other parts of the sea <sup>26</sup>	3. Compensation for fishing nets/boats if damaged due to entanglement in the intake structure This will be decided on a case by case basis by the LARC.		PMIU will identify the negative impacts and the fishermen affected.  LARC <sup>27</sup> will determine eligibility for compensation and compensation value in consultation with affected persons.  PMIU will determine vulnerable households and provide information on all project construction employment opportunities.
Impacts on vulnerable fishermen	Marginal and low income fishermen who use traditional small nets for fishing (these nets drift with the sea currents)	If their nets get damaged they will be provided with compensation if deemed eligible by LARC (refer above). (this impact is unlikely as per project developer, but this issue is included in the project Entitlement Matrix so that there is a provision in case such events will occur during the operation phase of the project)		LARC will determine eligibility for compensation and compensation value in consultation with affected persons.  PMIU will determine vulnerable households and provide information on all project construction

<sup>&</sup>lt;sup>26</sup> Contractor's EMP includes provisions for ensuring adequate passageway is provided to fishermen during construction to pass the sea area.

<sup>27</sup> A land acquisition and resettlement committee has been set up under the ongoing loan. The same committee will provide advisory and implementation support for any resettlement and land acquisition issues that may crop up during this project. The current LARC/GRC membership comprises of: Divisional Secretary; District Superintendent of Surveys; District Valuer; NWSDB representative; Head of project implementation unit (PIU); representative of CBO or nongovernment organization (NGO); and a resident of the community

Type of Loss	Definition of Entitled Person	Provision/entitlement	Implementation Issues/	Responsible Agency
				employment opportunities.

#### C. Measures for Income Restoration and Rehabilitation

- (i) There are no people who will experience direct negative impact on their income generation activities due to the proposed project. However, some community members, especially fishing communities perceived that some of the project activities may lead to reduction in their income from fishing activities. The executing agency believes the project will not create negative impacts such as reduction of fish population or difficulties for fishermen in launching their boats. Further, there will be no need for monetary compensation to restore income or rehabilitation of livelihood activities asthe ongoing project is supporting livelihood development activities to help local communities. This will enable the project to garner full community support for its' implementation. Several mini=projects are being developed in consultation with the community (for eg- fish market in Thalayadi area with ice, street lighting, provision of nets and fishing equipment etc.); and
- (ii) Contractor may allocate some low skilled jobs (such as tree planting along the site periphery, landscaping etc. to the members of the local community).
- 63. In addition, the contractors will be mandated to avoid all possible actions creating negative impacts on livelihoods of the communities in the project area. This situation will be carefully and frequently monitored by the PMIU sociologist and the other staff and if any such incidents are observed in project sites, these safe guard officers will take immediate actions to draw the attention of the contractors to rectify the negative impacts. The contractors will be requested to build contingency cost for paying compensation for mitigating the negative impacts caused by them (if these emerge in the project during construction period), although the responsibility for providing compensation will rest with the executing agency.
- 64. The resettlement study was conducted with project related communities on 7 -01 -2017 and this date is considered as cut-off date for identification of affected people. This message has been conveyed to the community leaders and other stakeholders consulted during the resettlement study in project area.

#### D. Other Social Safety Aspects

65. The communities located close to the project, especially the people in 3 villages of Maruthankerny Grama Niladhari division will be provided with timely information regarding the proposed project. This information will include, nature of construction activities, time schedules etc. The workforce will be educated and provided awareness to avoid conflicts with local communities during the construction phase.

#### VI. INSTITUTIONAL ARRANGEMENTS

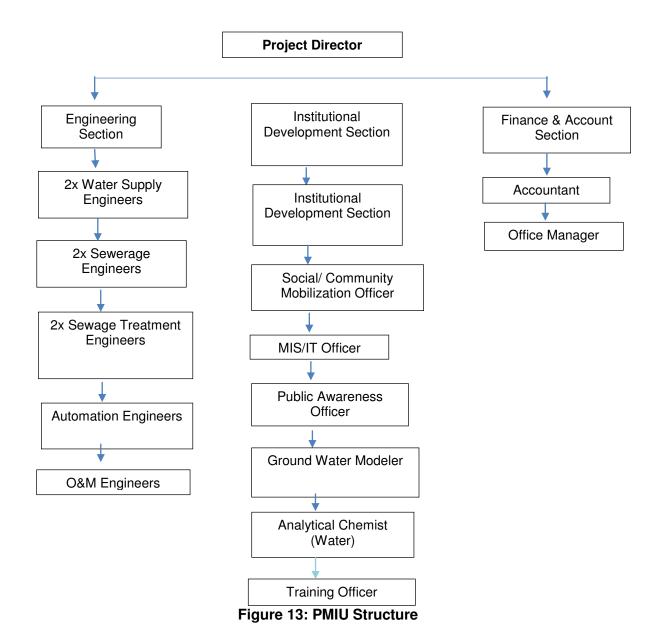
- 66. The Ministry of City Planning and Water Supply has been entrusted as the Executing Agency and National Water Supply and Drainage Board (NSWSDB) as the Implementing Agency for the JKWSSP. The Project Management and implementation Unit (PMIU) is located within NWSDB.
- 67. The PMIU resettlement planning and implementation capacity has been strengthened through provision of expertise, and training and support for NWSDB staff- particularly at the project level. This process will continue in the future too. The PMIU structure is shown in Figure 13. Within the PMIU, the sociologist is assigned the safeguards functions, including all.

resettlement issues The Sociologist will be supported by consultant hired when required by the PMIU.<sup>28</sup>

- 68. The main responsibilities of the PMIU -Sociologist are given below:
  - (i) Develop and enhance the community consultation strategy to manage risks associated with native perceptions of the project by the surrounding communities:
  - (ii) Implement the community outreach strategy including preparation of monitoring reports;
  - (iii) Receive grievances and complaints, register them, maintain complaint log, trigger subsequent tiers of GRM process (if unable to provide complaint resolution within stipulated time of 7 days) and communicate the outcome of the GRC to the affected people/ complainants;
  - (iv) Provide a briefing to the Grievance Redress Committee and monitor grievance redress mechanism including dealing with complaints and grievances;
  - (v) Organize and implement public consultation and disclosure activities;
  - (vi) Undertake consultations with the community to prepare mini-projects and implement livelihood supporting activities (financed under the ongoing loan) in the project implementing GN division;
  - (vii) Provide monthly reports to the Project Director regarding the progress of resettlement issues:
  - (viii) Identify vulnerable households;
  - (ix) Coordinate and monitor the implementation of the GAP, community consultation and participation plan and communication and awareness program (public awareness campaign);
  - (x) Engage in continuous consultations with the community to inform them about the project activities and seek their feedback specifically on livelihood issues (for example- any perceived reduction in fish catch); and
  - (xi) In consultation with the community develop action plans to address their concerns.
- 69. There is budgetary allocation to engage a resettlement and social development in case any unanticipated resettlement and livelihood loss issues emerge during project implementation. This expert will support the PMIU sociologist in preparing and implementing a resettlement plan. The TOR for this expert is provided in Annex 15.

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<sup>&</sup>lt;sup>28</sup> The consultant will be hired if there are resettlement issues during project implementation and a resettlement plan will need to be prepared and implemented.



70. Table 20 highlights the responsibilities for undertaking the community outreach and consultation program.

Table 20: Responsibilities in the Community outreach and complaint resolution

Activity	Responsible	Approval
Training and support to PMIU and District Offices	PMIU to hire consultant if required	PMIU-Project Director
Implementation of community consultation and participation action plan and community outreach under the communication and awareness program	PMIU	PMIU- Project Director

Activity	Responsible	Approval
Identification of risks/ problem issues emerging from consultation with communities	PMIU Sociologist	PMIU- Sociologist
Preparation of action plan for managing the issues raised by communities in project vicinity	PMIU-Sociologist	PMIU- Project Director
Coordination with various departments (Vadramarachchi East Divisional Secretariat, Department of Fisheries and Aquatic resources etc.) and contractors for implementation of remedial actions listed in action plan	PMIU, Sociologist and Vijay	ADB; PMIU- project Director
Submission of action plan to ADB for approval	PMIU_Sociologist	PMIU- Project Director
Revision of the Action Plan	PMIU consultant, sociologist	1 Wilo- i Toject Director
Public disclosure of social documents (including resettlement plan, action plan etc.)	PMIU- Sociologist	Executing Agency, ADB
Conducting awareness campaigns (including school activities) in local communities	PMIU- Sociologist and individual consultant for the communication and awareness program	PMIU
Awareness of contractors on resettlement issues of the project	Resettlement specialist hired by PMIU and Sociologist of PMIU	PMIU
Monitoring of the implementation of community consultation and participation action plan, community outreach under the communication and awareness program and GRM cases	Sociologist of PMIU	PMIU
Preparation of resettlement plan if required and resettlement plan monitoring	PMIU Sociologist with inputs from	PMIU-Project Director
Preparation of quarterly progress reports for implementation of implementation of community consultation and participation action plan, community outreach under the communication and awareness program and receipt and resolution of grievances	PMIU Sociologist	PMIU-Project Director
Allocation of Resettlement Plan/s budgets	PMIU Accountant	PMIU-Project Director
Dealing with complaints and grievances	PMIU- Sociologist, GRC	PMIU-Project Director
Communication of outcome of GRC cases	GRC, PMIU- Sociologist	-

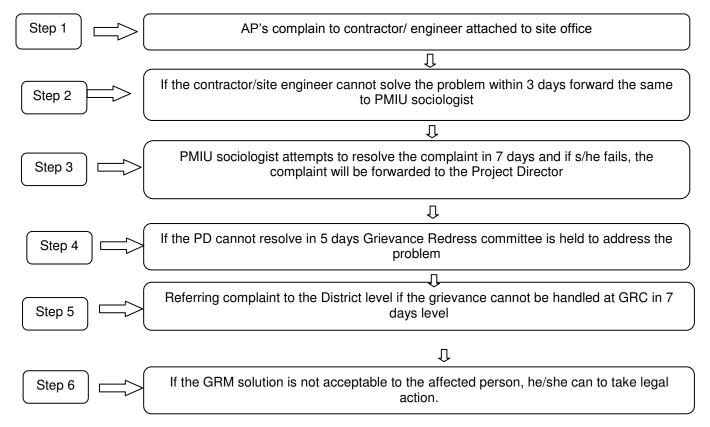
ADB = Asian Development Bank, GRC = Grievance Redress Committee PMIU = project management and implementation unit.

#### VII. GRIEVANCE REDRESS MECHANISMS

- 71. There can be some grievances from fishing communities in Maruthankerny Grama Niladhari division and from the neighboring communities. Therefore, Grievances redress mechanism (GRM) will be made available to provide institutional arrangements for the communities and other stakeholders to reach the institutions relevant with confidence.
- 72. Grievances of concern persons/ affected persons will first be brought to the attention of the PMIU Sociologist within 3 days after receiving the complaint of the affected persons. Grievances not redressed by the PMIU Sociologist within 7 days will be brought to the Project Director. Grievances not addressed at Project Director level within 5 days will be brought to the Divisional Secretariat level Grievance Redress Committee. There is a long history of grievance redress at the Divisional Secretariat level services through the Divisional Secretary. This is a well-established procedure. The community members in DS area present their grievances to the DS offices where arrangements have been made to inspect the problems of the community members and help to solve the problems in the field itself, if possible or otherwise take actions to forward the grievances of the communities that cannot be solved to the higher authorities of the District. This practice of resolution of grievances through the GRC will be formalized for this project. The GRC will comprise of the Divisional secretary of the Vadamarachchi as chair, a representative from the NWSDB, the PMIU Sociologist and a resident from the Maruthankerny Grama Niladhari division. The PMIU Sociologist will observe and take minutes.
- 73. The GRC will meet when grievances are put forward by the Project Director to determine the merit of each grievance, and resolve grievances within a month of receiving the complaint. Grievances which cannot be resolved at this level within 7 days will be referred by affected persons to the higher level at the District. If the GRM solution proposed at the district level is not acceptable to the complainant, he/she can take the matter to legal channels. This however, does not prohibit them from seeking legal recourse of action during any stage of the process. Diagram 1 describes the steps of the GRM process.
- 74. Records will be kept of all grievances received including, contact details of complainant, date that the complaint was received, nature of grievance, agreed corrective actions and the date these were resolved and outcome. A project information sheet including brief description of the sub-project, likelihood negative impacts, institutions to be contacted during construction phase and their locations will be provided to the project related stakeholders. This information will be shared among representatives of key stakeholders in and outside of the project area at least one month prior to commencement of the construction work. It is noted that most of the stakeholders in the project area already know about the proposed project.
- 75. A form will be used to register the complaints of the project affected communities in project implementing area. The copies of the form will be made available with the site engineers of the contractors, construction supervision engineers attached to the site and the PMIU sociologist. The registered complaints using this form will be received by the Sociologist (PMIU) who will take necessary actions to provide timely solutions.
- 76. During the resettlement survey information about the project and likelihood impacts have been conveyed to the community leaders and other key stakeholders. A detailed leaflet with specific details about the sub-project and GRM arrangements will be distributed to the affected community members prior to commencement of civil work. The PMIU sociologist together with other staff will conduct awareness meetings with the communities and the construction crew to explain about the GRM arrangements to be followed.

- 77. The PMIU sociologist will play a key role in monitoring of project sites during construction period. The construction crew will also be made aware about the GRM mechanism by the PMIU. They will be responsible to monitor the social safeguards related activities at the project sites during implementation period. The information on the social safeguard implementation will be included in semi-annual progress reports submitted to the ADB. Annex 4 includes specimen forms that can be used for grievance registration and monitoring of impacts.
- 78. The focal point for receiving complaints /queries will be sociologist of PMIU office who is responsible for taking actions to solve the problems with the help of concerned parties. The PMIU sociologist together with other staff in PMIU will make frequent visits to the project sites to ascertain if there are any issues. The communities can also contact the PMIU sociologist through the telephone number 021-2220256 and lodge their complaints. They also can post letters with their complaints to the PMIU office at its address mentioned below. The communities in the project area can also meet the PMIU sociologist at the PMIU office located at No -127, 1st Floor, M.P.C.S Building, and K.K.S Road, Jaffna. The communities in the project area can also reach the site office established in the project area during construction period and make their complaints/grievances to the staff in the construction site. These grievances will be collected by the PMIU sociologist to offer solutions through the institutional process established.

**Diagram 1: Steps in the Grievance Redress Process** 



79. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>29</sup>

#### A. Current Arrangement for Grievance Redress Mechanism:

- 80. A GRC was established on 11 November 2015 to provide information about project implementation at Thalaiyadi as it is large scale SWRO the first ever sea water desalination plant in Sri Lanka. This committee supports in the resolution of grievances and disputes at the ground level during the implementation of the project. Also, this system helps to create the trust and confidence among community members that, this committee will provide them some platform for airing their grievances and seeking support in case of any negative impact on their livelihood because of the project.
- 81. This Committee is supported to record and resolve fishermen's grievances regarding the proposed project under the guidance of the Divisional Secretary. As a result of this, SLR 127.5 million (ADB financing of \$1 million) from ongoing loan was approved by ADB & NWSDB for the infrastructure, social and human capital development of this area,
- 82. The members of this existing GRC are given in Table 21 below. The operations of the GRC related to the additional financing project will be as follows:
  - (i) Keep a feedback register and receive SWRO project related complaints, comments or suggestions from communities and relevant stakeholders:
  - (ii) Review the feedback and take appropriate actions as soon as possible: and
  - (iii) Seek to resolve an issue quickly, amicably, and transparently.

Table 21: Members of This Existing GRC

Name	Position	Address
Mr. K.Kanageswaran	Chairman of GRC	Divisional Secretary, Vadamarachchi East DS Division
Mrs. I.Balakumary	Secretary of GRC	Sociologist, PMCIU, JKWSSP, NWSDB
Mr. Jones Inparaj	Coordinator of GRC	Development Officer, DS Division, Vadamarachchi East
Mr. M.Thavaraja	Member of GRC	Grama Niladhari, J/428 – Maruthankerny
Mr. J.Aswin Dias	Member of GRC	Secretary, Fisheries Society, Thalaiyadi
Mr.Y.Yoganathan	Member of GRC	President, Rural Development Society, Thalaiyadi
Mr. Y.Emilrajan	Member of GRC	Member, Rural Development Society, Thalaiyadi
Mrs.D. Mary Subajini	Member of GRC	Member, Women Rural Development Society, Thalaiyadi
Mrs. M.Mary Renuka	Member of GRC	Member, Women Rural Development Society,

 $<sup>^{29}\</sup> Accountability\ Mechanism.\ http://www.adb.org/Accountability-Mechanism/default.asp.$ 

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Name	Position	Address		
		Thalaiyadi		
Ms. Y.Thusara	Member of GRC	Coordinating Officer (PMCIU & Thalaiyadi)		
Mr. R. Sulaxsan	Member of GRC	Coordinating Officer (PMCIU & Thalaiyadi)		
Mr. J.Latheeswaran	Member of GRC	Coordinating Officer (PMCIU & Thalaiyadi)		
A representative from Maruthankerny (North and South villages) to be determined later	Member GRC	Agreed by representatives from Maruthankerny South and North to participate as member during subsequent		
A representative from APs (to be determined later)	Member GRC	meetings.		

GRC = Grievance Redress Committee, PMCIU = project management coordination and implementation unit.

#### B. Information Disclosure, Consultation and Participation

- 83. The NWSDB, the Government of Sri Lanka, ADB and Agence Française de Développement have been involved in exploring possibilities for solving drinking water problem in Jaffna. Therefore, JKWSSP has been a popular project even though this project did not get materialized so far irrespective of the many efforts by these parties. The information about this project is well known among the general public in Jaffna. They are aware of the water source identified (Iranaimadu irrigation tank) and the political issues that emerged and the reasons for long delay of the project etc.
- 84. The approved resettlement plan will be placed in the regional office of NWSDB, Vadamarachchi Divisional Secretariat division office and PIU office. Executive summary of this document containing important information like resettlement planning framework, schedule of works and management principles adopted for the subproject will be made available in the local language (Tamil) and the same will be distributed to affected persons. The finalized/approved resettlement plan will also be disclosed in ADB's website, as well as NWSDB website and PMIU website. Project information will be continually disseminated through disclosure of resettlement planning documents, as and when updated.
- Information dissemination and disclosure has been a continuous process since the beginning of ongoing project. The office of the Project director of JKWSSP has been intensively involved in information disclosure and consultation with local and regional stakeholders during the past few years of this project since its inception (Annex 5). Most of these consultation and training programs/sessions were confined to the officers of the Vadamarachchi Divisional Secretariat division and other regional offices. It has been observed that some communities in Maruthankerny Grama Niladharidivision are still not fully aware of the project and therefore, they hold negative attitudes towards the project. However, it can be assumed that officers trained under this project may be influential in conveying the accurate information of the project to the groups/ constituents which do not have sufficient information about the project. Between 2015 and 2016 about 26 training and awareness sessions have been formally conducted /organized by the training and awareness consultant hired by the PMIU (Annex 5 for details of the sessions). The PMIU will continue consultations, information dissemination, and disclosure throughout the project cycle (annex 7, 8 and 12). The communication outreach strategy also includes conducting a community consultation and participation plan (CPP) for outreach and information dissemination to all stakeholders affected by the project (Annex 12). PMIU will ensure that the communities in project areas are fully aware of project activities at all stages of

construction. Community groups will be consulted and made aware of the civil works and project activities, anticipated impacts and mitigation measures, grievance redress process and contact details of PMIU personnel prior to construction.

86. The Social Impact Assessment team (involved in preparation of EIA for this project) initially conducted in-depth Interviews with key community leaders and with representatives of relevant Government agencies. Some community members in the project vicinity voluntarily participated when the interviews with key community leaders were being held. Therefore, most of the community leaders interviews became focus group discussions. This provided opportunity to capture the views, perceptions and opinions common to the larger community of the 3 villages relevant to the proposed project. Summary of views expressed by the stakeholders is included below (Table 22 below)

**Table 22: Views of Stakeholders** 

Stakeholder	Views
Divisional Secretary and some staff of the Divisional secretariat	The people in Jaffna in general have suffered significantly for a long time due to the unavailability of safe drinking water, Ground water in Jaffna is
Divisional secretariat	becoming unsuitable for drinking due to various reasons  The people should be provided with accurate information on this proposed
	project to make them more aware  The people in Maruthankerny GN division (Thalaiyadi, Maruthankerny North and Maruthankerny South) were against this project in the beginning but DS spoke to them and made them aware of the need of a drinking water project for Jaffna. As a result, people of Thalaiyadi now understand the need for this project and the people in other 2 villages have agreed to consider the project after being conveyed the findings from sea study conducted by Lanka Hydraulic Institute (LHI). The report provides an analysis of on sea water characteristics, impact on fish population etc. The communities in Maruthankerny North and South need to be further educated by providing
	accurate information about the project  The coastal area in front of the sea identified to install the intake and outfall structures and the land demarcated for the SWRO plant are not utilized for economic or social purposes. As a result of this proposed project these land areas will become valuable properties.
	The DS and his staff are much concerned about the project and therefore, they intervened to act as mediators between the project developers and the communities in the area. The DS is of the strong opinion that repeated interventions with accurate information conveyed to the local community will lead to acceptance of the project by the communities.
Grama Niladhari of Maruthankerny Division	The communities in all 3 villages were against the project based on certain initial perceptions. However, later the communities in Thalaiyadi village understood the need of the project and its implications on fishing activities. The people in Maruthankerny North and South are not in full agreement and they have allowed to conduct the LHI study to verify the behavior of sea, and other implications of the project on fishing activities. Therefore, it is necessary to reach the people in the 2 villages (Maruthankerny North and South) with accurate information of the project and convince them with the likelihood implications of the project on fishing activities.  According to interviews of the resettlement study team, the PMIU is being supported by a consultant to undertake awareness activities. One of the former Government Agents in Jaffna District said that. this program will be redirected as a specific target activity to reach Maruthankerny North and South villages to make them aware about the project and dispel their negative perceptions about the project.

Stakeholder	Views
Madal Fishermen	A large area along the coastal belt starting from Sundikadu in South and Point Pedro in North has been declared by the Department of Fisheries and Aquatic Resources as the area suitable for Madal fishing. There were 4 parties involved in Madal fishing within the coastal belt now identified for the proposed project. 3 Madal parties have abandoned their activities for more than 2-5 years and they have converted by themselves to fishermen going for fishing in Boats. The fourth madal operator had emigrated after the tsunami. He has now retuned but issued a letter saying he is no longer interested in running madal fishing operations (Annex 9)
Other fishermen	The 2 main issues to be clarified for the general fishermen include: (i) likelihood in the reduction of fish population in the sea area near the outfall and its vicinity; and (ii) likely threat of fish population leaving the shallow sea areas of due to implications of the proposed project. This group needs accurate information on these 2 issues. The on-going awareness activities carried out by PMIU will include information relevant to the issues of fishing community extracted from the LHI report, EIA report and from other technical reports prepared for this project  The fishermen are also concerned that if waste diesel and other oils used for the project are released to the sea there can be some negative implications on fishery resources.  There may be tendency for their fishing nets to get entangled in the intake structure. The fishermen stated that they will need to know the exact location of the sea used for installation of the intake. They themselves suggested the installation of an indicator (Signal light) for easy identification of the intake even from faraway places of the sea.  The fishing communities are also of the opinion that there may be a tendency to expand the sea area required for the project for future SWRO plant expansion activities. They also think that some larger are of the sea may be declared as high security zone and prohibited for the fishing communities in their boats.  They raised concerns that the discharge of brine solution into the sea will lead to excess salinity which may have impacts such as reduction in fish catch.
Community members in Thalaiyadi village	The community leaders in this village mentioned that they are the people who are in the proximity of the proposed project land and the sea area proposed for the project. They were against the project in the beginning without knowing its details but they are aware of the details and therefore, they now welcome the project that will address the most critical problem of paucity of water in their area as well as in the entire Jaffna area. Even though they have positive views of the project they too need answers to few gray areas including, the cost for obtaining sea water purified at high cost and the qualitative suitability of the sea water purified for drinking purposes. These issues need to be clarified based on scientific evidences. The infrastructure facilities in the village are in very poor condition. The main road, Puthukkadu/Thalaiyadi is dilapidated and other interior roads are also in very poor physical condition. The village also has poor common facilities such as schools, clinics etc and therefore, they are very keen to use the proposed project as an opportunity/vehicle get improved facilities in the villages. The representatives of key Government agencies have attended some of the awareness programs conducted by the project. These sessions are good forums for the community leaders to raise these needs of the villages. Even at present some of the interior roads in these villages are being improved by Predeshiya Saba in Vadamarachchi division.
People in Maruthankerny North	The waste water released to the sea from outfall may lead to a reduction of fish population in the area, "If the LHI study generates scientific evidence

Stakeholder	Views
and South	proving that there will be no harmful effects on fish population we will express our willingness for the project", The PMIU will organize a presentation to brief them these issues based on the EIA report. The assistance of the Department of Fisheries and Aquatic Resourcesmay be obtained to reach the fishing community.  "Our villages are neglected by the government and NGOs in providing improved infrastructure facilities and therefore, we are not happy about this type of project to be established in our area." These issues are beyond the scope of the proposed project and this report. However, the awareness sessions organized by the project are used by the stakeholders, especially community leaders to raise these issues with the representatives of key Government agencies who also attend some of the awareness sessions organized by the project.  The key request from the communities is the provision drinking water, which the project will provide "The proposed project should have priority in providing drinking water facilities to our area"

NGO = nongovernment organization.

- 87. In addition, as a part of the field studies conducted for data collection to prepare this report, the resettlement study team formally interviewed 14 key informants (refer Annex 6) to understand their views about the project and these views have been used to identify their perceived project benefits and disadvantages.
- Need for public participation and continued community outreach: Opportunities for the local community to participate in the project during its planning and construction phases is an essential element of this type of project. The community leaders are to be educated on the scientific reasons for selecting specific locations for implementing certain features of the project such as intake, out fall and SWRO plant etc. Once the community leaders are equipped with accurate information of the project, its design features and its positive and negative implications. they can respond to the other community members in the villages when these issues are raised. Wider consultations to disseminate the scientific and technical elements of the projects aimed at dispelling negative perceptions of the community are planned under the communication and awareness program.<sup>30</sup> A consultant will be hired to prepare a public awareness strategy and associated communication and outreach material such a brochures, pamphlets and videos (TOR in annex 8). The public awareness strategy also includes continued information dissemination to the communities to update them about project progress, challenges and achievements and seek their views.. The local knowledge of the fishermen and other community leaders may be highly relevant in certain issues of the project and therefore, their knowledge and other perceptions of the project will be given due considerations in planning and implementation of the project. The consultant to implement the public awareness strategy will work closely with the PMIU Sociologist who will conduct continued consultations to assess the concerns and negative perceptions of the communities. The sociologist will use this data to prepare an action plan to address these concerns. The consultant may need to modify the public awareness strategy based on the issues identified in the action plan to make sure that the consultations are meaningful. The action plan will be a living document that will be updated based on the outcomes and issues identified during the ongoing consultations.

-

The primary concern of the fishermen is that the operation of SWRO plant will impact the marine fish yield in the area thereby negatively impacting their livelihoods.

89. There may be limited employment opportunities in the project during its operation phasefor instance to undertake semi-skilled jobs such as tree planting and landscaping during the project construction period. The local community seem keen to secure longer term employment during the operation of the plant. The communication strategy and consultation and participation action plan will help to identify such issues and the action plan should contain follow up actions to ensure that the communities feel a sense of inclusion.<sup>31</sup>

#### C. Resettlement Budget and Financing Plan

90. The resettlement budget for the project prepared by the resettlement planning team with the inputs from the local communities, PMIU staff and Department of Fisheries and Aquatic Resources is included in Table 23.

Table 23: Details of budget for Resettlement Plan implementation

Table 23: Details					
Resettlement Cost Item	Unit	Man- months	Unit Cost LKR	Total Cost LKR	Sub Total (LKR)
					(=:::)
1. Intake and Out fall					
a. Compensation for fishermen during the construction works	15	9	15,000	2,000,000	
b. Arrangements for temporary access during the intake and out fall pipe lying construction	Sum	Sum	Sum	0	
c. If any net or boat get damaged due to the project's infrastructure provision for compensation for such damages including operations and maintenance period	Sum	Sum	Sum	7,000,000	
d. If the previous Madal padu (3 Padus) comeback - cost for facilitation to reinitiate the actions	3	6	10000	180,000	9,180,000
2. Transmission Main					
a. Dissemination of information on transmission line installation to relevant communities	Sum	Sum	Sum	15,000	
b. Loss of tress	100	0	5,000	500,000	
c. Temporary loss (including shifting assistance)	Sum	Sum	Sum	500,000	
d. Provision for compensation of income reduction (shops) due to construction of water transmission line	20	7 Days	2,500	350,000	2,545,000

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<sup>&</sup>lt;sup>31</sup> From consultations conducted during the project design stage it seems communities were keen on project related employment and being prioritized for drinking water connections.

Resettlement Cost Item	Unit	Man- months	Unit Cost LKR	Total Cost LKR	Sub Total (LKR)
e. Mitigation of other access related issues for houses of water transmission line	35	7 Days	4,000	980,000	
d. Compensation for any damage occurred boundary wall, fence and paddy field	50	0	4000	200,000	
3. SWRO Plant					
a. Cost for continuous awareness activities and Information Campaign, Consultation, and disclosure activities <sup>32</sup>	10	18	50,000	900,000	
b. Implementation of Community participation action plan including planning, implementation, operation and maintenance period	Sum	Sum	Sum	1,768,000.00	
c. Additional assistance to vulnerable persons	Sum	Sum	Sum	700,000	3,368,000
Total					15,093,000
10% Contingencies					1509300
Grant Total				16,602,300	

Note: The ongoing project, with assistance from ADB has already planned a livelihood assistance program under the existing loan worth about. 127.5 Million LKR/ ADB financing \$1m (Annex 2). The activities of this livelihood assistance project will be planned and implemented in Maruthankerny Grama Niladhari area. Therefore, the livelihood assistance required funds may come from this project or from separate sources. The livelihood assistance activities in this Grama Niladhari division will be carefully focused on providing additional support for enhancing fishery related household incomes (for example: establishment of fish market, providing fishing equipment for marginal fishermen carefully selected using proper selection criteria from the community in Grama Niladhari division). However, a needs assessment will need to be conducted sampling all the individual families in the entire Maruthankerny Grama Niladhari division (not only in Thalaiyadi village) should be conducted for implementing any livelihood assistance project. The needs assessment activity will not be limited to a single survey/event and should be carried out as recurrent survey from time to time to be able to accurately identify the beneficiaries and their needs. This will help in ensuring the long-term sustainability of the livelihood activities assisted by the project through ADB.

#### VIII. MONITORING AND REPORTING

91. As the project is classified as a category B project, this will entail the submission of semi-annual safeguards monitoring reports. The PMIU-Sociologist will: (i) be responsible for the finalization and disclosure of the resettlement plan; (ii) monitor the effectiveness of the implementation plan; (iii) make recommendations for changes and corrective actions where necessary; (iv) support with the implementation of these corrective actions; (v) preparation of semi-annual safeguards monitoring reports; and (vi) and report to the Project Director.<sup>33</sup>

<sup>32</sup> This includes preparing some leaflets regarding SWRO and distributing them to the community and having the discussion during the planning and implementation period

<sup>&</sup>lt;sup>33</sup> In case unaticpated resettlement issues emerge, a consultant will be hired (TOR is in Annex 15) who will provide the PMIU with training in resettlement issues, social survey methods and data analysis and recording, and he will also support the PMIU-Sociologist in updating and implementing the resettlement plan.

However, the key part of monitoring involves monitoring the project's impacts on the local community including any livelihood impacts and grievances. Monitoring data will be collected by PMIU Sociologist from PMIU, contractors, and individual community member to ascertain the issues and prepare action plan for addressing any issues expressed by the communities. Various indicators will be used, including those shown in Table 24.

Table 24: Potential Monitoring Indicators for the additional fianncing

Monitoring Issues	Monitoring Indicators
Delivery of entitlements to affected persons (if need arises only)	Affected persons received entitlements per amounts and program specified in resettlement plan and decision of LARC Compensation provided before loss incurred and prior to start of construction  Arrangements for livelihood provided to vulnerable APs
Communication and awareness program and community consultation and participation action plan	Completion of various activities in community consultation and participation plan achieved.  Finalization of public awareness strategy and communication materials prepared under the communication and awareness program.  Number of focal group discussions/ awareness outreach sessions conducted under the communication and awareness program.  Updating of the public awareness strategy based on the action plan.
Consultation, grievance and other issues	Training for GRC members conducted by PMIU sociologist. Public meetings held to disclose impacts and entitlements Meetings with individual affected persons to agree compensation Affected Persons aware of entitlements and grievance procedure GRC meetings held and grievances resolved GRC decisions communicated to complainants,
Benefit monitoring	Post-impact meetings held with APs to check receipt of entitlements and satisfaction Checking any disproportionate impacts on vulnerable households
Livelihood monitoring	Obtaining baseline data from contractor on marine productivity and sea water quality Periodic monitoring on fish catch and yields (data to be obtained from community consultation and from Department of Fisheries and Aquatic Resources. Number of consultations conducted to assess livelihood impacts. Survey on socio-economic status of affected Persons (including vulnerable APs) completed and compared with baseline survey results. Preparation of report/ analysis identifying linkages between livelihood impacts and SWRO plant construction/ operation. <sup>34</sup>

92. The Monitoring Unit of PMIU will undertake the monitoring of the various indicators.. Data will be gathered through reviews, audits, community consultations, unscheduled and unannounced inspections, as well as interviews with community leaders, PMIU and other stakeholders, contractors, and others involved in the process at all levels, as well as through structured direct observations on the ground and compiling of EMP baseline and periodic monitoring data.<sup>35</sup>

<sup>35</sup> This will be required to monitor livelihood impacts as a function of fish yields.

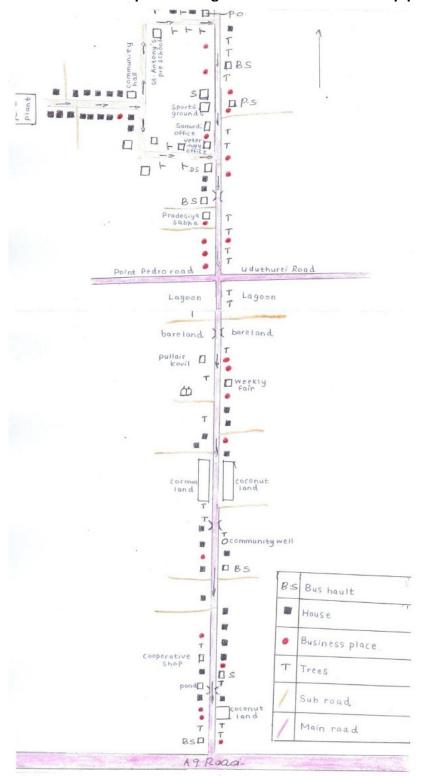
<sup>&</sup>lt;sup>34</sup> Depending on the situation, corrective actions will be identified to improve fish yields to baseline levels.

### **ANNEXES**

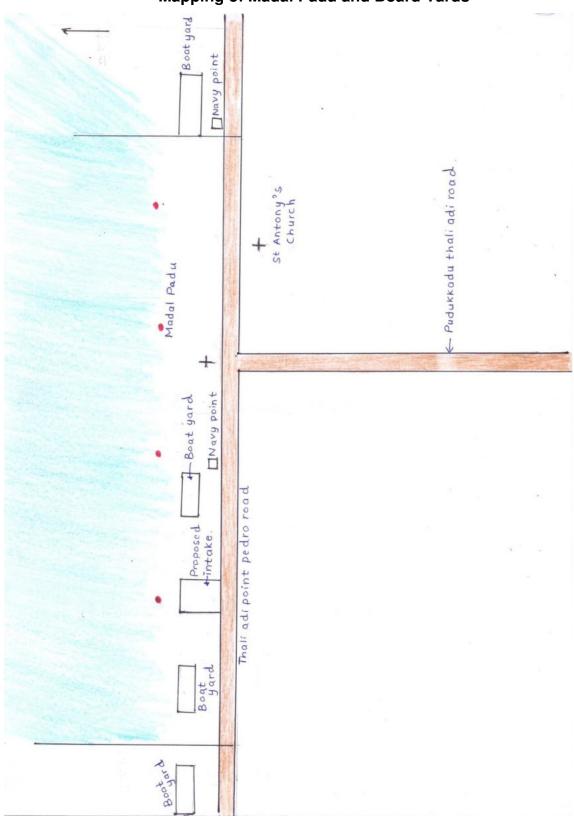
Annex 1: Annex 2:	Details of the Properties Observed along the Proposed Route Livelihood Development Proposal for Maruthankerny Area Funded under Ongoing Loan
Annex 3:	Comparison Between ADB's Involuntary Resettlement Policy and National Involuntary Resettlement Policy
Annex 4:	Specimen Forms that can be used for Grievance Registration and Monitoring of Impacts during Project Implementation
Annex 5:	Meetings, Community Consultations and Trainings Related to Establishing Reverse Osmosis Plant at Thalaiyadi
Annex 6:	Key Persons Interviewed during Resettlement Plan Preparation Stage
Annex 7:	Proposal for Community Awareness Program
Annex 8:	Terms of Reference for the Continuation of Communication and Awareness Program for the Project
Annex 9:	Consent Letter of Traditional Padu Owner and its Translation
Annex 10:	Signed Memorandum of Understanding Between National Water Supply and Drainage Board and Fisheries Society and Translation
Annex 11:	Meeting Minutes of Public Consultation and Participant's List
Annex 12:	Community Consultation and Participation Action Plan
Annex 13:	Types of Fishing in Jaffna
Annex 14:	Third Party Report on Agreement Letter Provded by Directly Impoated Madal Padu Owner
Annex 15:	Terms of Reference of Resettlement and Social Development Expert

#### ANNEX 1: DETAILS OF THE PROPERTIES OBSERVED ALONG THE PROPOSED ROUTE

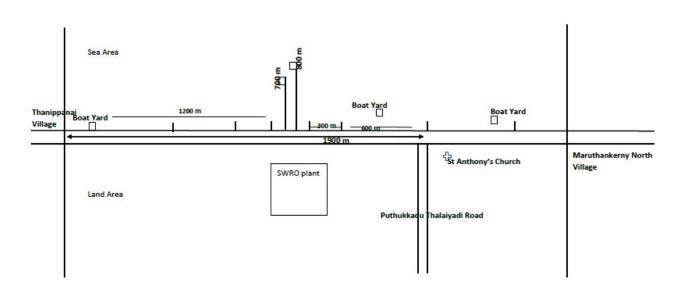
# Houses & Public Spaces along the Water Transmission pipeline alignment



# **Mapping of Madal Padu and Board Yards**







# ANNEX 2: LIVELIHOOD DEVELOPMENT PROPOSAL FOR MARUTHANKERNY AREA FUNDED UNDER ONGOING LOAN

#### Livelihood Development Proposal for Maruthankerny Area

#### INTEGRATED MARUTHANKERNY GND DEVELOPMENT PROJECT

#### I. PROPOSAL SUMMARY:

The main objective of this project is to assess the quality of life in the villages of Thalaiyadi, Maruthankerny North and Maruthankerny South of Maruthankerny GND under Vadamarachchi East Divisional Secretariat Division and providing assistance to improve the quality of their life. The total financial requirement is Rs. 127.5Mn.

#### II. PROJECT DESCRIPTION

Decades of internal conflict and Tsunami badly affected in Vadamarachchi East coastal area and is lagging behind economically, as many facilities for fishing and other key industries were destroyed. Migrations were occurred in high level. Investment levels have remained extremely low, little maintenance has been undertaken on surviving infrastructure, and key industries, such as agriculture and fishing, have been abandoned. Poverty is the most pressing issue in this area. Quality of health life also challengeable due to the unavailability of proper sealed toilets.

The development of this area is lack far behind in terms of the progress compared to other areas in the Northern Province. The main objective of this development project is to assess the quality of life in the villages of Thalaiyadi, Maruthankerny North and Maruthankerny South and providing assistance to improve the quality of their life.

Maruthankerny Grama Niladhari Division is located within the Vadamarachchi Divisional Sceretariat area, in Jaffna District of Northern Province of Sri Lanka and consists three villages namely Thalaiyadi, Maruthankerny North and Maruthankerny South. The J/48 - Maruthankerny GN division is defined as an area with traditional population. The 3 villages in this GN division have suffered significantly during civil war period. The destruction due to Tsunami in 2004 was far serious than civil war in this GN division. For example all the houses in Thalaiyadi and Maruthankerny North villages were destroyed by Tsunami. These two villages were recreated in areas about 300m away from the coast. Each family has been given new houses established in small plots of land (30-40 perch).

Maruthankerny GN division has 3 villages and the total populations in these 3 villages are 1351 and all the people in these villages are Tamils. The total population of Maruthankerny GND is 1351.

The impact of the project will be improved the quality of life in the rural area of Vadamarachchi East DS Division. The project will contribute to rehabilitating, reconstructing, and developing internal roads, improvements of play grounds, providing sanitation facilities, livelihood

development, seed capital investments for fishermen, Trainings with required tools and infrastructure development. The outcomes of the project will be

- Easy access from Maruthankerny to Other Places
- Fisheries Industry will improve
- Local products will be marketed easily
- Development of the Maruthankerny GND
- · Increasement of the Tourism Market
- · Attractions of Foreign Investors
- Employment Opportunities
- · Improvement of Health Standard

#### III. PROJECT RATIONALE

Main roads and the internal roads are in bad conditions and people suffering to travel Maruthankerny to Pont Pedro and Maruthankerny to Puthukkadu which are only available to connect with main roads. Internal roads in three villages are unable to use during the rainy season. Community from this area faced challenges to access their basic needs such as schooling, health and transporting inputs and marketing of their products. Point Pedro Maruthankerny Road – 30Km, Thalaiyadi Chundikulam Road – 25Km, Maruthankerny GN Division Internal Roads – 6.5 Km are identified to renovate. Thalaiyadi Chundikulam road will be renovated by Northern Provincial Council through predeshiya Saba and Point Pedro to Maruthankerny Road will be renovated by Road Development Authority. Almost all the interior roads within Maruthankerny North and South division are seriously dilapidated. Some of the roads get inundated during rainy seasons and all the roads generate dust during dry periods.

Sanitation is a national priority and lack of sanitation facility is available in this village. Nearly 500 household toilets are available including which are not fully constructed and bad state of repair and not in uses. The method of toilet construction is not in the proper way and the disposal system is unacceptable and unaffordable to the people. Toilet usage and unhygienic practices led to spread the infection diseases among the community. Also the existing toilet pit has only soakage pit. This system adversely affect or impact to the environment. This system has to be changed septic tank with soakage pit.

Tourism development and the industries such as Ice factory and Fish factory are important to develop in this village. Maruthankerny GN division other income generation activities such as tourism, business or industries are hardly available. There is only 1 small garment factory available

in Maruthankerny south village with 15 employees. Thalaiyadi village has small ice factory with 4 employees. A small boat yard is being constructed in Thalaiyadi village and it may require 10-15 people to be employed in its operation phase.

In Maruthankerny GN Division, there are Rural Development Societies, Women Rural Development Societies, Fisheries Organizations, Sport Club and the Community Centers. But they have sound knowledge in the planning an implementations of the small scale developments. Necessary training needed to improve their skills and increase the living standard of this people. During the project implementation period and the operation period necessary skills required. Trainings and required tools are needed to improve the capacity development of the RDS and WRDS of this Maruthankerny GND. The following developments are required immediately in this village.

- Internal Roads rehabilitation and renovation in Maruthankerny North and Maruthankerny South
- · Improvement of Play Ground at Thalaiyadi
- Providing Sanitation for 40 Households
- Livelihood Development
- Seed Capital Investment for Fishermen
- Trainings with required tools
- Industries Development (Ice Factory)
- · Marketing and Shopping Facility

#### III. IMPLEMENTATION ARRANGEMENTS

The project will be the part of the Jaffna Kilinochchi Water Supply and Sanitation Project. Ministry of City Planning is the executive agency and the National Water Supply and Drainage Board is the implementing agency through various stakeholders such as Northern Provincial Council, Predeshiya Saba, Divisional Secretariat, Vadamarachchi East, RDD, RDA and the Community Based Organizations.

# IV. BUDGET

No	Description of Development	Required Allocation in Rs.Mn	Remarks
1.	Internal Roads rehabilitation and renovation in Maruthankerny South and North	14.0	Already Chief Secretary funds available to renovate the Thalaiyadi Internal Roads
2.	Improvement of Playground at Thalaiyadi	3.0	
3.	Providing Sanitation facilities to 40 Households and 30 Nos of Drinking Water wells and 10 Nos of Agriculture Wells/ Improvement of Irrigation Facilities	10.0	At the rate of Rs. 75000 for per toilet
4.	Revolving fund for 3 WRDS to encourage the small income generation activity under Livelihood component	4.5	
5.	Seed Capital for Fishermen Cooperative Society for supplying requested fishing gears (Nets, Boats and Engines)	20.0	
6.	Trainings with requires tools (Plumping, Pitting, Wiring, Plant Operations, Boat Mechanic etc.)	10.0	
7.	Ice Factory rehabilitation and increasing the industrial development in Mega Scale & providing Solar panels for Energy Saving	10.0	At present it functioning with 10 – 15 employees. If develop this as mega scale industry employment opportunities will increase
8.	Improvement of Garment Production Centre and employing youths with revolving fund	14.0	
9.	Marketing and Shopping Facility (Establishing fish market and some shop complexes)	10.0	
10.	Multipurpose Community Hall	30.0	
11.	Street Lights Electrification with Solar Power	2.0	
Total	J.	127.5	

#### V. TIME SCOHULE

No	Description of Activity	Year 2017											
	-	J	F	M	A	M	J	J	A	S	0	N	D
1.	Conduct village level assessment including baseline survey and	_		-							2 2		
	PRA												
2.	Formation & orientation on	_											
	Project Team												
3.	Stakeholders Meeting						•						
4.	Procurement						_						
5.	Civil Works						_						
6.	Trainings	_			-								
7.	Evaluation									-	_		
8.	Monitoring												

#### VI. MONITORING AND EVALUATION

Predeshiya Saba and Divisional Secretariat Office will commit to follow up the project from the moment work has commenced and will send three-monthly reports to donor agency up until six months after its termination. In addition, the project will establish a project monitoring plan based on the project log frame for internal monitoring and evaluation purpose. The monthly activity plans will be developed from the project monitoring plan.

Monthly project review meetings will be organized to review the progress and these meetings will be facilitated by the Project Manager/PMU. Proceedings of each monthly review will be recorded and kept for future reference. The Executive Director will undertake period monitoring visits to the project area to interact with project beneficiaries, project staff and other stakeholders on the progress.

The evaluation will assess the impact of the project within the project framework. It will also identify the gaps and provide recommendations to be considered for similar future projects. In case, donor agency commits to undertake the external evaluation of the project, then the project will reconsider the budget for the evaluation activity.

# ANNEX 3: COMPARISON BETWEEN ADB'S INVOLUNTARY RESETTLEMENT POLICY AND NATIONAL INVOLUNTARY RESETTLEMENT POLICY

# Comparison between ADB's Involuntary Resettlement Policy and National Involuntary Resettlement Policy

ADB Policy on Involuntary Resettlement 2003	Sri Lanka National Involuntary Resettlement Policy	Gaps Between ADB Policy and NIRP
Involuntary resettlement should be avoided wherever feasible.	Involuntary resettlement should be avoided or reduced as much as possible by reviewing alternatives to the project as well as alternatives within the project.	No difference between ADB policy and NIRP on this issue.
Where population displacement is unavoidable, viable livelihood options should be provided to minimize the impact.	Where involuntary resettlement is unavoidable, affected people should be assisted to re-establish themselves and improve their quality of life.	The NIRP concurs with ADB policy on this issue.
If individuals or a community must lose all or part of their land, means of livelihood, or social support systems, so that a project might proceed, they will be compensated and assisted through replacement of land, housing, infrastructure, resources, income sources, and services, in cash or in kind, so that their economic and social circumstances will be at least restored to the pre-project level. All compensation is based on the principle of replacement cost.	Replacement land should be an option for compensation in the case of loss of land; in the absence of replacement land cash compensation should be an option for all affected persons.  (Replacement cost is based on market value before the project's acquisition. In the absence of functioning markets, a compensation structure is required that enables affected people to restore their livelihoods to levels at least equivalent to those maintained at the time of dispossession, displacement, or restricted access.)  Compensation for loss of land, structures, other assets and income should be based on full replacement cost and should be paid promptly. This should include transaction costs.	The NIRP concurs with ADB policy on this issue.
Each involuntary resettlement is conceived and executed as part of a development project or program. During project preparation, ADB and the executing agency or project sponsor/s assess the opportunities for affected people to share project benefits. The affected people need to be provided with sufficient resources and opportunities to reestablish their livelihoods and homes as soon as possible, with time-bound action in coordination with the civil works.	Resettlement should be planned as a development activity for the affected people.	The NIRP concurs with ADB policy on this issue.

ADB Policy on Involuntary Resettlement 2003	Sri Lanka National Involuntary Resettlement Policy	Gaps Between ADB Policy and NIRP
Affected people are to be consulted on compensation and/or resettlement options, including relocation sites, and socio-economic rehabilitation. Pertinent resettlement information is to be disclosed to the affected people at key points, and specific opportunities provided for them to participate in choosing, planning and implementing options. Grievance redress mechanisms for affected people are to be established. Where adversely affected people are vulnerable groups, resettlement planning decisions will be preceded by a social preparation phase to enhance their participation in negotiation, planning and implementation.	Affected persons should be fully involved in the selection of relocation sites, livelihood compensation and development options at the earliest opportunity.	NIRP complies with ADB policy in most respects. However, stakeholder involvement mainly involves provision of information and there is no specific mechanism for APs to participate actively in choosing, planning or implementing resettlement options.  NIRP does not disclose about the establishment of Grievance redress mechanisms for affected people
Institutions of the affected people, and where relevant, of their hosts, are to be protected and supported. Affected people are to be assisted to integrate economically and socially into host communities so that adverse impacts on the host communities are minimized and social harmony is promoted.	Common property resources and community and public services should be provided to affected people.  To assist those affected to be economically and socially integrated into the host communities; participatory measures should be designed and implemented.	The NIRP concurs with ADB policy on this issue.
The absence of a formal legal title to the land is not a bar to compensation and entitlement policy.	Affected persons who do not have documented title to land should receive fair and just treatment.	The NIRP concurs with ADB policy on this issue.
Affected people are to be identified and recorded as early as possible to establish their eligibility through a population record or census that serves as an eligibility cutoff date to prevent a subsequent influx of encroachers or others who wish to take advantage of such benefits.	-	The NIRP does not mention establishing a population record through census.
Attention must be paid to the needs of the poorest APs, and vulnerable groups that may be at high risk of impoverishment. This may include those without legal title to the land or other assets, household headed by females, the elderly or disabled and other vulnerable groups, particularly indigenous peoples.	Gender equality and equity should be ensured and adhered to throughout the policy.  Vulnerable groups should be identified and given appropriate assistance to substantially improve their living standards.	NIRP complies with ADB policy in most respects.  Nevertheless, the NIRP does not define the term "vulnerable groups", but gender mitigation is included.

ADB Policy on Involuntary Resettlement 2003	Sri Lanka National Involuntary Resettlement Policy	Gaps Between ADB Policy and NIRP
Appropriate assistance must be provided to help them improve their socioeconomic status.		

ADB = Asian Development Bank, APs = affected persons, NIRP = National Involuntary Resettlement Policy.

# ANNEX 4: SPECIMEN FORMS THAT CAN BE USED FOR GRIEVANCE REGISTRATION AND MONITORING OF IMPACTS DURING PROJECT IMPLEMENTATION

#### SAMPLE GRIEVANCE REGISTRATION FORM

(To be available in Tamil, Sinhala and English)

The Jaffna and Kilinochchi sea water desalinization project welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback. Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing \*(CONFIDENTIAL)\* above your name. Thank you.

Date	k you.	Place of registrati	ion			
Contact Information	on/Personal Details	<b>\</b>				
Name		•	Gender	* Male	Age	
Name			dender	* Female	Age	
Home Address						
Place						
Phone no.						
E-mail						
Complaint/Sugges	stion/Comment/Que	estion Please prov	vide the de	etails (who, w	hat, wh	ere and
, , ,						
If included as atta	chment/note/letter,	please tick here:				
How do you want	us to reach you for	feedback or updat	e on your c	omment/griev	ance?	
FOR OFFICIAL U	SE ONLY					
Registered by: (N	ame of Official regis	stering grievance)				
Mode of commun	ication:					
Note/Letter						
E-mail   Verbal/Telephonic	<b>:</b>					

Annex 4

Reviewed by: (Names/Positions of Official(s) reviewing grievance)						
Action Taken:						
Whether Action Taken Disclosed:	Yes					
Manus of Displacement	No					
Means of Disclosure:						

### **SAMPLE MONITORING TEMPLATE**

S. N.	Activities	Completed Y/N/ NA	Remarks
A. Comr	nunication and Awareness Program	1/11/11/11/	
1	Finalization of public awareness strategy		
3	Finalization and approval of templates for communication materials		
2	Development of communication materials prepared under the communication and awareness program (video, brochures etc)		
3	X number of focal group discussions/ awareness outreach sessions conducted during reporting period		
4	Updating of the public awareness strategy based on the action plan.		
B. Comr	nunity Consultation and Participation action plan	1 1	
1	Number of orientation workshops conducted		
2	Number of community consultations conducted		
3	Number of workshops conducted (including in schools)		
4	Number of consultations conducted with affected people (if any).		
5	Consultation, participation and disclosure as per Plan		
C. Reset	ttlement Plan	•	-
1	Disclosure of final Resettlement Plan on ADB and EA websites		
2	Circulation of summary RP in the local languages to all stakeholders		
3	Finalization of list of Affected Persons and compensation/assistance/allowances due		
4	Affected persons received compensations as per amounts and program specified in resettlement plan		
5	Additional assistance for vulnerable households given (No. of vulnerable APs)		
D. Griev		T	
1	Grievance Redress Committee and telephone hotlines established		
2	Entitlements and grievance redress procedure disclosed		
9 E Monit	Grievances No. of grievances registered No. of grievances redressed Outstanding complaints Disclosure of grievance redress statistics		
E. Monit			
1	Survey on socio-economic status of affected Persons (including vulnerable APs) completed		

S. N.	Activities	Completed Y/N/ NA	Remarks					
	and compared with baseline survey results							
2	Survey on satisfaction levels of Affected Persons with implementation of outreach activities.							
F. Lat	F. Labor							
1	Implementation of all statutory provisions on labor like health, safety, welfare, sanitation, and working conditions by Contractors							
2	Equal pay for equal work for men and women							

NOTE: Where applicable, the information provided in the table should be supported by detailed explanatory report, receipts and other details.

# ANNEX 5: MEETINGS, COMMUNITY CONSULTATIONS AND TRAININGS RELATED TO ESTABLISHING REVERSE OSMOSIS PLANT AT THALAIYADI

# Meetings, Community Consultations and Trainings related to Establishing Seawater Reverse Osmosis Plant at Thalaiyadi

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
1	02.02.2015	DS, Vadamarachchi East	DS Office, Vadamarachchi East	DS, Grama Niladharis, Development Officers, Members from Fishermen's Societies, Engineers and Social Mobilization Officers from JKWSSP	Consultation with officers and fishermen from Maruthankerny Requested the concerns and opinions of public and fishermen from Vadamarachchi East regarding the Reverse Osmosis Plant	Fishermen and public objected Officials from DS office agreed and accepted these complaints
2	28.05.2015	Northern Provincial Council	Fisheries Community Centre Hall, Maruthankerny	Hon. Ministers from Northern Provincial Council, Secretary from Ministry of Agriculture, Assistant Director, Department of Fisheries and Aquatic Resources, President/ Water Globe Consultant, ADB Officials, DS & Grama Niladharies of Vadamarachchi East, Members from Fisheries Society, Project Staffs of JKWSSP	Provided clear understanding about desalination Plant to the fishermen	Fishermen got clear idea about SWRO
3	03.06.2015	Project Director, JKWSSP	DS Office Vadamarachchi East	DS, GSs, Development Officers and Community Leader and Members from Fisheries Society RDS and WRDS	Consulted with the community leaders of the village and recorded their worries and concerns regarding the development of Vadamarachchi East.  Explainedthe SWRO plant technology, its uses, its cost and the benefits.	
4	11.07.2015	DS, Vadamarachchi	DS Office Vadamarachchi	GA, DS, Community Leaders, RDS and WRDS, Religious	Consulted with the public regarding their	

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
		East	East	Heads	opinions of SWRO plant and discussed the issues and problems of people	
5	29.09.2015	GA, Jaffna	District Secretariat Office, Jaffna	GA/ Jaffna, DS/ Vadamarachchi East, DA, DS Office, Staff of JKWSSP, Well-wishers and educated people from Thalaiyadi Village	Project name was changed to Thalaiyadi SWRO Plant from Maruthankerny Reverse Osmosis Plant	
6	11.11.2015	Project Office	St. Thomas Pre- School Hall, Thalaiyadi	DS, Project Staffs of JKWSSP, ADB Consultant, RDS and WRDS of Thalaiyadi Village, Fisheries Society	Established GRC for the socio-economic concerns and environmental safeguard	
7	17.11.2015	DS, Vadamarachchi East	St. Thomas Pre- School, Thalaiyadi	ADB Safeguard Specialist, ADB Officials, DS Vadamarachchi East, DA Vadamarachchi East, Thalaiyadi RDS, Thalaiyadi WRDS, Thalaiyadi Fisheries Cooperative Society	Explained ADB's safeguards policies and recorded the concerns of community, and confirmation of Padus and public/ private lands.	
8	23.01.2016	Project Office	Library, Thalaiyadi	RDS, WRDS, Fisheries Society, Sports Club, Youth Society	Grievances Redress Committee (GRC) discussed the status and progress of the SIA & EIA Studies.	
9	23.01.2016	DS, Vadamarachchi East	Library, Thalaiyadi	Chief Secretary, DS, ADP, Members form RDS, WRDS, Fisheries Society, Sports Club, Youth Society & Community Center	Chief Secretary, NPC consulted with community leaders and requested to hear their worries and issues. Considered their short comings and agreed to renovate the internal roads and play ground. Also agreed to construct new multipurpose hall.	
10	26.01.2016	Project Office & LHI	Pre-School, Thalaiyadi	LHI Social Team, Project Staffs, DS Office Staffs, Fisheries' Society, RDS and WRDS	Discussed about the proposed SWRO Plant, income generating	

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
					potential, livelihood, land availability, padus details.	
11	06.02.2016	Project Office & LHI	GS Office, Maruthankerny	GS, Project Staffs, LHI Staffs, RDS, Fisheries Department from adjoin villages	Community leaders from other adjoining villages (those who are opposing the project) came to discuss their reasons for opposing the project.	They fear that fish production will be reduced due to the discharge. It was discussed clearly that this will not be the case as diffusers will ensure that the brine is mixed to ambient salinity levels within 100m of outfall. This was understood clearly by the fishermen, who no longer oppose the project.
12	04.03.2016	DS, Vadamarachchi east	DS Office, Vadamarachchi East	Members from Parliament, Members from Provincial Council, Community Leaders, Heads of Departments, Fisheries department, RDS, WRDS & Fisheries Society	Parliamentarian explained the drinking water need to the public from Jaffna and suggested to wait for LHI's report to verify the positive and negative impacts of the project.	
13	24 & 25.06.2016	Project Office	Thalaiyadi Community Centers & GS Office	Community Leaders, Fisheries department, RDS, WRDS & Fisheries Society, Communities, Farmers	Individually met the leaders, community representatives and farmers to identify the requirements of the developments in Thalaiyadi area	Based on this discussion SLR 127.5 million (\$ 1m ADB financing) from ongoing loan was allocated for implementing theMaruthankerny Integrated Development Project
14	17.07.2016	Project Office	Thalaiyadi Roman Catholic School	School Students from 19 schools at Vadamarachchi East	,	Parents were most interested and

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
				Division	the project details and the ongoing activities at Thalaiyadi.  Exam preparation for school students also conducted by project	participated with their children
15	21.07.2016	DS, Vadamarachchi East	DS Office, Vadamarachchi East	DS, Predeshiya Saba Secretary, GS, RDS, WRDS, Fisheries Society, Farmers Society, RDO,	Discussed about the Integrated Maruthankerny GND Development Project of NWSDB/ADB (financed under ongoing loan) – SLRs. 127.5 Mn and the technical reports was prepared.	Please refer the proposal
16	01.08.2016	Project Office	Thalaiyadi Roman Catholic School	School Students from 19 schools at Vadamarachchi East Division	Community and school students were explained about the project details and the ongoing activities at Thalaiyadi. Exam preparation for school students also conducted by project	Parents were very interested and participated with their children
17	04.08.2016	Chief Minister, NP	DS Office, Vadamarachchi East	Chief Minister, Ministers of NP, Members of NPC, Chief Secretary, Government Agent, All government institution and boards	Mobile service was arranged by Chief Minister, NP to record the grievances of public from Vadamarachchi East DS Division.	There were no grievances reported regarding the activities of Desalination project at Thalaiyadi.
18	12.09.2016	Project Office	Thalaiyadi Roman Catholic School	School students from 19 schools at Vadamarachchi East Division	Community and school students were explained about the project details and the ongoing activities at Thalaiyadi. Exam preparation for school students also conducted by project	Parents were very interested and participated with their children
19	20.10.2016	Project Office	DS Office, Vadamarachchi	DS, ADP, Project Staffs, Predeshiya Saba Officer, GS,	Awareness discussion about the solar panel	Locations for solar panel street lights

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
			East	RDS, WRDS from three villages, Fisheries Society, Farmers Society, RDO and DO	street lights installation and location finalized	(funded under the Maruthankerny Integrated Development Project) were finalized.
20	21.10.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Officials from the DSO, Hospital, Other regional departments located at Thalaiyadi	Training programs were organized for officers and community leader under ADB TA 7676 and commenced from 14.10.2016 <sup>1</sup>	
21	12.11.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Community Leaders from RDS/WRDS/Fisheries Society of Vadamarachchi East DS Division	Training in communitydevelopment tools for community leaders was arranged under TA 7676	34 community leaders participated and actively engaged in the activities
22	15.11.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Officials from the DSO, Hospital, Other regional departments located Vadamarachchi DSD	Training on small scale project management for Officers was arranged under TA 7676	30 Officers from Vadamarachchi East DS Division and other stakeholders participated in this training
22	19.11.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Community Leaders from Vadamarachchi East DS Division	Training program in book keeping was organized for community leaders under TA 7676	30 Community leaders participated from Vadamarachchi Area
23	22.11.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Officials from the DSO, Hospital, Other regional departments located Vadamarachchi DSD	Training on team building for Officers was arranged under TA 7676	30 Officers from Vadamarachchi East DS Division and other stakeholders participated
24	06.12.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Officials from the DSO, Hospital, Other regional departments located	Training on project proposal writing was arranged under TA 7676	29 Officers from Vadamarachchi DSD and other

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<sup>&</sup>lt;sup>1</sup> TA 7676 SRI: Capacity Development for Water Supply and Sanitation Service Delivery (approved 31 December 2010). The TA amount of \$600,000 was utilized for capacity building of water and sanitation delivery agencies.

No.	Date	Organized By	Venue	Participants	Outcome	Remarks
				Vadamarachchi DSD		stakeholders participated and benefitted from this training.
25	10.12.2016	Project Office	Government Agent's Office	Community Leaders from RDS/WRDS/ Fisheries Society of Thalaiyadi, GA, DS, ADP, ADB Consultant and PMCIU Staffs	The meeting was organized by DS, Vadamarachchi East to discuss about the progress of Thalaiyadi Development activities and the findings of LHI Study.	15 community leaders participated and discussed the community infrastructure development activities. The LHI study findings were also discussed and the community leaders got a clear idea about the proposed SWRO project.
26	11.12.2016	ADB – TA 7676	DS Office, Vadamarachchi East	Community Leaders from Vadamarachchi East DS Division	Training on savings and Development was conducted under TA 7676	33 Participants participated and actively engaged in the activities.
27	17.01.2017	ADB – TA 7676	DS Office, Vadamarachchi East	Officials from the DSO, Hospital, Other regional departments located Vadamarachchi DSD	Training on data collection method for Officials was conducted under TA 7676	40 participants participated
28	21.01.2017	ADB – TA 7676	DS Office, Vadamarachchi East	Community Leaders from Vadamarachchi East DS Division	Training on technology for small businesses was conducted for community leaders under TA 7676	40 participants participated
29	16.03.2014	Project Office	Government Agent Office	ADB Team, GA, DS, Secretary PS, AD from Fisheries Department, RDS, WRDS, Fisheries Society, Sports Club, Communities	LHI's studies were presented and participants understood the findings.	60 participants participated
30	24.03.2017	GA Office	Government Agent Office	GA, DS, Secretary PS, AD from Fisheries Department, President, Secretary and	LHI's studies were presented and participants understood	They requested to arrange a meeting with 15 fishermen

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No.	Date	Organized By	Venue	Participants	Outcome	Remarks
				Treasurer from Vadamarachchi East Fisheries Cooperative Society	the findings.	from the fishermen cooperative society from Vadamarachchi East. A further meeting was conducted (no.31) to discuss this further.
31	18.04.2017	GA Office	GA Office	GA, DS, Secretary PS, AD from Fisheries Department, President, Secretary and Treasurer from 15 Fisheries Societies of Vadamarachchi East	LHI's studies were presented and they clarified the intake, outfall, the concentrated salt discharge from outfall, fish production etc.	

ADB = Asian Development Bank, DS = Divisional Secretariat, JKWSSP = Jaffna Kilinochchi Water Supply and Sanitation Project, SWRO = seawater reverse osmosis.

# ANNEX 6: KEY PERSONS INTERVIEWED DURING RESETTLEMENT PLAN PREPARATION STAGE

# Key persons interviewed during Resettlement Plan preparation stage

Name Address		Position	Date of the interview
Eng. T. Barathithasan	PMCIU -Jaffna	Project Director, JKWSSP	6-01-2017
Mrs. P. Jeyarani	DS office Palai	Divisional Secretary, Palai	6-01-2017
Eng. R. Balendra	PMCIU Office Jaffna	Senior Engineer, JKWSSP	6-01-2017
Eng. S. Malathy	PMCIU Office Jaffna	Chief Engineer, JKWSSP	6-01-2017
Mrs. I. Balakumary	PMCIU Office Jaffna	Sociologist, JKWSSP	6-01-2017
Mrs. S.P. Vanothini	Maasar GN office, Palai	Grama Niladhari, Maasar, Palai	6-01-2017
Mr. N.Nishanthan	Predeshiya Saba sub- office, Maruthankerny	Acting OIC, PS	6-01-2017
Mr. N.Sivaram	Soranpattu GN office, Palai	Grama Niladhari, Soranpattu, Palai	7-01-2017
Mrs. S.Radhika	Chempionpattu GN office	Grama Niladhari, Chempionpattu, Palai	6-01-2017
Mr. S.Aravindhan	Maruthankerny South GN area	Madal Operator	6-01-2017
Mr. S.Arunalandhan	Thalaiyadi, Main street	Former Madal operator	6-01-2017
Mr. S. Velayudan	Maruthankerny North	RDS President Maruthankerny North	6-01-2017
Mr. V. Velayudan	Maruthankerny North	President – Fisheries Society Maruthankerny South	6-01-2017
Mr. S.Sivakumar	Maruthankerny South	Youth Sport Club- President	6-01-2017

JKWSSP = Jaffna Kilinochchi Water Supply and Sanitation Project, PMCIU = project management coordination and implementation unit.

#### ANNEX 7: PROPOSAL FOR COMMUNITY AWARENESS PROGRAM

# THE PROPOSAL FOR CONTINUOUS COMMUNICATION AND AWARENESS PLAN FOR THE SWRO PLANT PROJECT

1. Due to the sensitive nature of this project which is located in a traditional fishing area, there is a need to conduct continuous awareness activities to be continuously with the surrounding communities to address their concerns and issues pertaining to the project. A brief description of the proposed awareness program is described below. The detailed TOR for the continuation of communication and awareness program for the project is in Annex 8.

#### The objective of the awareness program:

- 2. Main objective is to provide accurate and comprehensive information to the project related stakeholders, especially to the villagers in Maruthankerny GN area to make them aware about the proposed project and address their concerns about the project by providing them with timely information and seeking their inputs to help enhance the design and implementation of the sub- projects under the livelihood development program which is being funded under the ongoing loan (Annex 2). The program is intended to manage the risks emanating from negative perception of project among the fishing communities located near the project area and manage any conflicts that may emerge through timely information dissemination and undertaking continuous dialogue.
- 3. The following activities will be carried out to achieve the expected objectives
  - (i) Preparation of materials for awareness and address any issues that may lead to potential conflicts (in the form of powerpoint presentations, video clips etc.) These media for information dissemination will be required to be developed by the project proponents. External inputs from communications and media specialists may also be sought if required;
  - (ii) Training of potential trainers from Jaffna for conducting awareness and outreach activities. (DS, Assistant Director of Fisheries Department, Project staff etc.);
  - (iii) Train project staff (sociologist) to document the outcome of awareness programs;
  - (iv) Preparation of a report based on awareness outcome sessions' (notes produced by the Project sociologist); and
  - (v) Preparation of follow up action plan based on the outcome of awareness sessions.

#### Action plan for implementation of Awareness program

- 4. The main objective of the action plan is to raise awareness of the communities in Thalaiyadi, Maruthankerny north and South villages in Maruthankerny Grama Niladhari division on the proposed project and its impacts. The livelihood enhancement program under the ongoing loan (Annex 4) already developed by the PMIU would also be discussed with the communities in the Grama Niladhari division to ensure that the local communities indeed benefit in some way from the project and livelihood assistance program.
- 5. The following activities will be carried out to achieve the expected objectives

**Activities of Awareness Program** 

Activity	Details	Responsibility	Other remarks
1	List the activities planned and implemented by the PMIU to raise the awareness of the communities in 3 villages of Maruthankerny Grama Niladhari division	PMIU/external consultant	Data from PMIU provided by the Sociologist
2	Review of the outcomes of these activities implemented by PMIU for community awareness and mobilization	External consultant	Small write up
3	Prepare a small document in the form of power point slides in simple way to present relevant project impacts to communities and propose mitigatory measures	External consultant	Support from PMIU
4	Present the project proposed livelihood activities to the community leaders to enhance their level acceptance of the proposed activities for their villages	PMIU	Observations by LHI disseminated through a Research Assistant
5	Revise the proposed livelihood activities based on the feedback received from the community leaders	PMIU	Support from External consultant
6	Capacity building of PMIU staff to convert the livelihood activities to mini-projects	External consultant/PMIU	Support from PMIU
7	Capacity building for PMIU to conduct awareness sessions along with implementation of livelihood related mini-projects in the 3 villages.	External consultant/PMIU	Participation of PMIU
8	Strategy for mini-project planning and implementation and monitoring by PMIU and the community leaders/CBOs <sup>1</sup>	External consultant	With PMIU
9	Incorporation of the feedback for improvements to the livelihood related mini-projects and their planning and implementation process	PMIU	Support from loan funded consultant
10	Preparing impact and outcome reports on awareness program and the mini-project implementation.	External consultant <sup>2</sup>	With PMIU

<sup>&</sup>lt;sup>1</sup> Mini projects are being developed under the ongoing loan. The loan allocates SLR 127.5m for livelihood development projects to support the community. The mini-projects are being identified in close consultation with the community.

<sup>2</sup> Consultant will be recruited by LHI under the ongoing loan to undertake the awareness programs. TOR provided in

Annex 8.

# ANNEX 8: TERMS OF REFERENCE FOR THE CONTINUATION OF COMMUNICATION AND AWARENESS PROGRAM FOR THE PROJECT

### Terms of Reference for proposed Social Awareness Program

#### **BACKGROUND:**

- 1. The ADB funded potion of the Jaffna and Kilinochchi Water Supply and Sanitation Project (the Project) was approved on 10 November 2010 for \$164 million and declared effective in May 2011. The Project is financed with a loan of \$90 million equivalent from the ADB's Asian Development Fund (\$70 million) and Ordinary Capital Resources (\$20 million), along with €35 million (approximately \$45 million) co-financing from AFD. The AFD Credit Facility Agreement was signed on 31 December 2011. The overall impact of the Project is improved health and human development in urban areas of Jaffna Peninsula while the specific outcomes are: (i) improved water supply and sanitation infrastructure for residents and returning internally displaced persons in targeted urban areas; and (ii) improved protection and management of Jaffna Peninsula's water resources. The project area covers the Jaffna Peninsula and Poonakary & Palai Predeshiya Sabha in Kilinochchi District.
- 2. The initial design of the drinking water scheme was entirely dependent on abstracting water from Iranaimadu Tank but the progress of the project was hampered due to a dispute over water sharing between the urban areas drinking water requirements and the irrigation needs of the local farmers. With the resettlement of internally displaced people in Kilinochchi, the demand for water for irrigation has increased significantly, resulting in strong resistance from farmer organizations to share water for other needs with the Jaffna District. This situation escalated after an unusually severe drought experienced during 2012 which saw a significant drop in water levels in the Iranaimadu tank. In September 2014, ADB processed a technical assistance to mobilize an international consultant to scope the feasibility of undertaking a desalination project in the Jaffna area, to meet the region's growing water needs. The rapid assessment undertaken by the consultant, confirmed the feasibility of sea water desalination plant in Thalaiyadi. The project team undertook many discussions with the villagers and they well understood the advantages of the proposed desalination plant to be set up within their village coastal stretch of 3 km, and given their consent for the development of this project
- 3. Later, it was noted that the adjoining villagers living far away from the proposed location, objected to the project with the support of some organized groups. The objection arose from ignorance regarding the desalination process. The community was concerned that the discharged water from the plant will negatively impact their fishing operations. Several consultations have been undertaken by the project team with the neighbouring communities to explain the plant's operation process and address their concerns pertaining to negative impacts on the local fishing economy. The views of the local fishermen have been considered and environmental impact studies installation and operation of the plant will not to have any negative effects on the fishing activities of the local fishermen.
- 4. To avoid this type of misunderstandings in the future, there is a need to share the findings from the technical, social and environmental impact assessment which is being undertaken by LHI and PMIU of NWSDB. For this purpose, the ongoing project is seeking to contract a suitably qualified and experienced individual from LHI to undertake the design and implementation of communication and public awareness campaign related to the above-mentioned project. The consultant is not yet on board. The purpose of this Terms of Reference (TOR) is to clarify the task to be performed by the individual.

#### **OBJECTIVE:**

- 5. The objective of this consultancy is to design and implement communication and public awareness strategies to positively highlight and disseminate the findings of the social and environmental impact assessment and project achievements among the public.
- 6. The project will incorporate a campaign strategy that will, through communication and the awareness creation target three main t areas of Maruthankerny North, Maruthankerny South and Thalaiyadi. The campaign strategy is to educate and make the people from these areas understand the operational processes of the proposed desalination plant and the projects' relevance in terms of meeting the urgent need of pure drinking water for the people of Jaffna peninsula.

#### **SCOPE OF WORK:**

- 7. The consultant/ consultant firm will be able to:
  - (i) Design and implement a public awareness strategy to increase awareness on the findings of the social and environmental impact assessment and project achievements based on the review of existing communications / public awareness tools and assessment of their effectiveness;
  - (ii) Prepare outreach materials for awareness raising & harmonization of the potential conflicts in the form of power point presentation including critical animations/videos. (LHI will submit the power point presentation and PMIU will do the presentation, distribution, etc.);
  - (iii) Conceptualize, develop layouts, formats and designs of all the promotional materials and activities agreed as part of the public awareness strategy to advertise the project to target audience including media. These will be in the form of project folders, banners, billboards, posters, web campaign, photo/drawing essays, video campaigns for broadcast, print and social media. (LHI will submit the design layouts for the above-promotional materials and PMIU will do the printing/production, distribution, etc.);
  - (iv) Script and shooting of video documentary regarding the SWRO plant installation should be developed and should not be less than 30 Minutes. (The cost relevant to the video documentary is not included in this consultancy fee and this additional cost will be paid from the contingency budget or other sources identified by PMIU.) The video should also highlight the social outreach conducted by project team with the nearby communities over the last few years. It must demonstrate how project communications and outreach have helped to change the negative perception of the project, and helped build community support for the project;
  - (v) Prepare case studies to highlight JKWSS project and SWRO plant success stories, good practices and lessons learned (publications, brochures etc.);
  - (vi) Develop an inventory of media and public relations voluntary professionals / agencies from the area that can be utilized during project implementation, and facilitate contact with them whenever necessary. Social media sites must also be monitored to have better coverage;
  - (vii) Document and report activities highlighting progress, achievements and success stories of project, including outreach via social media;

- (viii) Conducting Focal Group Discussions/awareness sessions among the community in a way to convince them of the advantages of locating the SWRO plant in their area; and
- (ix) Prepare necessary modifications to the outreach strategy based on outcomes of community consultations and actions outlined in action plan.

#### **EXPECTED DELIVERABLES**

- 8. The consultant/ consultant firm will submit the following as outputs:
  - (i) A comprehensive public awareness strategy for the project:
  - (ii) Submitting video documentary regarding the SWRO plant should be developed and should not be less than 30 Minutes. This should include the depiction of the social outreach activities that have been conducted to help develop project support among the local communities. (The cost relevant to the video documentary is not included in this consultancy fee and this additional cost will be paid from the contingency budget or another source identified by PMIU.);
  - (iii) Design layout (for printing/production) of project folder, banners, billboards, campaign t-shirt, poster. (LHI will submit the design layouts for the above-promotional materials and PMIU will do the printing/production, distribution, etc.);
  - (iv) Publish articles (with relevant photos) regarding the SWRO plant operations and the findings of the EIA & Social Impact Assessment;
  - (v) Inception report outlining the work/activities to be undertaken, including implementation plan and timelines;
  - (vi) Progress report describing the activities outlined in the agreed Public Awareness Strategy and approved Implementation Plan; and
  - (vii) Final report on social awareness which should show the methodology used, activities undertaken, successes, challenges, results (planned and unplanned), lessons identified and recommendations on how to use these lessons.
- 9. To complete the above task, the consultant or consultancy firm will be required to:
  - (i) Submit an inception report within one week after award of contract;
  - (ii) Collaborate with key stakeholders (DS, GS, Fishermen Society, RDS/WRDS, Sports Club, and Community Centre) in the target areas to collect information, photos and video footages for the development of awareness materials and other activities:
  - (iii) Submit quarterly reports; and
  - (iv) Submit final report at the end of the assignment.

#### **PAYMENT SCHEDULE**

10. The payment will be made on quarterly basis based on the activities completed by the consultancy.

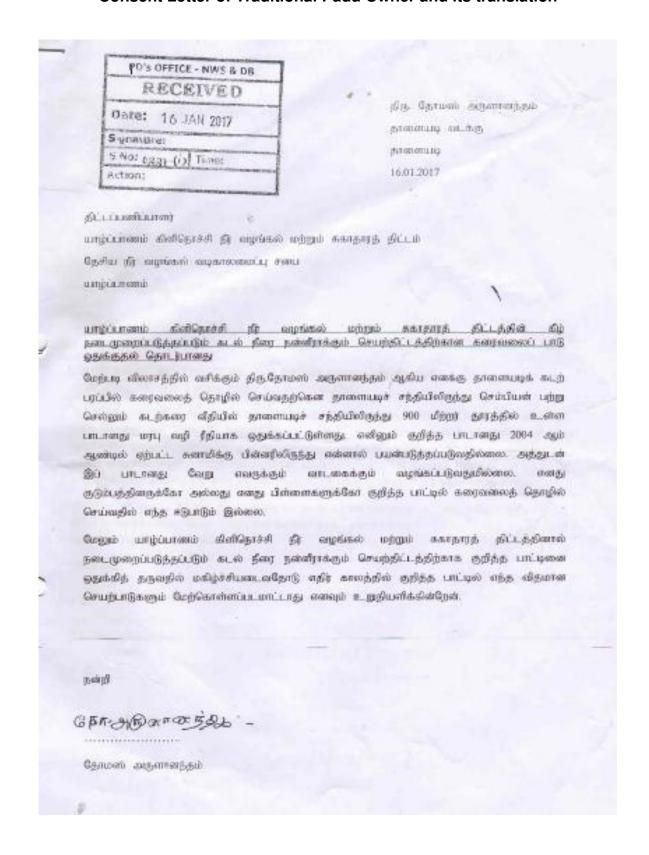
#### **DURATION AND LOCATION**

11. The duration of the consultancy is scheduled to last a maximum of ten (10) months (intermittent inputs). Scope of work will be a combination of home and field inputs to be provided

under the supervision of the project Sociologist and Project Engineer. No equipment or material will be purchased or provided by project to conduct the scope of work. Any travel, equipment or materials needed to accomplish this TOR will be covered by the consultant. Any expenses, unless explicitly articulated by the project, will be at the expense of the consultant.

- 12. Please find below a tentative schedule of Consultant activities:
  - (i) Site visit and discussion with stakeholders;
  - (ii) Preparation and submission of power point presentation and design layouts;
  - (iii) At the end of first quarter, conduct site visit & discussion with stakeholders, and submission of progress report 1;
  - (iv) At the end of second quarter, conduct site visit & discussion with stakeholders, and submission of progress report 2;
  - (v) At the end of third quarter, conduct site visit & discussion with stakeholders, and submission of progress report 3; and
  - (vi) Submit of final report at the end of the assignment.

# ANNEX 9: CONSENT LETTER OF TRADITIONAL PADU OWNER AND ITS TRANSLATION Consent Letter of Traditional Padu Owner and its translation



Mr. Thomas Arulanantham,

Thalayadi North,

Thalayadi

16.01.2017

Project Director,

Jaffna - Kilinochchi Water Supply and Sanitation Project.

Nater Water Supplies and Drainage Board.

Jaffna.

### Allocating Beach Seine Padu for Sea Water Purifying program implemented under Jaffna- Kilinochchi Water Supply and sanitation Plan.

The Beach seine fishing Padu (Fishing area) located at 900 meters from Thalayadi Junction on the beach road running from Thalayadi Junction to Semplyanpattu had been allocated traditionally to me, Mr.Thomas Arulanantham, residing at the above address for beach Seine fishing. However, after the Tsunamy that occurred in 2004, this padu had not been used by me. Further, I also do not lease this padu to anyone. Neither my children nor I have any intention of doing Beach Seine fishing in this Padu.

While stating that I am happy in allocating this padu for the Sea water purifying project implemented under Jaffna Kilinochchi Water Supply and Sanitation plan, I also assure that no activities of any kind will be undertaken in the said Padu.

Thank you.

Sgd.: T.Arulanantham (Thomas Arulanantham)

Translated by mo

Sworts Translator English -Tomil No.27, Our Lody of March's Sast Road, Karunagan, Jaffins.

15/02/2017

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### ANNEX 10: SIGNED MEMORANDUM OF UNDERSTANDING BETWEEN NATIONAL WATER SUPPLY AND DRAINAGE BOARD AND FISHERIES SOCIETY AND TRANSLATION

### KANAGARATNAM ASSOCIATES

Kanagaratnam Kesavan J.P.U.M. Attorney-at-Law & Notary Public, Justice of the Peace & Unofficial Magistrate. Commissioner of Oaths.

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புரிந்துணர்வு உடன்பூரக்கை

20:- 15559





தால் வதி, இரத்மலானை, தபால் பெட்டி இலக்கம் 14 என்னும் விலாசத்தில் பிரதான காரியாலயத்தைக் கொண்டதும் 1974 ஆம் ஆண்டின் 02 ம் இலக்க சட்டத்தினால் ஸ்தாபிக்கப்பட்டதுமான தேசிய நீர வழங்கல் வடிகாலமைப்பு சபையின் சார்பாக அதன் தலைவர் திரு.கே.அலாகுடின் அன்சார் பொது முகாமையாளர் **G.A.குமாரரட்ணா** ஆகிய நாம் (முதலாம் யாழ்ப்பாண மாவட்டத்தின் கடற்றொழில் நீரியல் திணைக்களத்தின் கீழ் J/2177ம் இலக்கத்தில் 30.05.1994 ம் திகதி பதிவு செயய்ப்பட்ட தாளையடி கடற்றொழிலாளர் கூட்டுறவுச் சங்கத்தின் சார்பாக தலைவர் அழகராசா அன்ரன் விமல்ராஜ் செயலாளர் ஜோன் அமிர்தநாயகம் எமல்சன் NP/DRD/JA24/J/428-0808 இலக்கத்தில் பதிவு செய்யப்பட்ட தாளையடி கிராம அபிவிருத்திச் சங்கத்தின் தலைவர் ஜோன் பொஸ்கோ யோகநாதனும் செயலாளர் பெஞ்சமின் ஜீவதாசும் ஆகிய **IDITIO** இரண்டாம் புறமாகவும் எங்களுக்குள் இணங்கி எழுதிக் கொள்ளும் பூரிந்துணர்வு உடன்படிக்கையாவது.

នាងរកទាំ (முதலாம் புறத்தவரான தேசிய நீர் வழங்கல் வடிகாலமைப்பு . பையானது ஆசிய அபிவிருத்தி வங்கியின் நிதி வழங்குதலுடன் யாழ்ப்பாணக் மக்களின் நீர்ப் பிரச்சினையைத் தீர்ப்பதற்கான உடனடி நீர் வழங்கல் திட்டம் ஒன்றை அமுல்படுத்துகின்றது என்றும் .யாழ்ப்பாணக் குடி நீர் வழங்கல் திட்டத்திற்காக தாளையடி கடற்பரப்பில் கடல் நீரைப் பெற்று சுத்திகரித்து நன்னீராக்கி விநியோகிப்பதற்கான கட்டுமானப் பணிகள் எங்கள் புறத்தவரால் என்றும் அமைக்கப்படும் மேற்குறித்த கட்டுமானங்கள் அமைக்கப்படும் போது கடல் நீரை உறிஞசும் குழாய்கள் ,வெளியேற்றும் குழாய்கள் ,சுத்திகரிப்பு நிலையம் மற்றும் பிரதான நீர் விநியோகக் குழாய்கள் என்பவற்றை 1ம் புறத்தவரால் அமைக்கப்படும் என்றும், மேற்குறித்த 2ம் புறத்தவரின் இணக்கப்பாட்டுடன் தாளையடிக் கடலிலிருந்து கடல் நீரை எடுத்து சுத்திகரித்து விநியோகிப்பதற்கு மேற்படி கட்டமைப்பு 1ib புறத்தவரால் அமைக்கப்படும் என்றும் மேற்குறிக்க காளையுமக் கடந்பரப்பினைப் பயன்படுத்தும் கடற்றொழிலாளர்களுக்கும் கரை வலைத் தொழிலில் ஈடுபடுபவர்களுக்கும் எந்தவிதமான பாதக விளைவுகளும் ஏற்படாத வகையில் மேற்படிகட்டுமாணங்கள் 1ம் புறத்தவரால் அமைக்கப்படும் என்றும் மேற்குறித்த கட்டுமாணங்கள் இதன் பின்னால் காணும் நிபந்தனைகளுக்கு அமைவாக அமைப்பதற்கு **20**(5) புறத்தவர்களும் இத்தால் பொருந்தி கொள்ளுகின்றனர்.

#### மேற்குறித்த நிபந்தனைகள்

- யாழ்ப்பாணக் குடிநீர் வழங்கலுக்கான சுத்திகரிக்கப்பட்ட நீரைப் பெற்றுக் கொள்வதற்குத் தேவையான கட்டமைப்பினை தாளையடியில் அமைப்பதற்கு இரு புறத்தவர்களும் உடன்படுகின்றனர்.
- 2. முதலாம் புறத்தவரின் கட்டமைப்பு வடிவமைப்பிற்கு ஏற்ப, சுத்திகரிப்பு நிலையமானது கடந்கரையிலிருந்து 500 மீற்றர் தூரத்தில் அமைக்கப்படும். மேலும் கடல் நீரை உறிஞ்சும் மற்றும் வெளியேற்றும் குழாய்கள் கரை வலைத் தொழில் பாதிக்கப்படாதவகையில் நிலத்தினுள் புதைக்கப்படும். நீர் உறிஞ்சும் குழாய் அமைப்பு கடலுக்குள், கடற்கரையிலிருந்து ஏறக்குறைய 800 மீற்றர் தொடக்கம் 1000 மீற்றர் தூரம் வரை நீட்டப்பட்டு அதன் முடிவுப் பகுதியில் பொருத்தப்பட்டிருக்கும் உறிஞ்சு கருவிகள் கடலினுள் 10 மீற்றர் ஆழத்தில் அமைக்கப்பட்டு மிதப்புக்களினால் அடையாளமிடப்பட்டிருக்கும்.
- 3. இரண்டாம் புறத்தவரின் இணக்கப்பாட்டுடன் சுத்திகரிப்பு ച്ചുതல பகுதியிலிருந்து அமைக்கப்பட்டுள்ள கட்டுமான குழாய் அமைப்பு பாடு உள்ள பகுதியில், இத்துடன் இணைக்கப்பட்டுள்ள வரைபடத்தின் படி, முதலாம் இணைப்பு 1ல் உள்ள புறத்தவரின் பாவனைக்கு வழங்க இரு புறத்தவர்களும் இத்தால் உடன்பட்டுக் கொள்ளுகின்றார்கள். அதாவது ஒரு பாடு 300 மீற்றர் அகலமுடையது என எடுக்கும் போது அப் பகுதியினுள் ஏறக்குறைய 100 மீற்றர் அகலமான பகுதிக்குள்ளேயே குழாய் பதித்தல் ஏற்பாடுகள் இருக்கும்.
- 4.தாளையடிக் கிராம மக்களின் நலன் கருதி பின்வரும் செயற்பாடுகள் செய்வதற்கு ஏற்பாடுகள் முதலாம் புறத்தவரால் செய்யப்பட்டுள்ளது.
  - ✓ கட்டுமானப் பணிகள் இடம்பெறும் போதும் அதன் பின்னரும் உள்ளுர்த் தொழிலாளிகளுக்கு் முன்னுரிமை வழங்கல்
  - ✓ கிராமிய உட்கட்டுமானங்களை அபிவிருத்தி செய்தல்
  - √தொழிற் பயிற்சிகள் வழங்குதல்
  - ✓ சுயதொழில் முன்னேற்றத்திற்கு உதவுதல்
- 5. மேலும் இவ் உடன்படிக்கையை நடைமுறைப்படுத்தும் போது ஏதும் பிணக்குகள் ஏற்படின் அவை கடற்றொழில் நீரியல் வள திணைக்களம் மற்றும் தேசிய நீர் வழங்கல் வடிகாலமைப்பு சபை மற்றும் வடமராட்சி கிழக்கு பிரதேச செயலகம் ஆகியோரின் அனுசரணையுடன் யாழ் மாவட்ட அரசாங்க அதிபரின் தலைமையில் கலந்துரையாடப்பட்டு முடிவுகள் எட்டப்படுவதற்கு இரு புறத்தவர்களும் இத்தால் உடன்பட்டுக் கொள்ளுகின்றார்கள்.

இதற்கத்தாட்சியாக இப் புரிந்துணர்வு உ நாங்கள் இதிலும் இதுபோன்ற இன்னு	உடன்படிக்கையின் 1ம் 2ம் புறத்தவர்களாகிய யமிரு பிரதிகளிலும் <i>15ஸ்ஷால் Onneysando</i> ல <i>5 hayan</i> by
இருந்து இரண்டாயிரத்து பதிவே	ரழாம் ஆண்டு <b>ம∧</b> ∮ மாதம்
திகதியாகிய இன்	று <b>எமது</b> கையொப்பங்களை வைக்கின் <b>றோம்</b> .
	M
	(தன்லவர் - தேசிய நீர் வழங்கல்
	வடிகாலமைப்பு சபை)  General Manager National Water Supply & Drainage Board
	(பொதுமுகாமையாளர் - தேசிய நீர் வழங்கல் வடிகாலமைப்பு சபை)
இதன் கீழ் கையொப்பம் வைக்கும்	
சாட்சிக்காரர்களாகிய நாங்கள் குறித்த	di dingin agricon
உடன்படிக்கை முடிப்புக்காரருடைய ஊர்,	(தலைவர் - தாளையடி கடற்றொழிலாளர் <sub>கு இ</sub>
பெயர் தொழிலாகிய இவைகளை ் நன்கறிவோம் என்றறிக்கையிடுகி <b>றோம</b>	கூட்டுறவுச் சங்கம்)
	Car. Day 30 chaired by a
	(செயலாளா - தாளையடி கடற்டுற்றிலாளர்
	கூட்டுறவுச் சங்கம்)
	இலர் இலிக்குத் வி (தலைவர் தாளையடி கிராம அபிவிருத்திச் சங்கம்)
	(செயலாளர் தாளையடி அபிவிருத்திச் சங்கம்
சாட்சிகள் :	
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J. Qualit

பிரசித்த நொத்தாரிஸ்

02. hypuan விரும் விரு

#### இல:- 15559 / 01-02-2017

இலங்கைக் குடியரசின் யாழ்ப்பாண மேலநீதிமன்ற வலய பிரசித்த நொத்தரிஸ் <mark>கனகரத்தின</mark>ம் கேசவன் ஜே.பி.யூ.எம் ஆகிய நான் மேலே விபரிக்கப்பட்ட சாதனத்தை அதன் உறுதி முடிப்பவர்களாகிய தேசிய நீர் வழங்கல் மற்றும் வடிகால் அமைப்பு சபையின் தலைவர் திரு.கே.அலாகுடின் அன்சார், பொது முகாமையாளா ஜீ.ஏ.குமாரட்ணா, கடற்றொழிலாளர் கூட்டுறவுச் சங்கத்தின் தலைவர் அழகராசா அன்ரன் விமல்ராஜ் செயலாளர் ஜோன் அமிர்தநாய்கம் எமல்சன் தாளையடி கிராம அபிவிருத்திச் சங்கத்தின் தலைவர் ஜோண் பொஸ்கோ யோகநாதன் செயலாளர் பெஞ்சமின் ஜீவதாஸ் ஆகிய இவர்களுக்கு இதில் கையொப்பம் வைத்திருக்கும் சாட்சிகள் <mark>யாழ்ப்பாணம் கிளிநொச்சி நீா வழங்கல்கள் சுகாதார</mark> திட்டம் தேசிய நீா் வழங்கல் வடிகால் சபையின் திட்டப் பணிப்பாளா் திருபாலசிங்கம் பாரதிதாசன் வடமாராட்சி கிழக்கு மருதங்கேணி பிரதேசச் செயலாளர் கனகசபாபதி கனகேஸ்வரன் ஆகியோர் வாசித்து விளங்கப்படுத்தினேன் என்றும் உறுதி முடிப்புக்காரரையும் சாட்சிகளையும் நான் நன்கறிவேன் என்றும் இவ்வுறுதி முடிப்புக்காரரும் சாட்சிகளும் நொத்தாரிஸ் ஆகிய நானும் என்முன்பாகவும் அவர்கள் ஒருவருக்கொருவர் முன்பாகவும் நல்லூரில் எனது மூத் தந்தோரில் இருந்து 2017ம் ஆண்டு <del>பங்குவி</del> மாதம் 01ந் திகதியாகிய இன்று ஒரே சமயத்தில் எங்கள் கையொப்பங்களை வைத்தோமென்றும் உறுதிப்படுத்தி அத்தாட்சிப்படுத்துகிறேன்.

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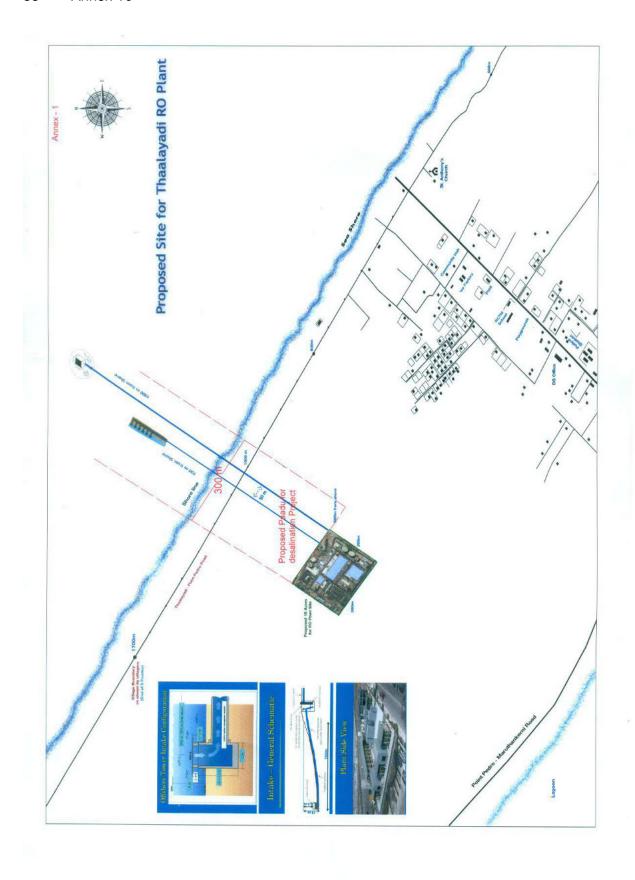
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2017-02-01



Kanagaratnam Associates. Kanagaratnam Kesavan, Attorney at Law & Notary Public Justice of Peace & Un-official Magistrate. Commissioner of Oaths.

#### MEMORANDUM OF UNDERSTANDING.

#### no:15559

This Memorandum of Understanding was made and entered into between

The National Water Supplies and Drainage Board, established under the Law No.2 of 1974 and having its registered Head Office at P.O.Box No. 14, Galle Road, Ratmalana, represented by its Chairman, Mr.K.AlaagudeenAnsar and its General Manager G.A.Kumararatneas the First party

and

Thalayadi Fishermen's Cooperative Society registered under No: J/2177 ON 30.05.1994 with the Fisheries and Aquatic Resources Department, Jaffna, represented by its President, Alakarasa Anton Wimalraj and its Secretary, John AmirthanayagamEmalson

with

Thalayadí Rural Development Society registered under No: NP/DRD/JA24/J/428-0808, represented by its President John Bosco Yoganathan and its Secretary Benjamine Jeevathasas the Second party

#### Whereas

The First party, the National Water supplies and Drainage Board, is implementing an immediate water supply project to solve the water problem of the people of the Jaffna peninsula, with funding provided by the Asian Development Bank and

Sworn Translator
English Tamil
No.27, Our Lady of Miracle's East Road,
Kurungan Laffina

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#### Whereas

the construction works for obtaining water from the Thalayady seas, desalinate it to potable water and provide it to the Jaffna Drinking water supply scheme shall be undertaken by the First party and

#### Whereas

the pipes for sucking sea water, pipes for expelling, purifying plant, and main water distribution pipes shall be laid or constructed by the First party while the above said structures are constructed and

#### whereas

the above said structure shall be constructed by the First party for the purpose of obtain sea water from Thalayady seas, purify it and supply the same with the consent of above said Second Party and

#### whereas

the above said structures shall be constructed by the First party without causing any disadvantageous effects on the Fishermen using the above said Thalayady sea area and to the fishermen engaged in beach seine fishing

now therefore both parties acknowledge and agree that the above said structures shall be constructed by the First party subjected to following conditions contained herein:

#### Above said Conditions.

- 1. Both Parties agree that the structure needed for obtaining the purified water for supplying water to Jaffna, to be constructed at Thalayady.
- 2. The purifying plant shall be constructed in accordance with the structural design of the first party at a distance of 500 Meters from the sea shore. Further sea water intake pipes and the expulsion pipes shall be buried so as not to affect the Beach Seine fishing. The water intake pipes shall be extended into the sea to a distance of approximately 800 to 1000 Meters and the sucking

V.F.BOSETH Sworn Translator English -Tamil No.27, Our Lady of Miracle's East Road, Kurunagar, Jaffna. devices at the end of the intake pipes located at a depth of 10 Meters into the sea and their location marked by floats.

- 3. Both parties hereby agree to allow the First party to use the area between the spot where the purifying plant is located to the area in which the Pipe structure is constructed, as per ground plan in annexure 1, with the consent of the Second party within the beach seine fishing area. That is, if the Beach seine fishing area is 300 meter wide, then the pipe laying arrangement will be within 100 Meter wide area.
- 4. Following arrangement had been made by the First party in consideration of the interests of the people of Thalayady Village:
- \* Giving priority to local workers during construction and thereafter.
- \* Developing rural Infrastructure.
- \* Providing Vocational Training.
- \* Helping the advancement of self-employment.

5. If any dispute arises while implementing this agreement Both parties agree to reach decisions after discussions led by the District Secretary, Jaffna, with the Cooperation of the Department of Fisheries and Aqua Resources, National Water Supplies and Drainage Board and Vadamaradchchi East Divisional Secretariat.

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No.27, Our Lady of Miracle's East Road,

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SULTVALLENCE

IN WITNESS WHEREOF WE, the said First and Second parties of the above Memorandum of Understanding set our hands hereunto and two others of the same tenor as this present at the office of the Notary on this First day of February Two Thousand Seventeen.

We the witnesses signed underneath do hereby declare that we are well acquainted with the Executants and know their proper name, occupations and residences

Sgd::Illegibly. The Chairman - National Water Supplies and Drainage Board.

Sgd.:Illegibly. The General Manager - National Water Supplies and Drainage Board.

Sgd. Anton Vimalraj. The President - Thalayadi Fishermen's Cooperative Society Ltd.

Sgd.: J.Emulson.

The Secretary - Thalayadi

Fishermen's Cooperative Society Ltd.

J.Yoganathan The President-Thalayadi Rural Development Society.

Sgd. Illegibly.

The Secretary - Thalayadi

Rural Development Society.

Witnesses.

1. Sgd.: T.B.Bharathithasan

2. Sgd: K.Kanageswaran

Sgd: K.Kesavan Notary Public.

V.F.JOSEPH Sworn Translator English -Tamil No.27, Our Lady of Miracle's East Road, Kurunagar, Jaffna.

5

I, KANAGARATNAM KESAVAN JP,UM, of High Court Zone, Jaffna in the Democratic Socialist Republic of Sri Lanka, Notary Public doth hereby certify and attest that the foregoing instrument was read over and explained by me to Mr. K. Alakudeen Ansar, the Chairman of the National Water Supplies and Drainage Board, G.A. Kumaratna the General Manager, Alakarasa Anton Wimalaraj, the President of the Thalayadi Fishermen's Cooperative Society, John Amirthanayagam Emulson, the Secretary, John BoscoYoganathan, the President of the Thalayadi Village Development Society, Benjamine Jeevathas, the Secretary, the said executants thereof in the presence of The Project Director of the Jaffna Kilinochchi Water Supply and Sanitation scheme - National Water Supply Baharathythasan, Thirubalasingam Board, Drainage Secretary, Maruthankerni Divisional Vadamaradchchi East Kanagasabapathy Kanageswaran, the subscribing witnesses who signed herein and the executants and witnesses are known to me and the same was signed by the executants and also by the said witnesses and by me the said Notary Public in the presence of one another all being present at the same time at my office at Nallur on this 01\*day of month of February of the year 2017.

AND I FURTHER CERTIFY AND ATTEST that the duplicate of this instrument bears stamps to the value of Rs.100/=and the original bears one adhesive stamp to the value of rupee one.

Date of Attestation 2017.02.01

KanagaratnamKesavan Justice of Peace & Un-official Magistrate Attorney at Law&Notary Public Inquirer into sudden death. Commissioner of Oaths 'Sivasthan', Nallur, Jaffna

Sgd. Illegibly or Notary Public

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Kurunagar, Jaffna.

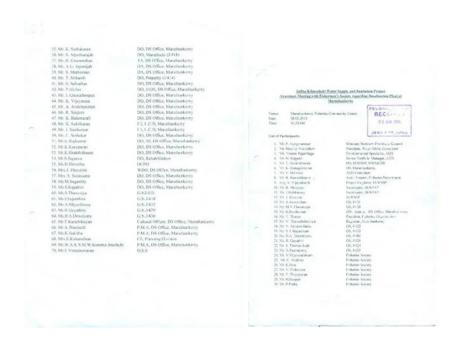
## ANNEX 11: MEETING MINUTES OF PUBLIC CONSULTATION AND PARTICIPANT'S LIST

JAFFNA - KILINOCHCHI WATER SUPPLY & SANITATION PROJECT ADB Review Mission Visit - Civil Society, Maruthankerny

Date : 28.05.2015 Time : 10.30 a.m Venue : Maruthankerny Fisheries Community Center

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#### JAFFNA - KILINGCHCHI WATER SUPPLY & SANITATION PROJECTADE Review Mission Visit - Civil Seciety, Manual Project

Date | 28.05.2015

Venue : Maruthankerny Fisheries Community Center

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## ANNEX 12: COMMUNITY CONSULTATION AND PARTICIPATION ACTION PLAN

Jaffna Kilinochchi Water Supply and Sanitation Project- Additional Financing Consultation and Participation Plan for Proposed Desalination Project

Consultation and			ation Pian for Proposed Desa			
Participation (C&P) Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate in SLRs.
Orientation Workshops for government officials, officers, and staff on JKWSSP	50-100 Government officials and staff consisting of representatives from, DS Office, NWASDB, Fisheries Department, CEA, MEPA, CCD, PMCIU, PEIC and members from community based organizations and Contractor(s).	Information sharing Consultation Shared responsibility Shared decision- making	Introduction about the desalination plant, water demand, its processes, environmental and social aspects of the plant etc.  Present safeguards disclosure, issues related to environmental and social risks and their mitigation, monitoring and reporting requirements  Discuss roles of stakeholders  Gather suggestions and agree on recommendations	Safeguard Specialist/ADB PD/JKWSSP Sociologist/PMCI U	Year 1: 1 Program orientation workshop	100X120X7 = 84000.00
Community consultations meeting Stakeholder's Steering Committee Meetings	50 – 75 members of the RDS/WRDS/FS/FO/SC/ CS and the public who has the interest to know about the desalination plant Steering Committee, PPCC, DCC meetings	Information sharing Shared responsibility Shared decision- making	Share information on proposed desalination plant and its activities Review compliance with gender, social safeguards, environment, awareness campaign, gender frameworks and plans Discuss progress in implementation, including problems encountered and means to mitigate/address them Regularly report on the progress of implementation	Safeguard Specialist/ADB PD/JKWSSP Sociologist/PMCI U GA/Jaffna	Conducting every months  Stakeholders meetings and workshops quarterly	12X7X120X75 = 756000.00 4X7X120X50 = 168000.00 Total: 924000.00
Orientation workshop	All program-related staff	Information	Construction management	PM/Contractor	one program for	1X7X50X120 =

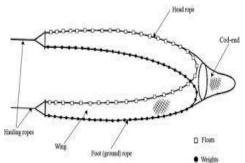
Consultation and Participation (C&P) Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate in SLRs.
for contractors/ laborers	and laborers in contractors' teams (25 – 50)	sharing	Quality assurance Core labor standards: HIV/AIDS, no child labor policy, equal pay for equal work for men and women etc. Employment opportunities for local poor men and women Environmental and social safeguards and mitigation measures Assistance to be provided to APs during construction Gender sensitization	Team PD/JKWSSP Engineer /PMCIU Sociologist/PMCI U	per year	42000.00
Orientation workshops in each village in the first year of implementation for community members (end users and APs) (half day)	100 community members, with at least 30% women, including SC and ST participating per program orientation seminar	Information sharing Consultation Shared decision- making	Introduce desalination project, highlighting its importance and benefits to the community Demonstrate the link between improved water supply and good health, women's empowerment, and environmental conservation Present safeguards and social frameworks and plans; discuss water tariff and affordability, proposed benefits for poor and vulnerable (subsidies etc.)  Gather views related to present level of service and recommendations	PD, Engineer, Sociologist of PMCIU	4 programs in three villages (Quarterly)	4X3X1X120X10 0 = 144000.00

Consultation and Participation (C&P) Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate in SLRs.
Consultations with	Affected Persons (APs)	Information	Identify the views of APs	Contractors,	During RP plan	200X2X3X120 =
affected persons (APs)	including women	sharing Consultation	including all women APs on resettlement and	DS/Vadamarachc hi East	updating (2	144000.00
on resettlement, entitlement,		Consultation	resettlement and compensation; job	PD,Engineer,	meetings in each village)	5X2X3X100X12
compensation issues,			opportunities, and mitigate	Sociologist/PMCI	Year 2-7 (semi-	0 = 360000.00
special protection			potential conflict	U	annual meetings	
measures for			Discuss potential disruptions		in each village	TOTAL:
vulnerable people (1-2			and assistance available,		including	504000.00
hours each)			andGather recommendations Inform about grievance		operation stage):	
			redress mechanism and			
			contacts, discuss issues and			
			grievances of APs, if any			
We delease and	Orbert ded for	de Cons	Agree on mitigation measures	DD E		10000 1 7
Workshops and competitions for	School students from Vadamarachchi East	drawings information	identify the basic information about the structure, processes	PD, Engineer, Sociologist/PMCI	one session for one year	10000x1x7 = 70000.00
School students	schools	sharing	and benefits of the	U	one year	70000.00
		exhibitions	desalination plant			
			Enhance creativity and	ZD/Vadamarachc		
			improve innovation skills, for	hi Zone		
			example by conducting painting competitions.	Principal/Schools		
			Students easily understand	1 Tilloipai/Octioois		
			and share the information with			
			others			
			Publishing of booklet			
			containing paintings made by school students,			
TOTAL COST OF CON	SULTATION AND PARTIC	CIPATION	concor students,			1,768,000.00

#### **ANNEX 13: TYPES OF FISHING IN JAFFNA**

**35.1 Beach Seine Fishing**: A seine is a fishing net that hangs vertically in the water with its bottom edge held down by weights and its top edge buoyed by floats. Seine nets can be deployed from the shore as a beach seine, or from a boat. It called as Madal Fishing in Sinhala and Karaivalai in Tamil. This method is same as used the one used by trawling nets. Approximately 10 – 15 laborers are needed to drag the rope from the beach. Fishermen venture 10-20km from the coast into the sea by small boats and throw the nets where there are lots of fishes visible.

Figure 7: Beach Seine Fishing





35.2 Small Scale fishing: Generally small scale fishing method means using traditional fishing

Figure 8: Small Scale Fishing



35.3 Fishing by using gears: The fishermen are using different types of fishing gears to catch the fishes. The fishermen from Vadamarachchi East are mostly using 3 types of gears such as drift gill net fishing, long line fishing and bottom set gill net fishing.

**35.3.1 Drift gill net Fishing:** Drift gill net fishing method is one of the modern fishing techniques used by Sri Lankan fishermen. It is used to catch the fishes in the middle part of the sea. Fisherman using this method lay the nets 10 km - 20 km distance from the sea shore. The net shape and the size differs based on the type of fish that they want to catch.

Figure 9: Drift gill net Fishing







**35.3.2 Long line fishing:** Long line fishing method means catching the fish with the help of a needle which is fixed to the line. Also, they attach artificial food to the line to attract the fishes. Normally this type of fishing is done by youngsters as a leisure activity and for food and is not undertaken commercially. Some fishermen catch the fish through long lining method from the sea shore while some are going by boat and catching fishes 20 km - 30 km away from the sea shore.

Figure 10: Long line fishing



**35.3.3 Bottom set gill net fishing:** A famous and commonly used traditional methods for fishing by marginal fishermen is throwing nets to the shallow sea. The fishermen use gillnets which are made to rest on the bottom (sea bed) which are allowed to *drift* with the sea current. A bunch of twigs are normally laid close to the net to attract the fish.

# ANNEX 14: THIRD PARTY REPORT ON AGREEMENT LETTER PROVIDED BY DIRECTLY IMPCATED MADAL PADU OWNER

## **Background**

1. This brief note is prepared by a third party led by an independent person, K.Jinapala residing at the address, No 72/3, Gramodaya Mawatha, Kalalgoda, Pannipitiya. He has no vested or other interest in the proposed project or the other positive or negative impacts of the project. He was briefed about his role as an independent party by PMIU on 4 June2017. He acted as impartial investigator to verify the fairness and transparency of the agreement between the PMIU of the proposed project and Mr. Thomas Arulanantham. This agreement was prepared in a form of a letter of consent willingly issued by Mr. Arulanatham to the PCIU indicating his willingness to allow the land and sea area he used for madal fishing about 14 years ago, (before the tsunami incident in the area)for the use of the proposed project activities. This has also been confirmed by the Divisional Secretary, Vadamarachchi East who is the Government appointed body. Mr. Arulanantham issued his letter of consent to PMU on 17 January 2017.

### Socio-Economic Back ground of Mr. Arunalantham

- 2. Mr. Arunalantham is a community member in Thalayadi village(Thalayadi North Thalayadi) of Marathernkerney Grama Niladhari Division (GND) in Vadamarachchi East Divisional Secretariat Division. He was a traditional fisherman involved in Madal fishing activities. He is the Chief householder of a family with 7 members (excluding Mr. Arulanantham), father, wife, 4 sons and 2 daughters. All his living children are settled abroad and he receives remittances from them to meet his living expenditures.
- 3. His father was also a fisherman in the Thalayadi sea coast area and was also involved in Madal fishing activities. They operated fishery activities under License issued by Divisional Secretariat with the recommendation from the Fisheries Department in Jaffna. Mr. Arunalantham's family is not socially or economically vulnerable because their monthly income is more than Rs 40,000/month (about Rs 5000 per capita income). Mr. Arunalantham is not disabled, nor are any of his family members. Mr. Arunalantham is in good health and does not have any chronic diseases. After the tsunami incident Mr. Arunalantham had gone abroad (Switzerland) for employment. HE was abroad till2013. He has earned some income abroad but did not disclose his income to the PMIU or independent third party evaluator.. He has his own house with all facilities and is residing happily in the area.

Consultation of the Mr. Arulanantham to make him aware of the project and access to the sea coast area he had used for Madal fishing

<sup>&</sup>lt;sup>1</sup> The official poverty line for Jaffna district in May 2017 is SLR 4223, whereas the Official Poverty line at National level for May 2017 is SLR 4284. Source: Department of Census and Statistics Sri Lanka.2017. http://statistics.gov.lk/poverty/monthly\_poverty/index.htm

4. Mr. Thomas Arunalantham is the only person (out of 4 Madal padu owners/ operators) whose "Madal Padu" is directly impacted by the project.<sup>2</sup> The PMIU has been in frequent interactions with Mr. Thomas Arunanantham on the proposed project related activities. The preparator of this note observed the meetings of the PMIU sociologist with Mr. Arulanantham held in June 2016 during social impact study (part of EIA) and also again in December 2016. Two community members from Thalaiyadi village -Mr. Benjamin Jebathas and Mr. Emilrajan was also present at the meetings held with Mr. Thomas Arulanantham. The meetings held were focused on the issues related to the land and sea area he had used for Madal operations. Further to this, Mr.Arulanantham's Padu details was confirmed with fisheries Department by the PMIU. The Asian Development Bank officials visited his house on 15 March.2017 and consulted with him and his wife.





<sup>&</sup>lt;sup>2</sup> Out of 4 Madal Padu operators, 2 have passed away and one has left the area after tsunami in 2004. Nobody from the local community of even Divisional Secretariat are aware of his whereabouts.



# Letter provided by Mr. Thomas Arunalantham on the use of coastal and sea area used for the Madal Padu

5. At every consecutive meeting Mr. Thomas Arunalantham repeatedly and constantly mentioned that he has not been operating the Madal Padu after the tsunami in the area. He also further mentioned he had not leased out his license to anybody else for operations. He had also not attempted at renewing his Madal Padu License issued by the DS of Vadamarachchi East based on the recommendation of Fisheries Department in Jaffna. This is because he is not interested anymore in Madal fishing operations or any other types of fishery activities in the same area or even in another area. He also does not have the equipment or the willingness to purchase new equipment for fishing as he is now a senior citizen does not wish to work anymore.



- 6. He also mentioned that his son and daughters (all settled abroad) are not interested in returning to Sri Lanka and does not have any expectation to get to Madal or any other fishery activities as they are happily settled abroad. He further issued a letter to the project director, JKWSSP, NWSDB granting his consent for the project to use the sea and coastal areas under his madal padu for project activities. In this letter, he allocates his rights to the project.
- 7. This agreement was issued on 16January 2017 at a meeting between PMIU and Mr. Thomas Arunalantham. This meeting was observed by K.Jinapala, preparator of this note, Mr. Benjamin, community member of the same village, Mr.Y. Yoganathan, President of Thalaiyadi Rural Development Society, and Mr. K.B. Gunapala who worked as a research assistant on the preparation of the SIA. I confirm that Mr Thomas Arunalantham was not coerced into signing this letter/ agreement and will not result in any negative any negative impacts to his family as his livelihood is not dependent on fish catch from this madal padu.

8. Mr. Arunalantham further mentioned that he welcomes the proposed desalinationplant project in the Thalaiyadi area and he perceives it to be a significantly beneficial project to his village and other communities in Jaffna. The translated copy of the agreement signed by Mr. Arunalanthamis provided in this annex. This translation was done by a Government accepted independent translator in Jaffna. The confirmation letter from Divisional Secretary, Vadamarachchi East is also attached below.

### The impacts to the donor associated with this agreement

- 9. The land and sea area used earlier for Madal Padu has not been used for livelihood activities since 2004. Mr. Arunalantham and his family members shifted their livelihood from fishing to other activities. Therefore, there will be no need for Mr. Arunanantham to request for new license to use the sea coast and sea area previously he used for Madal fishing. This is his well thought out voluntary and independent decision he has consistently mentioned at the interactions with PMIU and it will not have any negative impact on his or his family livelihood activities. The Fisheries Department has provided verbal assurance that he will be given an alternative location suitable for operation of *Madal Padus*, should he want to reactivate fishing operations. This assurance will be further followed up during project implementation.
- 10. The PMIU will always give priority to Mr. Arunalantham depending on his needs and desires in its community development activities implemented with project funding.

# ANNEX 15: TERMS OF REFERENCE OF RESETTLEMENT AND SOCIAL DEVELOPMENT EXPERT

1. In case complex resettlement issues emerge during project implementation, the PMCIU may hire a resettlement and social development consultant to support them. The consultant will be supported by the PMIU-Sociologist in performing this role. Specific tasks to be undertaken by the consultant include:

### 2. He or she will:

- (i) support the PMCIU sociologist in revising and implementing the resettlement plan and consultation and participation plan:
- (ii) identify key challenges and issues pertaining to the resettlement plan and prepare corrective action plans;
- (iii) support PMCIU in the implementation of corrective action plans;
- (iv) support PMCIU in undertaking ongoing consultations with the neighboring communities;
- (v) provide guidance to contractors, loan funded consultants and PMCIU in improving social considerations of the project implementation and operations;
- (vi) support PMCIU in identifying mini-projects for the development of the community;
- (vii) provide PMCIU necessary support to strengthen its grievance redress mechanisms;
- (viii) support PMCIU sociologist in the preparation of semi-annual safeguards monitoring reports;
- (ix) provide the PMCIU with training in resettlement issues, social survey methods and data analysis and recording;
- (x) supervise collection of monitoring data collected from PMCIU, contractors, and individual community members, and compare with entitlements and disbursement schedules established in the resettlement plan to ensure accuracy;
- (xi) support PMCIU is providing compensations to affected persons, where required;
- (xii) help PMCIU to establish/ further strengthen social monitoring systems;
- (xiii) Conduct internal seminars and training programs to raise the awareness of the PMIU and NWSDB Jaffna office regarding resettlement issues; and
- (xiv) support with identification of vulnerable households and additional entitlements for them.
- 3. The expert will preferably have a Master's degree in urban planning, sociology or related field, and a minimum of 10 years of experience in assessing social safeguards compliance in infrastructure projects. Experience in ADB social safeguards policies is preferred. He or she will support the respective state/ local government entities to ensure that proposed projects are compliant with the requisite social safeguards requirements and that they do not result in any adverse social impacts.