

MULTI-COUNTRY PROJECT DOCUMENT



Empowered lives.
Resilient nations.

Project Title: Accelerating Clean Energy Access to Reduce Inequality (ACCESS)

Project Number: 00126434 (ACCESS IDN) 00126532 (ACCESS TL)

Start Date: 01 May 2020

End Date: 31 Dec 2023

PAC Meeting date:

Countries Participating:

Country	Implementing Partner	Outputs to be delivered by country
1. Indonesia	UNDP Indonesia	Output 1: Renewable-based power plants built providing sustainable access to electricity for remote villagers in Indonesia with institutional and local capacity in place.
2. Timor-Leste	UNDP Timor-Leste	Output 2: Under SSTC between Indonesia and Timor-Leste: solar PV water pumps and Highly Efficient Solar Lamp System (LTSHE) are installed in remote villages in Timor-Leste providing sustainable access to clean water and lighting.

Brief Description

The objective of the Accelerating Clean Energy Access to Reduce Inequality (ACCESS) project is to support the poor and most vulnerable communities to have equitable and sustainable access to basic services for improving their livelihoods. The ACCESS project will be implemented in 2020-2023 in 23 villages in four provinces in Indonesia (East Nusa Tenggara, West Sulawesi, South-East Sulawesi and Central Kalimantan provinces) and 25 villages in three municipalities of Timor-Leste (Municipality of Dili (Atauro), Bobonaro and Manatuto). The ACCESS project is funded from the grant of USD 18,028,509 from the Korea International Cooperation Agency (KOICA) Indonesia, from which Indonesia's allocation is USD 15,028,509 and USD 3 million for Timor-Leste.

To achieve the objective, ACCESS will implement activities that will produce following outputs:

Output 1: Renewable-based power plants built providing sustainable access to electricity for remote villagers in Indonesia with institutional and local capacity in place.

Output 2: Under SSTC between Indonesia and Timor-Leste, solar PV water pumps and Highly Efficient Solar Lamp System (LTSHE) are installed in remote villages in Timor-Leste, providing sustainable access to clean water and lighting.

UNDP Indonesia is the implementation partner of KOICA for the ACCESS project. Under overall project management oversight by UNDP Indonesia, the UNDP Timor-Leste is responsible for producing Output two under South-South Triangular Cooperation (SSTC) activities with Indonesia in forms of clean energy technology and technical certification for local operators. For the project implementation, ACCESS project will be supported by the Project Management Unit (PMU) in Indonesia and Timor-Leste. The Ministry of Energy and Mineral Resources (MEMR) and KOICA Indonesia are the counterparts in Indonesia, while the Ministry of State Administration (MSA), KOICA Timor-Leste are the counterparts in Timor-Leste. These counterparts are the project board members expected to steer and provide strategic direction to the PMU.

At the end of the project, with minimum 30% of women as direct beneficiaries and in compliance with social-environmental safeguards, ACCESS is expected to result in access to electricity to at least 20,000 people in Indonesia and Timor-Leste, and access to water to 3,500 people in Timor-Leste from the total installation of about 1.2 Mega Watt decentralized solar-PV power plants,

improve the technical capacity of 80 local people and enhance the sustainability of built clean energy infrastructure at the village level by establishment of local energy service institutions.

Total resources required:			18,028,509
Total resources allocated:			
	UNDP TRAC:		-
	Donor:		18,028,509
	Government:		-
	In-Kind:		9,900,000 ¹
Unfunded:			0

Contributing Outcomes (UNDAF/UNSDCF/CPD, RPD or GPD):

Country 1 (IDN):

CPD (2021-2025) Outcome 2. Institutions and people contribute more effectively to advance a higher value-added and inclusive economic transformation.

Country 2 (TL):

UNDAF (2015-2020) Outcome 2: People of Timor-Leste, especially the rural poor and vulnerable groups, derive social and economic benefits from improved access to and use of sustainable and resilient infrastructure

Indicative Output(s) with gender marker²:

Country 1 (IDN):

Output 2.3. Low emission and climate-resilient objectives addressed in development plans and policies to promote economic diversification and green growth (GEN2).

Country 2 (TL):

SO2.3: Women and men in Timor-Leste, in particular school children and people living in rural areas, have increased access to - and utilize - safe and reliable water and improved sanitation and hygiene services, in an equitable and sustainable manner (GEN2).

¹ In-kind contribution USD 9.7 million comes from parallel funding of the Ministry of Energy and Mineral Resources for special fund allocation for small-scale energy rural electrification infrastructure in the project's provinces, fiscal year 2018 and 2019; and USD 0.2 million comes from the on-going UNDP/GEF Market Transformation MTRE3 Project activities in West Sulawesi and NTT provinces 2018-2021.

Agreed by (signatures)²:

Government of Indonesia	UNDP Indonesia
Ministry of Energy and Mineral Resources	
Mr.Dadan Kusdiana Director General of New and Renewable Energy and Energy Conservation (NREEC)	Mr. Norimasa Shimomura Resident Representative
Date:	Date:

² Note: This document, including the signature page, may be customized as needed. Separate signature pages (one per country) can be created and signed if needed to facilitate timely approval and budget revision if multiple countries are participating. Separate signature pages should still reflect all participating partners.

² The Gender Marker measures how much a project invests in gender equality and women's empowerment. Select one for each output: GEN3 (Gender equality as a principle objective); GEN2 (Gender equality as a significant objective); GEN1 (Limited contribution to gender equality); GEN0 (No contribution to gender quality)

Agreed by (signatures)

Government of Timor-Leste	UNDP Timor-Leste
 Mr. Belarmino Filomeno Neves General Director of Administrative Decentralisation, Ministry of State Administration, RDTL	 Ms. Lazima Onta-Bhatta Resident Representative, a.i.
Date:	Date: 17/12/2020



I. DEVELOPMENT CHALLENGE

Indonesia's Development Priorities and Challenges in Rural Electrification

1. In the National Energy Plan, the Government of Indonesia (GoI) targets to have a 100% national electrification ratio by 2020. Electrification is an important goal to reduce economic inequality between regions considering Gini Ratio in March 2018 was estimated at 0.389 (*National Statistical Agency, 2018*). Like other archipelagic countries, this has been a challenging target to be met considering country's geographical situation and limited government budget to connect all 82,000 villages on a grid. In 2019, about 2,200 villages were without or minimal access to electricity and mainly are in the Eastern provinces of Indonesia.
2. Furthermore, Indonesia has also set targets for having 23% renewable energy portion in the primary energy mix by 2025, as stated in the National Energy Policy (Government Regulation No. 79/2014). Increasing the contribution of renewable energy is in line with the Paris Commitment of Indonesia. The energy sector is expected to reduce 314 million tons of CO₂ from the country's greenhouse gas business as usual emission by 2030.
3. To speed up rural electrification as well as increasing the share of renewable energy, GoI has been allocating **Special Budget Allocation** for Small Scale Energy infrastructures from 2011 to 2019. This fund is used to build small scale renewable energy power plants at the village level and repair the broken ones. The Provincial Government submits the proposal for this special allocation to the Ministry of Energy and Mineral Resources (MEMR) along with pre-feasibility study and commitment for maintenance. The average fund allocation is about USD 35 million annually. Unfortunately, not all proposals can be funded by the GoI due to limited fiscal capacity. For example, in 2018, the eligible funding proposals were USD 60.5 million. Still, the Ministry of Finance's approved budget was only USD 34 million (57%). The unfunded locations shall wait for the coming year with uncertainties due to funding availability and competition with new proposals.
4. Also, the MEMR assigns National Utility Company (PLN) for the implementation of rural electrification. Nevertheless, the progress is still below expectations due to economic consideration and limited internal funding of the PLN to invest in rural electrification. The typical business model for rural electrification intervention by PLN is to provide electricity service generated from small diesel-fueled generators for several hours in a day and are only sufficient for 1-2 lighting lamps. This approach is not sustainable in terms of climate friendliness and the reliability of the service.
5. During 2017-2019, the Presidential Regulation No. 47/2017 was issued to regulate procurement and full deployment of Highly-Efficient Solar-PV Lamps (LTSHE). This program intends to reach households in Indonesia's remote and outer regions; those are not yet receiving support from special allocation or PLN service. The MEMR has distributed free of charge 360 thousand LTSHE by the end of 2019. The LTSHE is a solar home system that supplies solar-PV panel, four LED 3W lamps with battery, and handphone charging outlet.
6. Despite all the rural electrification attempts in Indonesia, the remaining challenges are:
 - limited funding capacity of government and utility company leave the last-mile communities in remote villages and small islands not having access to electricity service. In these areas, using kerosene or purchasing diesel-fueled generators are the standard solutions. The fact of the remoteness of the location; this option is costly. Thus, the hardest impacted ones due to lack of electricity access are the poor and women-headed households;
 - sustainability issue due to lack local personnel and institutional capacity to operate and maintain the government-built energy infrastructure and to manage the electricity business professionally to trigger rural economic development; and
 - low utilization of renewable resources in rural power generation compared to diesel-fueled generators due to technical familiarity and high initial investment cost of the renewable energy technology.

Timor-Leste's Development Priorities and Challenges in Rural Electrification and Clean Water Access

7. In 2002, after decades of conflict, then newly independent Timor-Leste was left with almost 90 percent of its infrastructure destroyed. The government of Timor-Leste has worked hard to rebuild roads, health facilities, and irrigation systems. Thanks to these efforts, the overall conditions of basic infrastructures in Timor-Leste have been improved greatly. However, rural electrification and clean water access remain as challenges and development priorities for the country.
8. Timor-Leste's National Strategic Development Plan 2011-2030 targets that everyone in Timor-Leste will have access to reliable electricity 24 hours a day by 2030. To achieve this target, rural electrification is a priority in Timor-Leste which will also contribute to urban and rural job growth and development. Based on the National Rural electrification master plan (REMP), in 2018, the electricity grid has reached most part of the country. However, according to the National Directorate for Research and Electricity Development, over 25% Sucos (Villages) & Aldeias (sub-villages) in Timor-Leste still have no access to the electricity grid.
9. National Strategic Plan of Timor-Leste 2011-2030 considers renewable energy as the potential solution to make a dramatic contribution to economic growth and help to reduce poverty levels in remote rural areas. Also, renewable energy facilities will contribute to climate change adaptation and mitigation efforts. More than 450 MW of potential renewable energy projects spread across the following technologies, including Hydropower 252 MW, Hydro pumping 100 MW, Wind power 72 MW, Solar 22 MW and Biomass / Solid waste 6 MW. National census (2015) estimates that about 29,000 families in remote areas of Timor-Leste already have their energy supply through various use of renewable energy resources. The municipal authorities have the plan to build more communal solar-PV power plants in coming future. Still, around 37,000 families living in isolated areas of the mountains, small islands, or near the border with Indonesia do not have access to electricity. 28% of population in Manatuto, 42% of Bobonaro, and 60% in Atauro (Dili) have no access to electricity for lighting (Statistic Office, 2014). They use kerosene lamp for lighting, which is costly to get and harmful to health and the environment. The biggest challenge for the government in the coming years will be to reach these families. For lighting purposes, solar home systems would be a lower-cost electrification option than grid extension considering the low population density and level of income among these remaining households.
10. On the other hand, water supply infrastructure for domestic and sanitation remain underdeveloped and require substantial investment, particularly to provide water during the dry season. In 2016, Timor-Leste launched the "Water and Sanitation Master Plan (2016-2030) with the aim to reach 75% of the population having access to clean water and sanitation by 2030. In 2018, it was reported that access to improved water supply in the rural area is only 60% (*Worldbank, 2018, Timor-Leste Water Sector Assessment and Roadmap*).
11. The progress in terms of access to water has been faster in urban areas. Urban areas have seen significant improvement, with 91 percent of cities having access to an improved water supply and 73 percent having access to improved sanitation facilities. However, in rural areas, access to improved water supply reaches only 60 percent of the population, and access to improved sanitation facilities is only 30 percent (Timor-Leste Rural Water, Sanitation and Hygiene Sector Strategy 2008-2011). Potential for the development of the water resources exists in Timor-Leste. However, it is constrained by limited data as well as by the institutional capacity to implement integrated water resources management (IWRM) solutions. For clean water access, the Ministry of Public Works has installed 320 solar PV water pumps. Unfortunately, they are no longer in operation due to lack of technical and maintenance capacity. Difficult access to clean water adds extra burden to women and children because they are commonly responsible for water collection for domestic use.

12. To address Timor-Leste's development priorities to provide electricity and clean water access to all populations in Timor-Leste, the challenges are:
- lack of proven approach and sustainable technology for providing access to clean water and lighting for households as they scattered and lie far away from the center of the village or national electricity grid;
 - lack of personnel and institutional capacity at the local level to operate and maintain the built solar-PV water pump infrastructure; and
 - difficulties in finding appropriate technology and approaches that reflect the local context particularly considering the direct impact on communities.
13. In the rural area, women and girls are often primarily responsible as energy producers for the household to collect fuel for cooking and lighting. In the absence of a modern energy facility, they rely on locally available biomass for cooking or kerosene lamp for lighting. Lack of access to energy sources leads to health risk caused by indoor smoke, less time for income-generating, educational, or other self-nurturing activities. These are gender problems related to energy access issues. Furthermore, among the rural poor, women-headed households are considered more vulnerable because they have fewer income earners. Even if access to modern energy is available, this group may have limited affordability than other poor households. In the area of renewable technology, women are still underrepresented. The number of women as a technical operator is still small. This number is even lower in rural areas.



Figure 1. Women use kerosene lamp for lighting.

II. STRATEGY

14. The Theory of Change underpinning the ACCESS project interventions in access to essential services is that people who live in remote locations regardless of gender are at risk of being left behind because of limited financial support, low education, and lack of technology options. If these people are provided with equitable and sustainable (available, accessible, and affordable) essential services of electricity and clean water, they can manage the facilities, and appropriate clean energy technology is introduced in neighboring countries; then their livelihoods will be improved and reduced inequality in the long term.

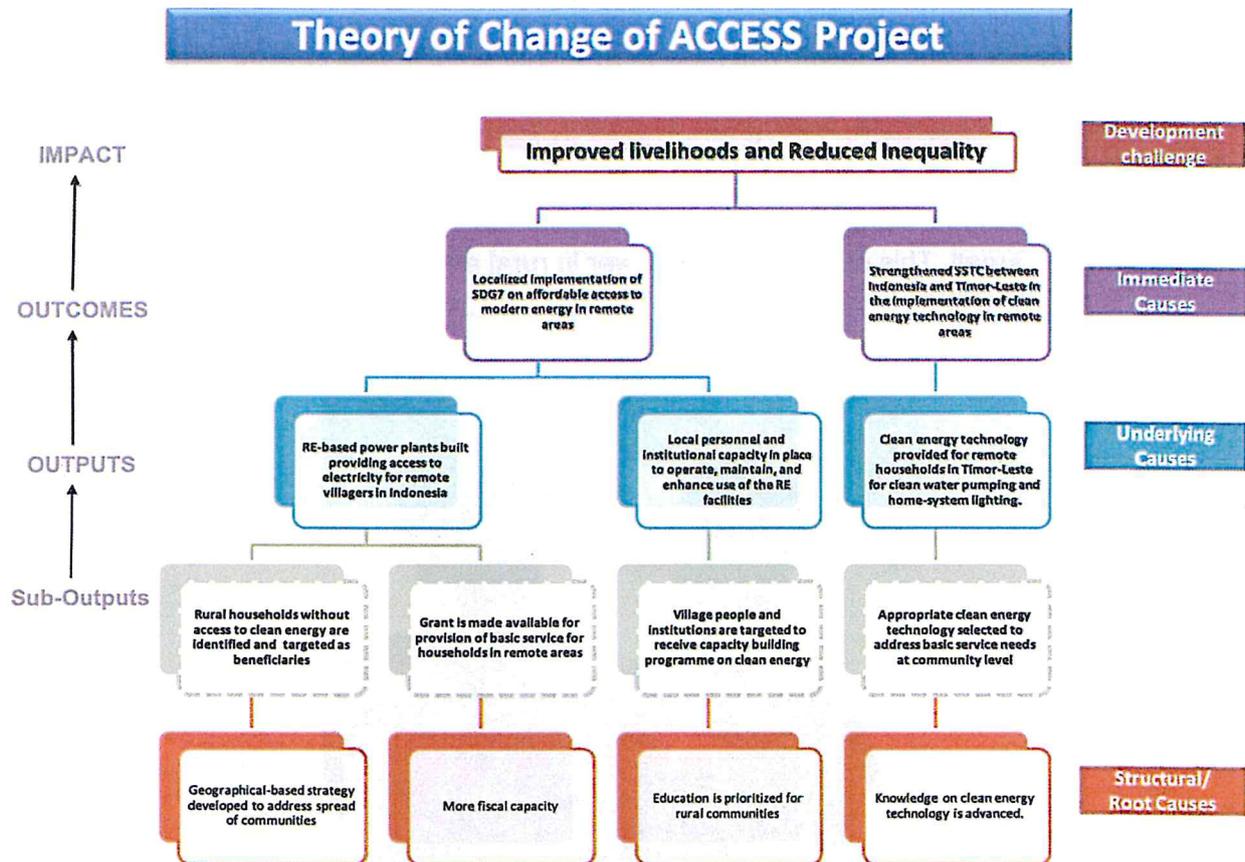


Figure 2. Theory of Change of ACCESS Project

Strategy for ACCESS Project in Indonesia

15. The ACCESS project in Indonesia will address Indonesia's rural electrification challenges of the limited government budget and high initial investment cost of renewable energy by building communal solar-PV power plants in the locations that are unfunded by the government's special fund allocation for Small Scale Energy 2017-2019. Among all the unfunded proposals, the target provinces are those with relatively low electrification ratios, and villages are very remote. This strategy will add more communities having access to electricity by using renewable resources and complementing the rural electrification and renewable energy programme of the MEMR. The solar-PV power plants will be equipped with a remote monitoring system to allow distant and timely monitoring of technical problems that occur in the field, and verification of reduced greenhouse gases emission.
16. Based on the result of the pre-feasibility study conducted in July-August 2019 by National Laboratory for Energy Conversion Technology (B2TKE-BPPT) and further technical evaluation from KOICA expert team, the target locations for the ACCESS project in Indonesia are decided

in 23 villages in 10 Districts in the Provinces of East Nusa Tenggara, West Sulawesi, South-East Sulawesi, and Central Kalimantan (Table 1 and Figure 3).

Table 1. Detail Locations and Solar-PV Installation Plan of ACCESS Project in Indonesia

No	Province	District	Sub-District	Village	GPS coordinate of the village	Number of Houses after Pre-FS	Solar Power Plant Capacity (kWp) after Pre-FS	Estimated annual generated electricity MWh (after pre-FS)
1	West Sulawesi	Mamasa	Tobulahan	Pangadaran	2°45'05.3"S 119°04'16.5"E	187	66	84
2		Mamasa	Tobulahan	Saluleang	2°46'01.7"S 119°16'58.0"E	115	34	44
3		Mamuju	Tommo	Leling Utara (Dusun Buntu Lalong)	02°10'14.12"S 119°29'36.78"E	214	40	51
4		Mamuju	Tapalang	Kopeang	2°50'47.35" S 118°59'35.62"E	243	66	84
5	South-East Sulawesi	Bombana	Kabena Barat	Desa Ballara (Dusun Pulau Ballara)	5°09'50.86" S 121°48'41.72"E	97	40	68
6		Bombana	Kabena Barat	Desa Ballara (Dusun Pulau Bangko)	5°10'02.0" S 121°48'39.5"E	126	50	40
7		Bombana	Kabena Tengah	Leryor (Dusun Boepapa)	5°04'48.59" S 121°58'28.09"E	117	46	65
8		Konawe Selatan	Laonti	Tambolusu (replacing Totole)	4°09'36.36" S 122°46'36.76"E	289	50*	68
9	Konawe Selatan	Laonti	Malarang	4°20'1.29" S 122°53'35.99"E	163	90	121	
10	Muna	Towea	Wangkolabu	4°31'8.70" S 122°43'16.32"E	188	110	156	
11	Muna Barat	Tiworo Utara	Tasipi	4°31'15.15" S 122°20'1.39"E	170	100	131	
12	East Nusa Tenggara	Sumba Barat	Laboya Barat	Gaura (Dusun 4)	9°43'44.2" S 119°15'57.6"E	132	35	40
13		Sumba Barat	Lamboya	Watuakare (Dusun 2)	9°44'27.4" S 119°22'22.3"E	103	31	36
14		Sumba Barat Daya	Wawewa Tengah	Eka Pata 2 (Dusun 1 & 2)	9°35'35.88" S 119°17'34.63"E	122	37	43
15		Sumba Barat Daya	Wawewa Tengah	Eka Pata 1 (Dusun 3)	9°34'42.24" S 119°16'43.11"E	92	32	37
16		Sumba Barat Daya	Wawewa Timur	Dangga Mango (Dusun 1)	9°38'50.33" S 119°16'22.16"E	48	20	23
17		Sumba Barat Daya	Wawewa Timur	Dikira (Dusun 4)	9°38'20.36" S 119°16'57.64"E	51	21	24
18		Sumba Barat Daya	Wawewa Timur	Mata Wee Lima (Dusun 2)	9°33'30.9" S 119°23'06.4"E	120	40	46
19	Sumba Barat Daya	Wewewa Selatan	Milla Ate (Dusun 1)	9°37'40.0" S 119°10'34.8"E	87	29	33	
20	Central Kalimantan	Barito Selatan	Dusun Selatan	Muara Ripung	1°41'40.9" S 114°48'26.6"E	114	60	78
21		Barito Selatan	Gn. Bintang Awal	Bintang Ara	1°27'33.5" S 115°17'29.8"E	93	30	39
22		Lamandau	Bulik Timur	Batu Tunggal	1°48'37.5" S 111°38'49.1"E	235	84	109
23		Lamandau	Bulik	Tamlang	1°39'51.8" S 111°25'18.5"E	147	55	72
Total		10	19	23		3,153	1,116	1,492

* Pre-Fs for Tambolusu village was conducted by Agency for Mining & Energy of the South-East Sulawesi province.

- The government's special allocation fund (2017-2019) for small scale energy in these four target provinces, but other villages, can be considered as co-financing to ACCESS project. Also, co-financing comes from the relevant activities under the UNDP-GEF project Market Transformation for promoting renewable energy use in East Nusa Tenggara and West Sulawesi.
- Furthermore, the ACCESS project will address the sustainability issue of the built renewable energy infrastructure by conducting open recruitment for local operators with an equal number of women participations. The operators will get training and formal certification from the MEMR's vocational training center for solar-PV power plant operation and maintenance. Additionally, installing the remote monitoring system in the power plant will help anticipate and allow an earlier response to system failure, which will enhance technical sustainability.

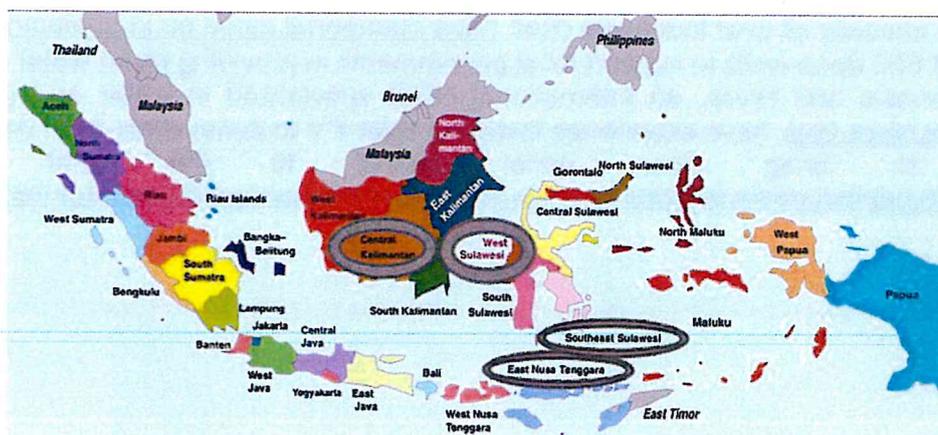


Figure 3. Provinces of the ACCESS Project in Indonesia

- The ACCESS project will establish and build the business management capacity of the existing or potential institution in the project location to serve as a renewable energy service company/cooperative (RESCO). Hivos has also experience in the development of RESCO in East Sumba. This experience is useful to learn the lessons (Ref: <https://sumbaiconicisland.org/wp-content/uploads/2019/10/Report Sustainable-Decentralised->

[Renewable-Energy-through-the-RESCO-Model-in-Indonesia final.pdf](#)). The presence of skilled local operators and RESCO as a local utility institution is critical for the sustainability of the operation. It ensures sufficient contribution for service collected from communities and stimulates productive economic activities by using the electricity. The ACCESS project may consider partnering with a Responsible Party to deliver a small grant to the newly established RESCOs for initial support.

20. The ACCESS project will address the gender problems by ensuring that poor households, particularly women-headed households, will have access to and benefit from the built clean energy electricity facilities. The project facilitator will affirmatively engage women groups in the consultation process in deciding on the tariff of electricity and prioritization of the use of electricity, such as for productive activities and educational purposes. Furthermore, women will have at least a 30% quota to be local operators that will receive training and certification on solar-PV operation and maintenance. *"Although access to modern energy will not necessarily lead to greater equality in gender roles, it can at least relieve some of the most burdensome and unhealthy aspects of their daily lives and expand the development options available to women, their families and their communities"* (ENERGIA, 2011).
21. The above strategy will enhance the use of renewable resources and provide communities access to modern energy. The project will benefit women and vulnerable groups in targeted communities through affirmative action through assurance of access to benefits, quota for participation as local operator and involvement in decision making processes. The project will contribute to the UNDP CPD Output 2.3 - *Low emission and climate-resilient objectives addressed in development plans and policies to promote economic diversification and green growth*.

Strategy for ACCESS Project in Timor-Leste

22. The ACCESS project in Timor-Leste, with strong partnership and close consultation with the Ministry of State Administration and Ministry of Public Work, will address the development challenges in rural electrification and clean water access by facilitating the exchange of best practices with Indonesia under the SSTC framework.
23. The ACCESS project will facilitate the exchange of technical standards, skills and experience from Indonesia, particularly for water source identification, engineering, procurement, and installing solar PV water pumps in targeted *Sucos*. For example, the Geological Agency of the MEMR has the technical capacity to assess potential water sources and implement a deep-well programme annually all over Indonesia (Ref: <https://geoportal.esdm.go.id/geologi/>). In 2019, the agency built 650 deep-wells to support local governments in providing clean water access. Also, UNDP Indonesia and Hivos, an international NGO specialized in water and green energy (<https://www.hivos.org>), have experience installing solar-PV to pump water from deep well or far distance to bring clean water nearer to the rural households (Ref: <https://undpindonesia.exposure.co/lifechanging-water-pumps-in-east-sumba>).

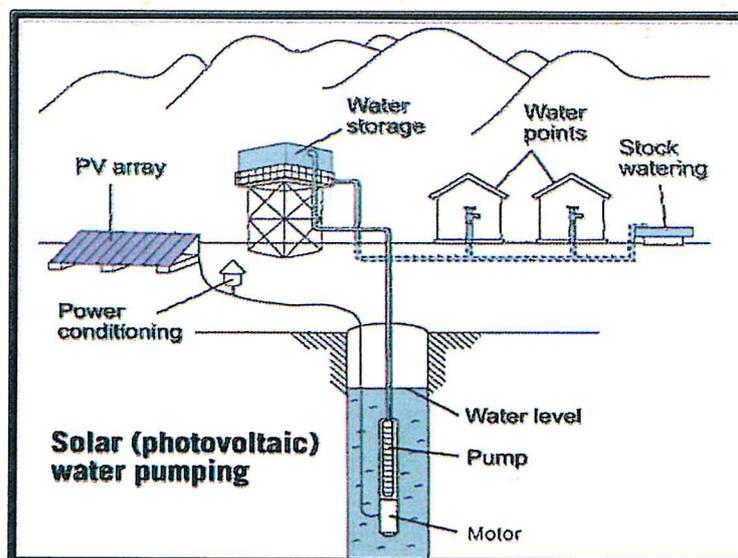


Figure 4. Schematic Diagram of Solar-PV water pump system (Source: Pre-FS Report)

24. The ACCESS project will facilitate the exchange of technical specifications and procurement terms for Highly-Efficient Solar PV Lamp System (LTSHE) from Indonesia to address challenges in providing lighting access for households living in isolated areas. For example, the MEMR has successfully procured and deployed 360,000 LTSHE since 2017-2019 for remote regions of the Eastern part of Indonesia under the [Presidential Regulation No. 47/2017](#) on procurement and installation of LTSHE. The LTSHE system consists of 1 unit of solar PV peak, four units of lamps embedded Lithium batteries, 1 USB and mobile charging hub, 5m cable, and three years after-sale guarantee service. Learning from these experiences will benefit Timor-Leste to carry out effective and efficient project implementation and to strengthen the capacities of the companies in Timor-Leste.

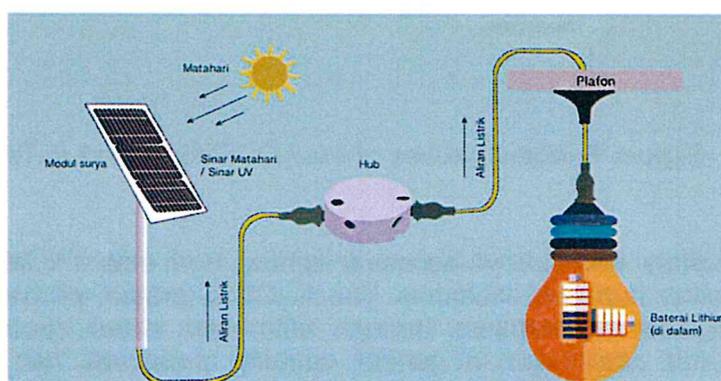


Figure 5. Highly Efficient Solar-PV Lamp System (LTSHE) (Source: MEMR)

25. The ACCESS project will facilitate training and certification of solar-PV operators in the targeted locations in Timor-Leste through collaboration with the vocational training center at the MEMR. This collaboration intends to address the lack of local technical capacity to sustain the operation of built solar-PV water pumps. Finally, the ACCESS project will facilitate the exchange of approach for the establishment of RESCO with a viable business model to ensure the operationalization of LTSHE and clean water service locally in Timor-Leste.

26. Based on the result of the pre-feasibility study conducted in August-October 2019, the locations of the ACCESS project in Timor-Leste are in 25 sucos (villages) in three municipalities, namely, Bobonaro, Dili (Atauro) and Manatuto (Table 2 and Figure 6).

Table 2. Detail Locations and Renewable Energy Technology of ACCESS Project in Timor-Leste

Municipality	Villages	Renewable Technology	Number of Households	Municipality	Villages	Renewable Technology	Number of Households	Municipality	Villages	Renewable Technology	Number of Households
Manatuto	Tahagamu	Solar PV water pump	62	Dili (Atauro)	Arlo	Solar PV water pump	55	Bobonaro	Falolai	Solar PV water pump	96
	Hatuermera 1	Solar PV water pump	70		Iliana	Solar PV water pump	38		Heliqae	Solar PV water pump	64
	Hatuermera 2	Solar PV water pump	58		Duoro	Solar PV water pump	53		Maliubun	Solar PV water pump	48
	Hatuanahun	Solar PV water pump	65		Fatuu	Solar PV water pump	75		Falolai	LTSHE	96
	Hatuconan	LTSHE	96		Bite	LTSHE	83		Duaderok	LTSHE	131
	Labubu	LTSHE	118		Anartuto	LTSHE	159		Heliqae	LTSHE	64
	Tahagamu	LTSHE	62		Ilitimur	LTSHE	80		Tepa	LTSHE	42
	Bua	LTSHE	72		Iliana	LTSHE	38		Sub-Aldeia Maliubun	LTSHE	48
	Fahilakor	LTSHE	64		Fatu'u	LTSHE	75		5	381	
	Reabutigeon	LTSHE	72		Douro	LTSHE	53				
	Hatuermera	LTSHE	128		Arlo	LTSHE	55				
	Hatuanahun	LTSHE	65		Adara	LTSHE	42				
	Anicolaun	LTSHE	42		Maquer	LTSHE	80				
	Rehatu	LTSHE	47		9	665					
Haturuin	LTSHE	27									
11		793									

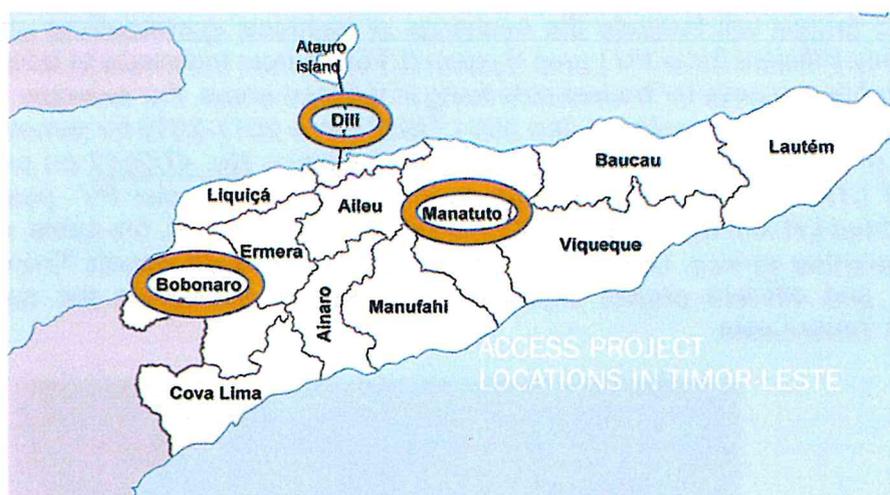


Figure 6. Municipalities of the ACCESS Project in Timor-Leste

27. The above strategy will improve access to lighting from solar-PV lamps and clean water for the rural communities in project locations. The ACCESS project will benefit women and vulnerable groups in targeted communities through affirmative action (quota for participation; Output indicator .4) and application of gender equality measures that will be outlined clearly in implementation guidelines or SOPs. UNDP TL's experience and knowledge in developing and implementing a participatory and inclusive decision-making process for community development will guide the process.
28. The project will contribute to the UNDAF Timor-Leste SO2.3: *Women and men in Timor-Leste, in particular school children and people living in rural areas, have increased access to - and utilize - safe and reliable water and improved sanitation and hygiene services, in an equitable and sustainable manner.*

III. RESULTS AND PARTNERSHIPS

29. The objective of ACCESS project is to support the poor and most vulnerable communities to have equitable and sustainable access to basic services required for improving livelihoods. The project will contribute to the systemic change in reducing inequality in electricity and clean water access by mobilizing international funding and enhance sustainability measures. The ACCESS project translates the strategy to achieve the objective through the following component activities and expected results.

Outcomes:

1. Localized implementation of SDGs No.7 Affordable & Clean Energy through the provision of access to renewable-based electricity.
2. Strengthened South-South and Triangular Cooperation (SSTC) between Indonesia and Timor-Leste in promoting the use of clean energy in rural areas.

Output 1: Renewable-based power plants built providing sustainable access to electricity for remote villagers in Indonesia with institutional and local capacity in place.

Activity 1.1 Renewable-based energy infrastructures construction that providing access to electricity for households in targeted villages in Indonesia that can be monitored remotely.

The activities will include engineering, Procurement and Construction of centralized PV power plants in targeted locations in Indonesia, social-environmental compliance and installation of remote monitoring device:

- Development of Detailed Feasibility Study for the construction of solar PV power plants in Indonesia's targeted locations. Gender perspectives is considered in the study.
- EPC (Engineering, Procurement & Construction) contract issuance to the selected EPC company.
- Issuance of necessary permits for small size infrastructure construction, including environmental license as required.
- Construction of the solar PV power plants, distribution lines, and household electrical installations as per approved Detail Engineering Design (DED) in Indonesia's targeted locations.
- Construction monitoring by the owner's engineer.
- Commissioning and issuance of Operational Eligibility permit (Surat Laik Operasi) for constructed power plants.
- Installing remote monitoring device for each power plant.

Activity 1.2 : Local capacity building for operation and maintenance of the built energy infrastructures.

The activities will include training and certification of solar PV power plant operators by EPC contractor for in-house training and by the formal certifying institution:

- Open recruitment and selection of operator candidates (women will have 50% quota for participation).
- Development and in-house training of SOP for operation and maintenance by EPC contractor.
- Field training in other solar PV operating sites as part of the certification process of operators.
- Certification process of selected operators by the formal certifying institution.

Activity 1.3: Local institution establishment to enhance sustainability and scaled-up use of built energy infrastructures.

The activities will include establishing local institutions and identifying potential economic added value from the provision of electricity, implemented by the district facilitator:

- Community consultations to get consent about the project.
- Community consultations on electricity tariff setting and operational rules based on required O&M cost estimates.
- Facilitating the establishment of a village electricity enterprise (BUMDES Listrik Desa/Renewable Energy Service Company (RESCO)) with a viable business model.
- Social-economy assessment to identify potential added value from the utilization of electricity.

Activities 1.4: Results dissemination and planning for scaling up developed.

The activities will include result dissemination activities and development of scaling-up proposal to be implemented by Monitoring and communication officer:

- Six national level workshops (in Jakarta and in Dili) conducted during and at the end of project.
- Development of result dissemination products (video, infographics, project brief, project progress and final reports).
- Development of scaling-up proposal.

Output 2: Under SSTC between Indonesia and Timor-Leste, solar PV water pumps and Highly Efficient Solar Lamp System (LTSHE) are installed in remote villages in Timor-Leste providing sustainable access to clean water and lighting.

The SSTC activities will include implementation on the construction of solar water pumps, installation of highly efficient solar lamp system (LTSHE), training, certification, and local institutional establishment. The project will support the knowledge exchange between Indonesia and Timor-Leste on technical specifications, training, and certification of local operators by capitalizing experience and training facilities of the MEMR:

- 2.1 Commissioning of Feasibility Study consisting of technical, social, economic and environmental assessment.
- 2.2 Procurement of EPC contractor for solar water pump and LTSHE provider
- 2.3 Construction of solar water pumps and installation of LTSHE in compliance with social and environmental national standards.
- 2.4 Construction & installation and performance monitoring by owner's engineer.
- 2.5 Open recruitment and selection of operator candidates (women participation is encouraged).
- 2.6 Development and in-house training of SOP for operation and maintenance by solar water pump and LTSHE contractors.
- 2.7 In field training and certification of qualified operators by the formal certifying institution on solar PV water pump and LTSHE.
- 2.8 Establishment of Renewable Energy Service Cooperative (RESCO) with a viable business model to ensure service sustainability.

Resources Required to Achieve the Expected Results

30. The following resources are required to achieve the project expected results:
- a) UNDP Programme assurance that will supervise project implementation, assuring achievement of project targets in compliance with UNDP standards and regulations;
 - b) Two Project Management Units (PMUs) to implement project activities in Indonesia and Timor-Leste. The PMU consists of project managers, chief technical engineers, Project Technical Officers responsible for each of the outputs, Monitoring and Outreach officer, Finance associate, administrative staff, and district/village facilitators;
 - c) Short-term consultants to provide expertise in a particular aspect of the project, including procurement specialist, social-environmental and gender specialist, owner's engineers to monitor construction works, decentralization/municipal service delivery specialist, and UN Volunteers/Interns to support implementation;
 - d) Technology providers, Engineering, Procurement, and Construction (EPC) companies as a vendor to provide solar lamps and technical service related to the solar-PV power plant and solar-PV water pumps;
 - e) Geological Agency and Vocational Training Center of the Indonesia Ministry of Energy and Mineral Resources (MEMR) provides sharing of experience and technical knowledge on a clean water supply system, also facilities for solar-PV training/certification of local operators;
 - f) UNDP Seoul Policy Center supports engagement with Korean technology providers and renewable energy companies to strengthen cooperation in clean energy; and
 - g) Project offices and equipment for an effective working environment and project cars (in Timor-Leste) to support field works and monitoring.

Partnerships

31. The ACCESS project will build partnership with following stakeholders:

Government Partners in Timor-Leste

The partners in Timor-Leste include UNDP Timor-Leste (UNDP TL), a UN Agency based in Dili, capital of the Democratic Republic of Timor-Leste. UNDP TL has been supporting the government of TL in sustainable development agenda. The UNDP TL role will be as an implementing partner to deliver Output 4 under South-South Triangular Cooperation (SSTC). The government partners in Timor-Leste involve the Ministry of State Administration (MSA) and the Ministry of Public Works. The Ministries are responsible for municipalities' development and infrastructures, respectively. KOICA Timor-Leste (KOICA TL) will be a development agency partner of the ACCESS project implementation. KOICA TL has been providing grant-aid for Timor-Leste government since 2001 with the focus in education, health, and infrastructure development. Experience sharing and synergy with KOICA TL in rural development interventions will enrich the ACCESS project implementation in Timor-Leste.

Government Partners in Indonesia

The Ministry of Energy and Mineral Resources (MEMR) is the main government partner for the ACCESS project. The MEMR's mandate in national electrification and promoting renewable energy is in line with the project's objective. MEMR also has vocational training centered on renewable energy and long experience in rural electrification needed as input resources for the ACCESS project. Other government partners in Indonesia include the Ministry of Villages and Disadvantaged Regions that have a role in building village enterprises for economic development. The Ministry of Communication and Informatics with a role to provide telecommunication and internet access to regions in Indonesia, which is essential for the operationalization of remote monitoring system of the built power plants. KOICA Indonesia is the donor of the ACCESS project as well as a partner in the implementation. KOICA has been providing grant-aid for Indonesia in the field of health, governance, and environment.

GEF-UNDP Market Transformation (MTRE3) Project

The MTRE3 is a UNDP Indonesia project for the MEMR with a source of funding from the Global Environment Facility (GEF) with a duration from 2017 to 2022. The MTRE3 project locations are in four provinces: West Sulawesi, NTT, Riau and Jambi provinces. The project focused on

facilitating regional energy planning, market development for renewable energy and energy efficiency, and improved monitoring, reporting, and verification systems for the energy sector. ACCESS and MTRE3 have the same intention to promote renewable energy at the local level. The MTRE3 project can play a role in assisting the ACCESS project in the engagement of government and stakeholders in West Sulawesi and NTT provinces and in supporting the development of a viable business model for off-grid power plants. Through these activities, the expenditure made by MTRE3 can be an in-kind contribution to this project (estimated US\$ 200,000).

Civil Societies / Non-Governmental Organization

The local NGOs working in rural electrification and water access are essential stakeholders in the project implementation in Indonesia and Timor-Leste. Hivos South East Asia in Indonesia is one of NGOs that acquires experience in rural electrification and RESCO. Taking lessons and building mutual collaboration with these NGOs will benefit project implementation at the community level. The local NGOs working in targeted locations will be involved in coordination meeting, facilitating community engagement, and implementing activities, such as providing expertise as village or district facilitators.

Risks and Assumptions

32. The ACCESS project may face external and internal potential risks as follows:

External risks:

- a) *Political instability between Indonesia and Timor-Leste will risk the implementation of SSTC component activities.* Risk mitigation: close coordination with the Ministry of Foreign Affairs in both the countries since initiation of the project to ensure correct SSTC protocol.
- b) *Natural disasters in targeted locations.* Risk mitigation: early coordination with the National Disaster Agency (BNPB) to get information on all target locations' potential risks. During construction, ensuring compliance of environmental safeguard standards for construction.
- c) *Built facilities are stolen/destroyed.* Risk mitigation: consult and engage communities since the project's planning process, establish village rules to anticipate unwanted actions.
- d) *Socio-cultural risk in the targeted locations, in which women are uncommon to take part in public activities such as to be local operators.* Risk mitigation: consultative meeting will be conducted with elderly, women-respected representative and head of village to explain about the role of local operators and seeking support.
- e) *Social and environmental risks (as per Annex 2. Social and Environmental Screening):*
 - Land ownership status in which the land-owner cannot reclaim the land right after end of operation.
 - The potential result of the project be vulnerable to potential impact of climate change, such as temperature, landslide.
 - Safety risk due to mobilization of heavy construction equipment
 - Community health risk due to unmanaged hazardous battery-waste
 - Generation of hazardous waste from used batteries

Internal risks:

- a) *Failure in procuring qualified Engineering, Procurement and Construction (EPC) company.* Risk mitigation: conduct market sounding in the early stage to get feedback on suppliers' interest and contract terms and conditions.
- b) *No local people are passing the certification test as solar PV operators.* Risk mitigation: engage potential operator candidates during construction and plan for longer training duration before entering the certification process.
- c) *Cost overruns during construction.* Risk mitigation: ensure the quality of engineering design, add insurance clause in the EPC contract, and allocate contingency budget to cover a reasonable level of cost adjustment.

Stakeholder Engagement

33. The ACCESS project's key stakeholders are the direct beneficiaries, which are the communities in the targeted villages. ACCESS Indonesia's target groups are 2,964 households including women-headed households, in 23 villages in East Nusa Tenggara, West Sulawesi, South-East Sulawesi, and Central Kalimantan provinces currently living without sustainable access to electricity. ACCESS Timor-Leste's target groups are 1,800 households in 25 villages in Dili (Atauro island), Bobonaro, and Manatuto municipalities. These households are currently living far from the electricity grid and are distant from clean water sources.
34. These target groups will be consulted since the project's development, during the construction phase, operationalization, and maintenance. During the detailed design phase, the project will assess each location's social, economic, gender, and environmental conditions. Results from this assessment will be used as input for further consultative meetings with communities to develop consensus in project activities and sustainability of the built infrastructures. The involvement of at least 30% of women in every engagement process will be ensured by applying gender equality measurers. Technical officers supported by district/village facilitators will facilitate the stakeholder engagement process.
35. Potentially affected groups are the communities in the neighboring village. Particularly those areas along the access road to the targeted villages. They may be affected by the mobilization of heavy equipment and frequent traffic during construction, such as construction workers, dust, noise, and collapsed roads. These potentially affected communities will be informed about the project and the project's complaint mechanism/channel. The construction procedure will follow strict compliance standards following the existing regulation.

South-South and Triangular Cooperation (SSC/TC)

36. The ACCESS project intends to use the SSTC approach between Indonesia and Timor-Leste to (a) replicate the application of Highly-efficient solar-PV lamp produced in Indonesia; (b) exchange technical knowledge in clean water resources, and (c) provide training and certification by Indonesian agency. The SSTC will facilitate the exchange of technical specifications and procurement terms for Highly-efficient Solar PV Lamp System (LTSHE). It will also use the experience and technical skills from the Geological Agency of the MEMR and UNDP Indonesia in assessing potential water sources and implementing a clean water access programme. The ACCESS project will facilitate training and certification of solar-PV operators in the targeted locations in Timor-Leste through collaboration with the vocational training center at the MEMR.

Knowledge

37. The ACCESS project has key activity in Results Dissemination, which mainly addresses the project's knowledge product development and dissemination. The knowledge products will consist of but not limited to the feasibility studies, baseline studies which include gender problem assessment and action plan, project briefs, lesson learned, project progress reports and evaluations, technical guidelines, and scaling-up proposal. The products will be presented in various popular formats, including video, infographics, project briefs, presentation material, etc. targeting multiple stakeholders. Dissemination of products will be made accessible by the public through direct distribution via emails, meetings, social media, UNDP/MEMR/MSA/KOICA websites, and UNDP Transparency Portal (www.open.undp.org).

Sustainability and Scaling Up

38. The built infrastructures resulted from the ACCESS project will be part of the rural electrification programme of the MEMR (in Indonesia) and of the MSA and Ministry of Public Works (in Timor-Leste). The technical standards, safeguard compliance, sustainability measures, and monitoring system will be introduced to the Ministries as best way to address sustainability challenge and improving the minimum service performance standard in the provision of electricity and clean

water access for the communities. The project will also facilitate synergy among Ministries' programme, such as MEMR and the Ministry of Communication and Informatics, in combining energy and telecommunication access in the expected target location. The synergy will accelerate equality in rural areas. By this strategy, it is expected that the government will do the scale-up of the ACCESS project approach in their existing infrastructure programme.

IV. PROJECT MANAGEMENT

COST EFFICIENCY AND EFFECTIVENESS

39. The ACCESS project addresses limited government funding, lack of sustainability, and clean energy technical challenge in rural electrification and clean water sectors. Joint project implementation between UNDP Indonesia and Timor-Leste is useful in facilitating the exchange of knowledge and technical facilities between the two countries. UNDP, as the implementing partner of ACCESS project, will use its procurement system and benefitted from vendors and experts' existing roster that can speed up the process. By using the portfolio management approach, UNDP can link the ACCESS project with other ongoing projects for synergy and leveraging impact, such as with the GEF-UNDP project Market Transformation, which promotes small-medium scale renewable energy investment. Furthermore, the project will have one monitoring and outreach officer for Indonesia and Timor-Leste, responsible for consolidating and disseminating results as one integrated project. The project will also be applying joint monitoring with KOICA and the government counterparts to optimize resources while encouraging cross-information.

Project Management

40. The ACCESS's project management will be implemented with following arrangement to ensure effective working collaboration towards results:

Project Coordinator is UNDP Indonesia that fully assume the overall coordination of the ACCESS project implementation in Indonesia and Timor-Leste. In doing this role, the Project Coordinator will closely collaborate with KOICA, UNDP TL and the government partners in Indonesia (IDN) and Timor-Leste (TL).

Project Management Unit (PMU) located in Jakarta, Indonesia, and in Dili, Timor-Leste will be established, led by Project Manager and supported by project officers and short-term consultants/contractual companies as required to deliver the project outputs. The PM will regularly report the project progress and seek guidance from the UNDP's Project Assurance and Project Board. The PMUs and UNDP's Project Assurance will conduct regular online coordination meetings.

Project Board (Steering Committee) consists of the high-level officials from the MEMR (IDN), KOICA Indonesia, UNDP Indonesia, MSA (TL), KOICA TL, and UNDP TL. Other relevant government partners can be invited as observers in the Project Board, such as from Indonesia: National Development Planning Agency (Bappenas), Ministry of Village and Disadvantaged Regions, Ministry of Foreign Affairs, and the Ministry of Public Works for Timor-Leste. The Project Board is responsible for approving the project's annual work plan, providing strategic guidance, and facilitating synergy with other partners. The Project Board Meeting will be conducted at least once a year.

Project Assurance (PA) role will be the Senior programme manager from UNDP Indonesia and UNDP Timor-Leste. The PA will supervise and assure compliance of the PMU activities in Indonesia and Timor-Leste to the UNDP's rules and regulation during the implementation of the project. The PA will act on behalf of the Project Board to carry out the project oversight and monitoring functions. This role ensures that the appropriate project management milestones are managed and completed according to UNDP standards and regulations as per the signed project agreement with KOICA.

V. MULTI-COUNTRY RESULTS FRAMEWORK³

Intended Outcome as stated in the UNDAF/country programmes of participating countries:

Country 1 (IDN):

UNSDCF/CPD (2021-2025) Outcome 2. Institutions and people contribute more effectively to advance a higher value-added and inclusive economic transformation.

Country 2 (TL):

UNDAF (2015-2019) Outcome 2: People of Timor-Leste, especially the rural poor and vulnerable groups, derive social and economic benefits from improved access to and use of sustainable and resilient infrastructure.

Outcome indicators as stated in the UNDAF/country programmes, including baseline and targets:

Country 1 (IDN)

CPD Outcome Indicator 2.6. Percentage of renewable energy in national energy mix;

Baseline: 8.55% (2019); Target: 23% (2025)

CPD Output 2.3. Low emission and climate-resilient objectives addressed in development plans and policies to promote economic diversification and green growth (Strategic Plan Output 2.1.1)

Indicator 2.3.3: Number of people with access to sustainable energy

Baseline: 562,885 (2020), Target: 697,725

Country 2 (TL):

UNDAF (2015-2020) Outcome 2: People of Timor-Leste, especially the rural poor and vulnerable groups, derive social and economic benefits from improved access to and use sustainable and resilient infrastructure.

SO2, 1: Improved capacity for the planning, constructing, and maintaining of climate- resilient infrastructure for rural development and local service delivery by national and sub-national body, with improved institutional frameworks and increased gender equitable citizen participation

SO2, 3: Women and Men in Timor-Leste, in particular school children and people living in rural areas, have increased access to – and utilize – safe reliable water and improved sanitation and hygiene service, in an equitable and sustainable manner

Applicable Output(s) from the UNDP Strategic Plan:

Strategic Plan Output 2.1.1. Low emission and climate resilient objectives addressed in national, sub-national and sectoral development plans and policies to promote economic diversification and green growth

Project title and Atlas Project Number:

Accelerating Clean Energy Access to Reduce Inequality (ACCESS)

Project Number: 00126434 (ACCESS IDN) and 00126532 (ACCESS TL)

³ Multiple countries/IPs can contribute to the same output and can share the same indicators. UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS				DATA COLLECTION METHODS & RISKS	
			Value	Year	2020	2021	2022	Final 2023		
Output 1: Renewable-based power plants built providing sustainable access to electricity for remote villagers in Indonesia with institutional and local capacity in place.	1.1.1 Number of households in targeted villages getting electricity supply generated from solar PV (disaggregated by gender, women-headed household), cumulative.	Commissioning report from construction company.	0	2019	0	2,964	2,964	2,964	Inspection and monitoring of power plant energy meter. <i>Risk: solar PV power plants are not operational as expected.</i>	
	1.1.2 Average monthly duration of electricity service to the households (hours/month), annually.	Monitoring log of the power plant.	0	2019	0	684	684	684		684
	1.1.3 Amount of generated electricity per month (kWh/month), annually.	Monitoring log of the power plant.	0	2019	0	123	123	123		123
	1.2.1 Issuance of Standard Operating Procedure (SOP) for operation and maintenance of built infrastructures in project locations.	SOP documents from the EPC contractor.	0	2019	0	In all locations	In all locations	In all locations	Review of SOP Review of training modules & training report, monitoring training session, Review certificate, monitoring training session. <i>Risk: Minimum technical experience and suitable level of education are not available among local people to become operators.</i>	
	1.2.2 Numbers of local people trained in field training on operation & maintenance and passed post-test (disaggregated by gender), cumulative.	Field training report from project team in collaboration with training provider.	0	2019	0	50 (30% female)	0	50 (30% female)		50 (30% female)
	1.2.3 Numbers of qualified local people are certified by solar PV operators (disaggregated by gender), cumulative.	Certificate issued by formal institution	0	2019	0	0	50 (30% female)	50 (30% female)		50 (30% female)
	1.3.1 Electricity tariff is agreed by communities (by involving women in consultation process)	Village regulation on electricity tariff and assignment of solar PV operators.	0	2019	0	consulted	issued	operational	Review of issued regulation, monitoring community consultation process.	

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS				DATA COLLECTION METHODS & RISKS
			Value	Year	2020	2021	2022	Final 2023	
	1.3.2 Issuance of formal assignment of qualified solar PV operators by head of village.	Village regulation on electricity tariff and assignment of solar PV operators	0	2019	0	consulted	issued	operational	Review of regulation, inspection of RESCO operation Review of assessment report.
	1.3.3 Establishment of village electricity enterprise (BUMDES Listrik Desa) or Renewable Energy Service Cooperative (RESCO), cumulative.	Village regulation on establishment of BUMDES Listrik Desa or RESCO and its business model.	7 villages have established BUMDES	2019	7	7	9	23 (all locations)	Risk: Communities and village government are not supporting the project.
	1.3.4 Identified economic values that can be added by utilizing electricity, emphasizing activities by women groups, cumulative.	Assessment report on potential economic added value from access to electricity.	87 existing micro enterprise	2019	87	87	13	100	
	1.4.1 Number of national level workshops presenting results of project, cumulative.	Documentation of workshops.	0	2019	0	2	2	6	Review and monitoring during workshops. Review of communication materials. Review of proposal.
	1.4.2 Number of stakeholder's institutions (government, private, donors, NGOs, regional development banks) receiving dissemination products, cumulative.	Evidence of documents receipt.	0	2019	200 webinar participants	100	100	100	Risk: The project is not well implemented, thus, not producing outputs with scalability potential.

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS				DATA COLLECTION METHODS & RISKS
			Value	Year	2020	2021	2022	Final 2023	
	1.4.3 Number of potential funders receiving scaling-up business model proposal, cumulative.	Proposal developed and evidence of proposal receipt.	0	2019	0	0	3	5	
Output 2: Under SSTC between Indonesia and Timor-Leste: Solar PV water pumps and Highly Efficient Solar Lamp System (LTSHE) are installed in remote villages in Timor-Leste providing sustainable access to clean water and highly efficient lighting.	2.1 Number of households in targeted Sucos/villages getting clean water from solar PV water pumps and lighting from solar lamp system (LTSHE) (disaggregated by gender, women headed household).	Commissioning report from construction company	0	2019	0	1,684	1,684	1,684 HH benefits from 11 solar PV water pumps; 1000 LTSHE	Inspection and monitoring of power plant energy meter. Review of SOP Review of training modules, training report & certificates, monitoring training session. Review of issued regulation, monitoring community consultation process. Review of regulation, inspection of RESCO operation.
	2.2 Average monthly duration of water and lighting service to the households (hours/month), annually.	Monitoring log of operators.	0	2019	0	95%	95%	95% operating performance	
	2.3 Issuance of Standard Operating Procedure (SOP) for operation and maintenance of built and installed infrastructures.	SOP documents from the construction contractor.	0	2019	0	In all locations	In all locations	In all locations	
	2.4 Number of local people trained and certified on operation & maintenance of solar water pump (disaggregated by gender), cumulative.	Training report and certificate issued by formal institution.	0	2019	0	0	30 (30% female)	30 (30% female)	Risk: Communities and Suco/Village government are not supporting the project.
	2.5 Issuance of formal assignment of qualified water pump operators by head of village.	Village regulation on assignment of solar PV operators.	0	2019	0	consulted	issued	Operational	Indonesia and Timor-Leste governments are not supporting the SSTC activities and not keen to exchange knowledge.
	2.6 Establishment of village institution, i.e. Renewable energy service cooperative	Village regulation on establishment of RESCO and its	0	2019	0	consulted	issued	Operational	

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS				DATA COLLECTION METHODS & RISKS
			Value	Year	2020	2021	2022	Final 2023	
	(RESCO) to ensure operation and maintenance of built infrastructure with viable business model, i.e. tariff for water and LTSHE.	viable business model.							

VI. Monitoring and Evaluation

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs (Project Assurance Report to be used by UNDP Indonesia).	The frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	MEMR, MSA, KOICA, local government	
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	MEMR, MSA, local government, KOICA	
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)			

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	At least annually	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	Project Board members	

Evaluation Plan⁴

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Mid-Term Evaluation	MEMR, MSA, KOICA, local government	Output 1	Outcome 3 (IDN) and Outcome 2 (TL)	Q2/2022	Beneficiaries, governments	\$ 30,000
Final Evaluation				Q4/2023		\$ 30,000

⁴ Optional, if needed

VII. MULTI-YEAR WORK PLAN BY PARTNER COUNTRY⁵⁶

ACCESS PROJECT INDONESIA (PROJECT NUMBER: 00126434)

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year			RESPONSIBLE PARTY	Funding Source	PLANNED BUDGET			
		2020	2021	2022			2023	Budget Description	Amount	
Output 1: Renewable-based power plants built providing sustainable access to electricity for remote villagers in Indonesia with institutional and local capacity in place. Gen Marker: GEN2	1.1.1 Dispatch Experts	127,304	496,941	496,941	377,725	UNDP	KOICA	Contractual Services - Individual	1,490,015	
	1.1.2 Detailed Feasibility study	119,227	62,530	-	-	B2TKE-BPPT	KOICA	Contractual Services - Implementing Partner	181,757	
	1.1.3 Engineering, Procurement and Construction of centralized PV power plants in targeted locations	-	9,541,626	-	-	UNDP	KOICA	Contractual Services - Companies	9,541,626	
	1.1.4 Construction supervision	-	288,000	-	-	UNDP	KOICA	Contractual Services - Companies	288,000	
	1.1.5 Commissioning	-	2,500	-	-	UNDP	KOICA	Contractual Services - Companies	2,500	
	1.1.6 Operationalization of remote monitoring system	-	115,000	-	-	UNDP	KOICA	Contractual Services - Companies	115,000	
	1.2.1 Selection and recruitment of local operators	-	302,400	-	-	UNDP	KOICA	Contractual Services - Companies	302,400	
	1.2.2 On-the job training of Solar PV power plant operators by EPC contractor, including women operators.	-	66,000	-	-	UNDP	KOICA	Travels	66,000	
	1.2.3 Technical training, certification and refreshed training for Indonesia and Timor Leste by formal institution	-	98,800	-	-	PPSDM-ESDM	KOICA	Contractual Services - Implementing Partner	98,800	

⁵ Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

⁶ Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

1.2.4 Technical workshops, experience sharing	-	30,000	108,187	59,269	UNDP	KOICA	Training- Workshops	197,456
1.3.1 Village meetings/ FGD for consent, awareness and consensus building.	-	127,600	-	-	UNDP	KOICA	Training- Workshops	127,600
1.3.2 Recruitment of village facilitators	-	302,400	-	-	UNDP	KOICA	Contractual Services - Companies	302,400
1.3.3 Producing information material for communities and village facilitators	-	76,000	-	-	UNDP	KOICA	Audio Visual & Print Prod Costs	76,000
1.3.4 Establishment of Village enterprise (BUMDES) as Renewable Energy Service Company (RESKO), including women in technical/managerial position.	-	30,000	-	-	UNDP	KOICA	Contractual Services - Companies	30,000
1.3.5 Delivering initial capital to support BUMDES/RESKO business sustainability	-	-	200,000	-	UNDP	KOICA	Grant	200,000
1.3.6 Facilitating development of potential economic added value from the provision of electricity	-	-	-	59,269	UNDP	KOICA	Travels	59,269
1.4.1 Development of result dissemination products (video, infographics, project brief).	-	20,000	-	-	UNDP	KOICA	Audio Visual & Print Prod Costs	20,000
1.4.2 Results dissemination activities to stakeholders at regional and national level in Indonesia and Timor-Leste	-	25,534	-	28,500	UNDP	KOICA	Travels	57,000
1.4.3 Development of internal monitoring report, consolidated Indonesia and Timor-Leste	-	2,000	-	-	UNDP	KOICA	Training- Workshops	2,000
1.4.4 Development and dissemination of scaling-up proposal	-	-	-	-	UNDP	KOICA	Individual Consultant - National	-
1.5.1 Site Monitoring & Project Board Meeting	10,000	51,000	98,304	35,204	UNDP	KOICA	Travels	200,439

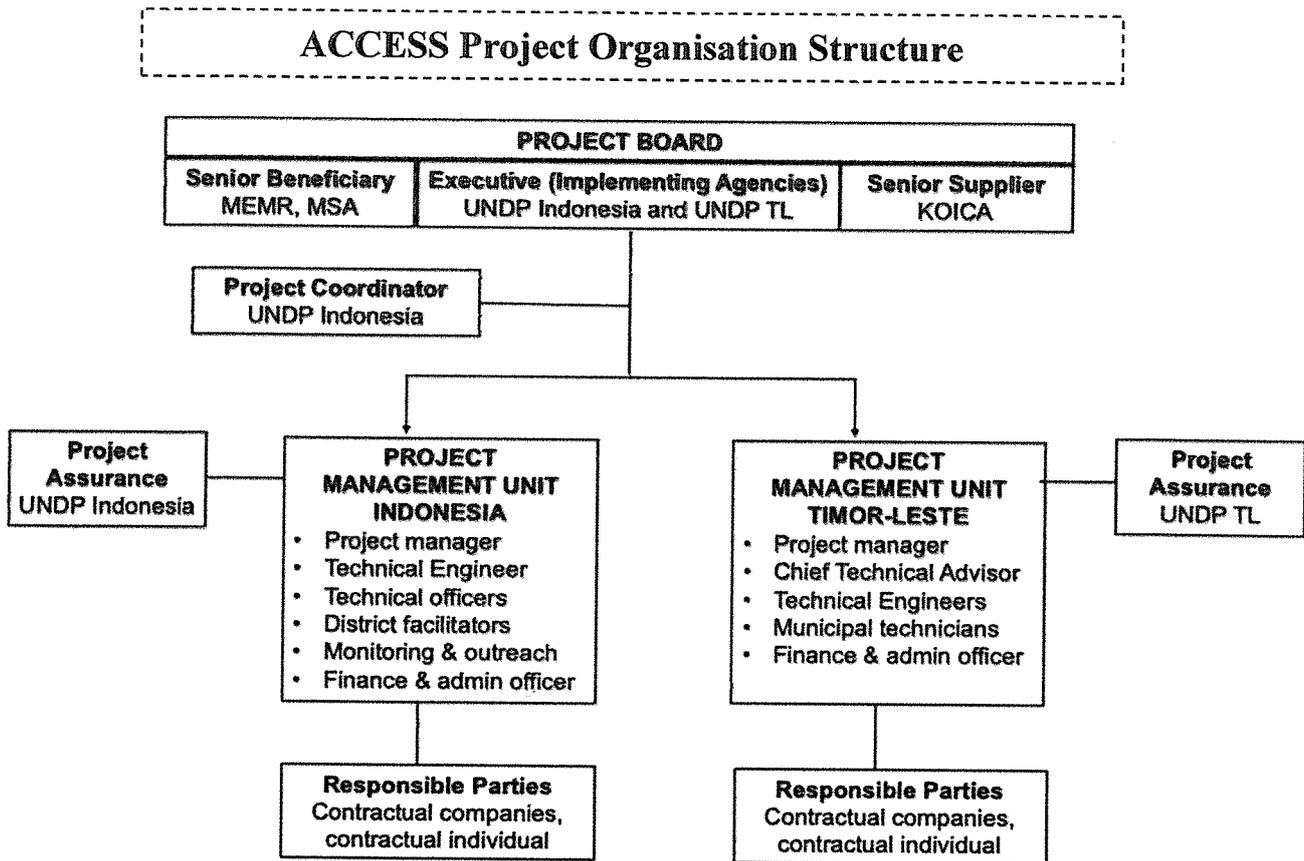
1.5.2 Production of Communication Products & Reports	12,000	6,500	10,000	49,400	UNDP	KOICA	Audio Visual & Print Prod Costs	77,900
1.5.3 Mid-term Review & Terminal Evaluation	-	-	30,000	30,000	UNDP	KOICA	Individual Consultant - International	60,000
1.5.4 Office Space Rent	12,000	36,000	36,000	36,000	UNDP	KOICA	Rental & Maintenance - Premises	120,000
1.5.5 Office Furniture	4,000	-	-	-	UNDP	KOICA	Equipment and Furniture	4,000
1.5.6 Office Supplies	7,680	7,680	7,680	7,680	UNDP	KOICA	Supplies	30,720
1.5.7 ICT Equipments	30,000	-	-	-	UNDP	KOICA	ICT Equipment	30,000
1.5.8 Direct Project Operation Cost	22,175	19,326	27,565	27,565	UNDP	KOICA	Miscellaneous Expenses	96,630
1.5.9 UNDP General Management Service	37,253	894,487	92,303	78,157	UNDP	KOICA	Facilities & Administration	1,102,201
TOTAL	381,639	12,602,325	1,106,980	788,768				14,879,712

ACCESS PROJECT TIMOR-LESTE (PROJECT NUMBER: 00126532)

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		2020	2021	2022	2023		Funding Source	Budget Description	Amount
		2.1 Engineering, procurement of equipment and construction							
OUTPUT 2: Implementation of South-South and Triangular Cooperation (SSTC) with Timor-Leste: Solar PV, water pumps and Highly Efficient Solar Lamp System (LTSHE) are installed in remote villages in Timor-Leste providing sustainable access to clean water and lighting. Gen Marker: GEN2	2.1.1 16 villages supported with Solar Water supply installations in 4 municipalities	-	1,268,050	-	-	UNDP	KOICA	Contractual Services- Companies	1,268,050
		-	38,042	-	-	UNDP	KOICA	Contractual Services- Companies	38,042
		-	45,000	-	-	UNDP	KOICA	Contractual Services- Companies	45,000
		-	50,722	12,681	-	UNDP	KOICA	Contractual Services- Companies	63,403
	2.1.2 Installation of LTSHE - house solar PV system in 1000 houses (25 villages x 40 households)	-	370,000	-	-	UNDP	KOICA	Contractual Services- Companies	370,000
	2.2 Capacity building and Expert Services								
	2.2.1 Workshops and participatory process	2,545	4,455	7,000	7,000	UNDP	KOICA	Training - Workshops	21,000
	2.2.2 Develop gender responsive infrastructure manuals	-	12,500	12,500	-	UNDP	KOICA	Low value grants	25,000
	2.2.3 Support to small agriculture projects	-	-	28,500	28,500	UNDP	KOICA	Low value grants	57,000
	2.2.4 International Engineer Project Coordinator 100%	-	120,150	60,075	60,075	UNDP	KOICA	International Consultant	240,300
	2.2.5 National Engineer for Maintenance and Installation	-	36,000	18,000	18,000	UNDP	KOICA	National Consultant	72,000
	2.2.6 Municipal Technicians	-	44,996	22,498	22,498	UNDP	KOICA	Contractual Service - Individual	89,991
	2.3 Project Management								

2.3.1 International Chief Technical Advisor (CTA) for Local Development Portfolio	3,244	26,726	14,985	14,985	UNDP	KOICA	Contractual Service - Individual	59,940
2.3.2 National Project manager in Timor Leste 50%	1,899	16,538	16,538	16,538	UNDP	KOICA	Contractual Service - Individual	51,511
2.3.3 Finance and Admin officer (60%)	817	44,183	22,500	15,716	UNDP	KOICA	Training-Workshops	83,216
2.3.4 Drivers	-	12,000	6,000	6,000	UNDP	KOICA	Contractual Service - Individual	24,000
2.4 Operation Cost								
2.4.1 Communication (banner, brochures, video), monitoring and printing of best practices document	510	2,528	2,528	2,528	UNDP	KOICA	Audio Visual&Print Prod Costs	8,094
2.4.2 Office materials and communication, email, office rental, etc	-	6,375	6,375	6,375	UNDP	KOICA	Supplies	19,125
2.4.3 Office equipment (furniture, computers, etc)	9,348	3,052	6,200	6,200	UNDP	KOICA	Information Technology Equipmt	24,800
2.4.4 Pick up 4x4	70,000	-	-	-	UNDP	KOICA	Rental & Maint of Other Equip	70,000
2.4.5 Car fuel and maintenance	-	3,000	4,500	4,500	UNDP	KOICA	Rental & Maint of Other Equip	12,000
2.4.6 Travels to the villages	8,180	2,320	5,250	5,250	UNDP	KOICA	Travels	21,000
2.4.7 Office rental	-	2,700	2,700	2,700	UNDP	KOICA	Rental & Maintenance-Premises	8,100
2.5 DPC and GMS								
2.5.1 Direct Project Cost (DPC)	26,456	76,717	11,547	11,547	UNDP	KOICA	Direct Project Cost	126,267
2.5.2 UNDP General Management Support (GMS)	7,151	123,101	20,096	22,110	UNDP	KOICA	UNDP General Management Service	172,458
TOTAL	130,149	2,309,154	275,703	255,291				2,970,297

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS



Project Coordinator

This role is appointed by the Project Board to coordinate, on behalf of the Project Board, the day-to-day collaborative efforts at the overall project level. The project coordinator plays a key role in coordinating and incorporating the programmatic contributions of all partner countries and is responsible for:

- Compiling joint project reports, with specific inputs from each partner country
- Facilitating communication and coordination among partners
- Preparing for and convening project board meetings
- Facilitating joint activities, as needed, and
- Coordinating and commissioning project evaluations.

The Project Coordinator is supported by a UNDP office that may be identified during the formulating of the multi-country project, taking into account its comparative advantages. Such an office is called a **coordinating office** of the project. The cost for services provided by a coordinating office should be covered by the project budget.

Project Board

Project board consists of the high-level officials from the MEMR (IDN), KOICA Indonesia, UNDP Indonesia, MSA (TL), KOICA TL, and UNDP TL. Other relevant government partners can be invited as observers in the Project Board, Project Board role is to provide strategic guidance for project implementation, management decisions for a project annual work plans and revisions. Based on the approved annual work plan (AWP), the Project Board will review and approve project quarterly plans and authorize any major deviation from these agreed quarterly plans. The Project Board is the authority that signs off the completion of each quarterly plan as well as authorizes the start of the next quarterly plan. The Project Board ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the project and external bodies.

Project Board contains of three roles, including:

- a) UNDP Indonesia (as Lead) and UNDP Timor-Leste as the Executive, represents the project ownership to chair the group and primarily responsible for executing the project in coordination with KOICA, MEMR and the MSA.
- b) KOICA as the Senior Supplier, represents the interests of the parties concerned which provide funding to the project. KOICA's primary function within the Board is to provide guidance regarding the implementation of the project.
- c) MEMR and MSA as the Senior Beneficiary, represents the interests of those who will ultimately benefit from the Project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.

Project Management Unit (PMU)

Led by Project Manager (PM). The PM will be responsible for the day-to-day management and decision making of the project and will be accountable to UNDP and the Project Board. The PM will ensure that the project produces the results specified in this agreement, to the required standards of quality and within the specified constraints of time and cost. The PMU will implement project Activities; conduct quarterly project meeting with KOICA, MEMR, MSA and UNDP or Project Board meeting. The Project Assurance (PA) functions to ensure PMU that appropriate project management milestones are managed, completed and policy advice is provided for scale-up and adoption by government.

IX. LEGAL CONTEXT

For UNDP Timor Leste:

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Timor-Leste and UNDP, signed on 20 May 2002. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by UNDP Timor-Leste (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

For UNDP Indonesia:

The project document shall be the instrument envisaged and defined in the [Supplemental Provisions](#) to the Project Document, attached hereto and forming an integral part hereof, as “the Project Document”.

This project will be implemented by UNDP Indonesia (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

UNDP (DIM)

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse (“SEA”) and sexual harassment (“SH”) allegations in accordance with its regulations, rules, policies and procedures.

6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBAA (for Timor Leste) or the Supplemental Provisions to the Project Document (for Indonesia), the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
 - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
 - b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
 - c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
 - d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
 - e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
 - f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
 - g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the

head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

- h. UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- i. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- j. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- k. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

- **Annex 1. Project Quality Assurance Report**
- **Annex 2. Social and Environmental Screening Template**
- **Annex 3. Offline Project Risk Register.**
- **Annex 4. Project Board Terms of Reference and TORs of key management positions**
- **Annex 5. Supplemental Provisions to the Project Document: The Legal Context**

Annex 1. Project Quality Assurance Report

<https://intranet.undp.org/sites/IDN/project/SitePages/Projects.aspx>

Annex 2. Social and Environmental Screening

Project Information

Project Information	
1. Project Title	Accelerating Clean Energy Access to Reduce Inequality (ACCESS)
2. Project Number	00126434 (ACCESS IDN) 00126532 (ACCESS TL)
3. Location (Global/Region/Country)	INDONESIA and TIMOR-LESTE

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
<i>Briefly describe in the space below how the Project mainstreams the human-rights based approach</i>
<p>The project was designed and will be implemented with due consideration of human rights principles, through the implementation of social inclusion and equal engagement of people in the dissemination of knowledge and sharing of benefits. ACCESS will implement activities that include construction of solar-PV power plants (in Indonesia) and solar-PV water pumping (in Timor-Leste), selection of local operators, provision of technical training and facilitating establishment of local institutions with functions as local service utilities. The project will result in equal access and benefits for all households and increased human capacity. Project implementation will apply a non-discriminatory, participatory approach and free, prior and informed consent (FPIC) process in involving stakeholders and benefits sharing, which are ways for project compliance with the Universal Declaration on Human Rights.</p>
<i>Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment</i>
<p>In the rural area, women and girls are often primarily responsible as energy producers for the household to collect fuel for cooking and lighting. In the absence of a modern energy facility, they rely on locally available biomass for cooking or kerosene lamps for lighting. Lack of access to energy sources leads to indoor smoke's health risk, less time for income-generating, educational, or other self-nurturing activities. These are gender problems related to energy access issues. The ACCESS project will address these gender problems by ensuring that poor households, particularly women-headed households, will have access to and gain benefit from the built clean energy facilities. The project facilitator will affirmatively engage women groups in the consultation process in deciding on the tariff of electricity and prioritization of the use of electricity, such as for productive activities and educational purposes. Furthermore, women will have at least a 30% quota to be local operators that will receive training and certification on solar-PV operation and maintenance. During the project implementation, gender equality measures will be outlined clearly in implementation guidelines or SOPs, evaluated, and a participatory and inclusive decision-making process for community development will guide the process.</p>
<i>Briefly describe in the space below how the Project mainstreams environmental sustainability</i>
<p>The ACCESS project was designed to mainstream environmental sustainability by selecting and using solar-PV, a renewable energy technology, to generate electricity for the targeted communities. The solar-PV will generate electricity with zero greenhouse gas emissions and it will replace use of diesel-powered electricity generators and kerosene lamps currently used by households in the project locations. The project will assess potential social and environmental risks pre-during and post construction of solar PV power plants (Indonesia) and solar-PV water pumps and solar-PV home systems (in Timor-Leste). The precautionary principles will be applied and risk</p>

mitigation actions will be taken in compliance with the country's standards. Potential hazardous waste from used batteries will be managed through ensuring cooperation between village utility institution with the local waste management company.

Part B. Identifying and Managing Social and Environmental Risks

<p>QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</i></p>	<p>QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i></p>			<p>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</p>
<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Land ownership status in which the land-owner cannot reclaim the land right after end of operation.</p> <p><i>(SES Principle 1: Human Rights)</i></p>	<p>I = 3 P = 2</p>	<p>Moderate</p>	<p>Use of land for location of solar-PV power plants.</p>	<p>The project will facilitate issuance of letter for land utilization permit from the land-owner with clear terms and conditions, witnessed by head of village.</p>
<p>The potential result of the project be vulnerable to potential impact of climate change, such as temperature, landslide.</p> <p><i>(SES Principle 3: Standard 2)</i></p>	<p>I = 3 P = 2</p>	<p>Moderate</p>	<p>Solar-PV panels and battery performance are sensitive to temperature; location of power plant can be affected by landslide, strong wind.</p>	<p>Early coordination with disaster agency to get information on the potential climate-related risks in all target locations.</p> <p>During construction, ensure quality of materials and compliance to environmental safeguard standard by construction company.</p>
<p>Safety risk due to mobilization of heavy construction equipment</p>	<p>I = 3 P = 3</p>	<p>Moderate</p>		<p>Ensure compliance of safety standards by the construction company, apply complaint mechanism.</p>

(SES Principle 3: Standard 3)				
Community health risk due to unmanaged hazardous battery-waste (SES Principle 3, Standard 3)	I = 4 P = 3	High	Used battery will contain hazardous substance.	Ensure waste management plan is in the SOP of the village utility institution. Facilitate village utility institution to have contract with waste management agency in the area.
Generation of hazardous waste from used batteries (SES Principle 3, Standard 7)	I = 4 P = 3	High	The solar-PV power plants will use batteries to store energy.	Ensure waste management plan is in the SOP of the village utility institution. Facilitate village utility institution to have contract with waste management agency in the area.
QUESTION 4: What is the overall Project risk categorization?				
Select one (see SESP for guidance)			Comments	
<i>Low Risk</i>			<input type="checkbox"/>	
<i>Moderate Risk</i>			<input checked="" type="radio"/>	
			The project involves construction of solar-PV power generation that include battery system, thus, it has moderate potential risks to social and environmental on Human Rights, Climate Change Mitigation & Adaptation, and Community health, safety and working conditions. The SES risks mitigation measures will be adopted in the guideline for project implementation and later in the village utility institution operation manual. Selection of construction company will include criteria on SES performance and bound by the contract to comply with SES standards.	
<i>High Risk</i>			<input type="checkbox"/>	
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?				
Check all that apply			Comments	
<i>Principle 1: Human Rights</i>			<input checked="" type="checkbox"/>	
			Clarity of land ownership status is required to ensure the rights-holder can claim their right.	
<i>Principle 2: Gender Equality and Women's Empowerment</i>			<input type="checkbox"/>	

	Principle 3: Environmental Sustainability		
	1. Biodiversity Conservation and Natural Resource Management	<input type="checkbox"/>	
	2. Climate Change Mitigation and Adaptation	√	Vulnerability of project results due to potential climate change impact should be taken into account in the selection of location for solar-PV system, construction design, material selection and operationalization.
	3. Community Health, Safety and Working Conditions	√	Health, safety and waste management measures during construction and operation should be ensured and imposed in the company's contract and the SOP for local operators.
	4. Cultural Heritage	<input type="checkbox"/>	
	5. Displacement and Resettlement	<input type="checkbox"/>	
	6. Indigenous Peoples	<input type="checkbox"/>	
	7. Pollution Prevention and Resource Efficiency	√	The potential hazardous waste generated from used batteries should be managed according to the hazardous waste standard.

Final Sign Off

Signature	Date	Description
QA Assessor	15 Sept 2020	Verania Andria Senior Advisor for Sustainable Energy, UNDP Indonesia
QA Approver	15 Sept 2020	Sophie Kemhadze Deputy Resident Representative UNDP Indonesia
PAC Chair	15 Sept 2020	Sophie Kemhadze Deputy Resident Representative UNDP Indonesia

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks	
Principles 1: Human Rights	Answer (Yes/No)
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ^[1]	No
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	Yes
7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment	
1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3. Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below	
Standard 1: Biodiversity Conservation and Sustainable <u>Natural</u> Resource Management	
1.1 Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	No
1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No

^[1] Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.3 Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4 Would Project activities pose risks to endangered species?	No
1.5 Would the Project pose a risk of introducing invasive alien species?	No
1.6 Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7 Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8 Does the Project involve significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No
1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10 Would the Project generate potential adverse trans-boundary or global environmental concerns?	No
1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i>	No
Standard 2: Climate Change Mitigation and Adaptation	
2.1 Will the proposed Project result in significant ^[1] greenhouse gas emissions or may exacerbate climate change?	No
2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Yes
2.3 Is the proposed Project likely to directly or indirectly increase social and environmental <u>vulnerability to climate change</u> now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
Standard 3: Community Health, Safety and Working Conditions	
3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	Yes
3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, and erosion, flooding or extreme climatic conditions?	No
3.6 Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No

^[1] In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.9 Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage	
4.1 Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2 Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement	
5.1 Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3 Is there a risk that the Project would lead to forced evictions?[1]	No
5.4 Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples	
6.1 Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3 Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	No
6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5 Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7 Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8 Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency	
7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or trans-boundary impacts?	No
7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	No

^[1] Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5 Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

SESP	Identified Potential Social Environmental Risks	Probability of Risk	Impact of Risk	Significance of Risk	Risk Management Plan
P1.5	Insufficient technical skill of local operators	3	3	Moderate	Identify and engage potential operator candidates during construction, plan for longer duration of training prior to entering certification process.
P1.6	Land ownership	2	3	Moderate	Facilitate issuance of letter on land utilization permit from the land-owner with clear terms and condition, witnessed by head of village.
P3.S2.2	Vulnerable to potential impact of climate change, i.e. natural disaster	2	3	Moderate	Early coordination with BNPB/disaster management agency to get information on the potential risks in all target locations. During construction, ensure compliance of environmental safeguard standard by construction company.
P3.S3.1	Safety risk due to mobilization of heavy construction equipment	3	3	Moderate	Ensure compliance of safety standards by the construction company.
P3.S3.2	Community health risk due to hazardous battery-waste	3	4	High	Ensure the waste management plan is in the SOP.
P3.S7.2	Generation of hazardous waste from used battery	3	4	High	Facilitate RESCO/local institution to have contract with waste management agency in the area.

Annex 3. Offline Project Risk Register

Project Title: Accelerating Clean Energy Access to Reduce Inequality (ACCESS)	Project ID: 00126434 (ACCESS IDN) 00126532 (ACCESS TL)	Date: 01 Sept 2020
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#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Political instability between Indonesia and Timor-Leste	01 Sept 2020	Political	The risk will impact the implementation of SSTC component activities (Output 4) P = 1 I = 4 Moderate	Maintain coordination with Ministry of Foreign Affairs to ensure proper SSTC protocol.	Project Manager	Project Manager	01 Sept 2020	
2	Natural disaster in targeted locations	01 Sept 2020	Environmental	The risk will impact construction activities and sustainability of built infrastructure P = 2 I = 4 Moderate	Early coordination with BNPB/disaster management agency to get information on the potential risks in all target locations. During construction, ensure compliance of environmental safeguard standard by construction company.	Technical officer	Technical officer	01 Sept 2020	
3	Built facilities are stolen/ destroyed by communities	01 Sept 2020	Operational	The risk will impact sustainability of the electricity/water service as key output of the project	Consult and engage communities since the planning process of the project.	Technical officer	Technical officer	01 Sept 2020	

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
4	Land-owner cannot reclaim the land after end of operation	01 Sept 2020	Social	I = 3 P = 2 Moderate	The project will facilitate issuance of letter for land utilization permit from the land-owner with clear terms and conditions, witnessed by head of village.	Technical officer	Technical officer	01 Sept 2020	
5	The built solar PV infrastructure is vulnerable to potential impact of climate change	01 Sept 2020	Environmental	I = 3 P = 2 Moderate	Early coordination with disaster agency to get information on the potential climate-related risks in all target locations. During construction, ensure quality of materials and compliance to environmental safeguard standard by construction company.	Technical officer	Technical officer	01 Sept 2020	
6	Safety risk due to mobilization of heavy construction equipment	01 Sept 2020	Social	I = 3 P = 3 Moderate	Ensure compliance of safety standards by the construction company, apply complaint mechanism.	Technical officer, EPC company	Technical officer	01 Sept 2020	
7	Women are uncommon to take part as local technical operators	01 Sept 2020	Social	I = 3 P = 1 Low	Consultative meeting will be conducted with elderly, women-respected representative and head of village to explain about the role of	Technical officer	Technical officer	01 Sept 2020	

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
8	Cost overruns during construction.	01 Sept 2020	Operational	The risk will delay construction activities and reduce project budget availability. P = 2 I = 3 Moderate	local operators and seeking support. Ensure quality of engineering design to be construct-able. Put clause in EPC contract for cost-overrun insurance coverage. Allocate contingency budget for reasonable level of cost adjustment.	Technical officer	Technical officer	01 Sept 2020	
9	No local people are passing the certification test as solar PV operator.	01 Sept 2020	Operational	Having certified operator will enhance technical skill of the operator. Fail to meet the certification passing grade will impact the operational sustainability of the built infrastructure. P = 3 I = 3 Moderate	Identify and engage potential operator candidates during construction, plan for longer duration of training prior to entering certification process.	Technical officer	Technical officer	01 Sept 2020	
10	Community health risk and generation of hazardous waste from used batteries.	01 Sept 2020	Environmental	Batteries used in solar-PV power plants and LTSHE (solar lamp) are toxic waste, Failure in managing the used batteries will impact environment. P = 3 I = 4 High	Ensure the waste management plan is in the SOP. Facilitate RESCO/local institution to have contract with waste management agency in the area.	Technical officer	Technical officer	01 Sept 2020	

Annex 4. Project Board Terms of Reference and TORs of key management positions

A. Terms of Reference: Project Board

The responsibilities of the Project Board are outlined below:

Initiating a project

- Agree on Project Coordinator's responsibilities, as well as the responsibilities of the other members of the Project Management Unit;
- Delegate any Project Assurance function as appropriate;
- Review the Progress Report for the Initiation Stage (if an Initiation Plan was required);
- Review and appraise detailed Project Plan and Annual Work Plan, including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plan.

Running a project

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the Project Coordinator;
- Provide guidance and agree on possible countermeasures/management actions to address specific risks;
- Agree on Project Coordinator's tolerances in the Annual Work Plan and quarterly plans when required;
- Conduct regular meetings to review the Project Quarterly Progress Report and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Review Combined Delivery Reports (CDR) prior to certification by the Implementing Partner;
- Appraise the Project Annual Review Report, make recommendations for the next Annual Work Plan;
- Review and approve end project report, make recommendations for follow-on actions;
- Provide ad-hoc direction and advice for exception situations when project manager's tolerances are exceeded;
- Assess and decide on project changes through revisions;

Closing a project

- • Assure that all Project deliverables have been produced satisfactorily;
- • Review and approve the Final Project Review Report, including Lessons-learned;
- • Make recommendations for follow-on actions to be submitted to the Outcome Board;
- • Commission project evaluation (only when required by partnership agreement).

Specific Responsibilities of Executive

- Ensure that there is a coherent project organisation structure and logical set of plans
- Set tolerances in the Annual Work Plan and other plans as required for the Project Coordinator
- Monitor and control the progress of the project at a strategic level
- Ensure that risks are being tracked and mitigated as effectively as possible
- Brief Outcome Board and relevant stakeholders about project progress
- Organise and chair Project Board meetings.
- The Executive is responsible for overall assurance of the project as described below. If the project warrants it, the Executive may delegate some responsibility for the project assurance functions.

Specific Responsibilities of Senior Supplier

- Make sure that progress towards the outputs remains consistent from the supplier perspective
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management
- Ensure that the supplier resources required for the project are made available
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

Specific Responsibilities of Senior Beneficiary

- Ensure the expected output(s) and related activities of the project are well defined
- Make sure that progress towards the outputs required by the beneficiaries remains consistent from the beneficiary perspective
- Promote and maintain focus on the expected project output(s)
- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve priority conflicts.
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target
- Impact of potential changes is evaluated from the beneficiary point of view
- Risks to the beneficiaries are frequently monitored.

B. Terms of Reference: National Project Manager

The **National Project Manager** is responsible for:

1. Manage and supervise the project team to ensure effective implementation and achievement of results:
 - Leads and supervises project team, builds team coherence and establishes clear roles and responsibilities among team members;
 - Ensures that the quality of project inputs meet the expected standards and are sufficient to produce project outputs and targets;
 - Takes overall responsibility for the project and performs oversight roles for project compliance against the relevant government and UNDP regulations for project management;
 - Manages critical issues, troubleshoots problems and develops solutions to the overall processes of project implementation;
 - Present project status to and consult with the project board for any issues that require their attention, including issues related to deviation from the approved work plans and its tolerance (e.g. deviation from the approved target, and/or budget);
 - Performs Project Manager duties in line with the UNDP's standard for project management;
 - Ensures overall project's effective monitoring of project performance, and the preparation of high quality and results oriented progress reports.
 - Supervise preparation and dissemination of project reports and other information materials to enhance the visibility and transparency of project implementation.
2. Ensure effective planning, budgeting, and implementation of the project
 - Mobilizes goods and services and other project inputs, including preparation of work plans, budget, ToRs for expert consultants, meetings and workshops;
 - Prepares project's annual and quarterly work plans and organizes project board meetings to obtain their approval;
 - Regular Monitoring, evaluation and reporting of progress of project activities;
 - Implements project work plan and ensures that the project remains within the tolerance level of the approved work plan;
 - Synthesis of the works and outputs of consultants and subcontractors to identify potential issues and problems
 - Preparation of annual work plans (AWP), quarterly and annual project reports;

- Oversee the financial record-keeping and internal control management of the PMU and the Project as a whole;
 - Provides additional inputs and data for external project reports as necessary and required by the project assurance team;
 - Responsible for the fiscal management of the project
 - Organizes project board meetings and reports to the project board the project's quarterly progress together with any issues that may require project board decisions; and
 - Liaises with UNDP's Quality Assurance Unit to initiate project review, evaluation and compliance processes.
3. Create and nurture strategic partnerships and support to the implementation of resource mobilization
- Establishes and maintains good working relationships with MEMR, KOICA and other relevant public and development partners who are the principal counterparts for the project;
 - Initiates and maintains partnerships with development partners, government institutions, private sector, civil society and other stakeholders to contribute to the achievement of project results;
 - Builds project reputation for quality design, reliable delivery as well as integrity and accountability;
 - Identifies and works with key partners/stakeholders to ensure synergies with other projects/initiatives and to avoid duplication of activities among actors;
 - Engages communities in the implementation and oversight of project activities, as appropriate, in a gender-sensitive manner.
 - Identifies opportunities for mobilizing resources for the project, and prepares substantive briefs on possible areas of cooperation; and
 - In coordination with UNDP's Communication unit and other relevant counterpart communications department, strengthens the communication of the project in order to communicate results, deepen stakeholder knowledge and buy-in to the project, and to facilitate resource mobilization for the project.
4. Facilitate knowledge building and management for and from the project implementation.
- Identifies best practices and lessons learnt from the project and from other initiatives that can be helpful to the project in achieving its goals and objectives;
 - Organizes and delivers trainings for the operations/project staff on project/programme management issues;
 - Conducts internal capacity building training for project staff to facilitate appropriate management and timely delivery of project outputs;
 - Identifies policy issues for codification and sharing;
 - Leads in generating knowledge products such as best practices and lessons learnt for knowledge sharing; and
 - Contributes to knowledge networks and communities of practice.
5. The incumbent of the position should avoid any kind of discriminatory behavior including gender discrimination and ensure that
- Human rights and gender equality is prioritized as an ethical principle within all actions;
 - Activities are designed and implemented in accordance with "Social and Environmental Standards of UNDP";
 - Any kind of diversities based on ethnicity, age, sexual orientation, disability, religion, class, gender are respected within all implementations including data production;
 - Differentiated needs of women and men are considered;
 - Inclusive approach is reflected within all actions and implementations, in that sense an enabling and accessible setup in various senses such as disability gender language barrier is created;
 - Necessary arrangements to provide gender parity within all committees, meetings, trainings etc. introduced.

C. Terms of Reference: Technical Officer

The **Technical Officer** is responsible for:

1. Ensures implementation of project strategies focusing on achievement of the following results:
 - Provide technical assistance and management of related stakeholders to deliver the expected outputs of project.
 - Ensure that required expertise and technical assistance is made available for the involved stakeholders.
 - Identify sources of information related to technical issues.
 - Identification and synthesis of best practices and lessons learned for effective implementation of activities to achieve project targets.
 - Coordinate the work and expected outputs with other strategic partners to seek synergy.
 - Conduct relevant studies to collate research-based information, evidences and facts to enrich the achievement of development results.
 - Contribute to advocacy networks at national level, knowledge networks and communities of practice.
 - Contribute to high-impact advocacy campaigns implemented with key partner
 - Active participation in various policy and partnership fora, as well as relevant international conferences and meetings on rural electrification area.
2. Participates in effective management of the project focusing on quality control from formulation to implementation of the projects, achieving the following results:
 - Assist National Project Manager (NPM) on the implementation of the project to ensure that the works and achievements satisfy project's objective and targets and meets the requirement of the UNDP and donor;
 - Provide technical inputs in the review of outputs by consultants hired under the component activities;
 - Manage various teams and other ad-hoc task forces for the conduct of specific activities and tasks under the Project;
 - Assist NPM in the preparation of quarterly, annual work plan (AWP), annual project reports and others as required by the UNDP and Project Manager;
 - Provide information on works progress and achievements for project Mid-Term Review and Terminal Evaluation and follow up implementation of the Action Plan to address the recommendations;
 - Act as NPM deputy in various meetings, workshops and other activities, as may be instructed by Project Manager;
 - Take actions for resolving problems and barriers as they emerge in the process of implementation, especially in external communications, and in meeting various aspects of UNDP working processes and practice;
 - Provide other support services as may be required by Project Manager to achieve project overall targets.
 - Conduct synthesis of the works, reports and other outputs of consultants and subcontractors involved in the Project;
 - Assist PMU to organize and arrange international workshops, conferences and surveys.
3. Maintain partnerships for project implementation with implementing partners focusing on achievement of the following results:
 - Regular assessment on the implementing partner's capacity and ensure that capacity development strategy is embedded within the framework of the project implementation
 - Established and maintenance of link of communication between Project Management Units in the implementing partner and the country office for provision effective support and assurance
 - Effective support and facilitation on wider partnership with project stakeholders to encourage coordination and synergies between various actors and thus ensure more impactful results

- Promotion of stakeholder awareness on project activities and results to support partnership and resource mobilization for future project implementation, replication and up-scaling.
4. Facilitation of knowledge building and management, producing and disseminating lesson learnt from designated projects and support to the promotion of cross-project, cross-unit knowledge fertilization focusing on the following results :
- Identification of entry points for knowledge generations and knowledge sharing from project experience;
 - Effective contributions to knowledge networks and communities of practice.
 - Identification of sources of information related to policy-driven issues. Identification and synthesis of best practices and lessons learned directly linked to project and programme country policy goals
 - Provision of support to the information sharing event and dialogue within the stakeholders by initiating and/or participating in consultative meetings that will address the issues and needs in collaboration with key partners.
 - Maintenance of established advocacy networks which are linked to national and international networks and proposed for expansion of network to the Project Manager, thus relevant, high-impact advocacy campaigns are implemented with key partners.
 - Effective support to the establishment of showcase to external stakeholders on progress made and impacts delivered
 - Organization of training for the operations/ projects staff on various issues.
 - Professional growth through active learning.
 - Conducts internal capacity building training for project staff to facilitate appropriate management and timely delivery of project outputs including in gender analysis and gender mainstreaming.
5. The incumbent of the position should avoid any kind of discriminatory behavior including gender discrimination and ensure that
- Human rights and gender equality is prioritized as an ethical principle within all actions;
 - Activities are designed and implemented in accordance with “Social and Environmental Standards of UNDP”;
 - Any kind of diversities based on ethnicity, age, sexual orientation, disability, religion, class, gender are respected within all implementations including data production;
 - Differentiated needs of women and men are considered;
 - Inclusive approach is reflected within all actions and implementations, in that sense an enabling and accessible setup in various senses such as disability gender language barrier is created;
 - Necessary arrangements to provide gender parity within all committees, meetings, trainings etc. introduced.

Annex 5. Supplemental Provisions to the Project Document⁷: The Legal Context

General responsibilities of the Government, UNDP and the executing agency

1. All phases and aspects of UNDP assistance to this project shall be governed by and carried out in accordance with the relevant and applicable resolutions and decisions of the competent United Nations organs and in accordance with UNDP's policies and procedures for such projects, and subject to the requirements of the UNDP Monitoring, Evaluation and Reporting System.
2. The Government shall remain responsible for this UNDP-assisted development project and the realization of its objectives as described in this Project Document.
3. Assistance under this Project Document being provided for the benefit of the Government and the people of Indonesia, the Government shall bear all risks of operations in respect of this project.
4. The Government shall provide to the project the national counterpart personnel, training facilities, land, buildings, equipment and other required services and facilities. It shall designate the Government Co-operating Agency named in the cover page of this document (hereinafter referred to as the "Co-operating Agency"), which shall be directly responsible for the implementation of the Government contribution to the project.
5. The UNDP undertakes to complement and supplement the Government participation and will provide through the Executing Agency the required expert services, training, equipment and other services within the funds available to the project.
6. Upon commencement of the project the Executing Agency shall assume primary responsibility for project execution and shall have the status of an independent contractor for this purpose. However, that primary responsibility shall be exercised in consultation with UNDP and in agreement with the Co-operating Agency. Arrangements to this effect shall be stipulated in the Project Document as well as for the transfer of this responsibility to the Government or to an entity designated by the Government during the execution of the project.
7. Part of the Government's participation may take the form of a cash contribution to UNDP. In such cases, the Executing Agency will provide the related services and facilities and will account annually to the UNDP and to the Government for the expenditure incurred.

(a) Participation of the Government

1. The Government shall provide to the project the services, equipment and facilities in the quantities and at the time specified in the Project Document. Budgetary provision, either in kind or in cash, for the Government's participation so specified shall be set forth in the Project Budgets.
2. The Co-operating Agency shall, as appropriate and in consultation with the Executing Agency, assign a director for the project on a full-time basis. He shall carry out such responsibilities in the project as are assigned to him by the Co-operating Agency.
3. The estimated cost of items included in the Government contribution, as detailed in the Project Budget, shall be based on the best information available at the time of drafting the project proposal. It is understood that price fluctuations during the period of execution of the project may necessitate an adjustment of said contribution in monetary terms; the latter shall at all times be determined by the value of the services, equipment and facilities required for the proper execution of the project.
4. Within the given number of man-months of personnel services described in the Project Document, minor adjustments of individual assignments of project personnel provided by the Government may be made by the Government in consultation with the Executing Agency, if this is found to be in the best interest of the project. UNDP shall be so informed in all instances where such minor adjustments involve financial implications.
5. The Government shall continue to pay the local salaries and appropriate allowances of national

⁷ Standard annex to project documents for use in countries which are not parties to the Standard Basic Assistance Agreement (SBAA).

counterpart personnel during the period of their absence from the project while on UNDP fellowships.

6. The Government shall defray any customs duties and other charges related to the clearance of project equipment, its transportation, handling, storage and related expenses within the country. It shall be responsible for its installation and maintenance, insurance, and replacement, if necessary, after delivery to the project site.
7. The Government shall make available to the project - subject to existing security provisions - any published and unpublished reports, maps, records and other data which are considered necessary to the implementation of the project.
8. Patent rights, copyright rights and other similar rights to any discoveries or work resulting from UNDP assistance in respect of this project shall belong to the UNDP. Unless otherwise agreed by the Parties in each case, however, the Government shall have the right to use any such discoveries or work within the country free of royalty and any charge of similar nature.
9. The Government shall assist all project personnel in finding suitable housing accommodation at reasonable rents.
10. The services and facilities specified in the Project Document which are to be provided to the project by the Government by means of a contribution in cash shall be set forth in the Project Budget. Payment of this amount shall be made to the UNDP in accordance with the Schedule of Payments by the Government.
11. Payment of the above-mentioned contribution to the UNDP on or before the dates specified in the Schedule of Payments by the Government is a prerequisite to commencement or continuation of project operations.

(b) Participation of the UNDP and the executing agency

1. The UNDP shall provide to the project through the Executing Agency the services, equipment and facilities described in the Project Document. Budgetary provision for the UNDP contribution as specified shall be set forth in the Project Budget.
2. The Executing Agency shall consult with the Government and UNDP on the candidature of the Project Manager⁸ who, under the direction of the Executing Agency, will be responsible in the country for the Executing Agency's participation in the project. The Project Manager shall supervise the experts and other agency personnel assigned to the project, and the on-the-job training of national counterpart personnel. He shall be responsible for the management and efficient utilization of all UNDP-financed inputs, including equipment provided to the project.
3. The Executing Agency, in consultation with the Government and UNDP, shall assign international staff and other personnel to the project as specified in the Project Document, select candidates for fellowships and determine standards for the training of national counterpart personnel.
4. Fellowships shall be administered in accordance with the fellowships regulations of the Executing Agency.
5. The Executing Agency may, in agreement with the Government and UNDP, execute part or all of the project by subcontract. The selection of subcontractors shall be made, after consultation with the Government and UNDP, in accordance with the Executing Agency's procedures.
6. All material, equipment and supplies which are purchased from UNDP resources will be used exclusively for the execution of the project, and will remain the property of the UNDP in whose name it will be held by the Executing Agency. Equipment supplied by the UNDP shall be marked with the insignia of the UNDP and of the Executing Agency.
7. Arrangements may be made, if necessary, for a temporary transfer of custody of equipment to local authorities during the life of the project, without prejudice to the final transfer.
8. Prior to completion of UNDP assistance to the project, the Government, the UNDP and the

⁸ May also be designated Project Co-ordinator or Chief Technical Adviser, as appropriate.

Executing Agency shall consult as to the disposition of all project equipment provided by the UNDP. Title to such equipment shall normally be transferred to the Government, or to an entity nominated by the Government, when it is required for continued operation of the project or for activities following directly therefrom. The UNDP may, however, at its discretion, retain title to part or all of such equipment.

9. At an agreed time after the completion of UNDP assistance to the project, the Government and the UNDP, and if necessary the Executing Agency, shall review the activities continuing from or consequent upon the project with a view to evaluating its results.

10. UNDP may release information relating to any investment oriented project to potential investors, unless and until the Government has requested the UNDP in writing to restrict the release of information relating to such project.

Rights, Facilities, Privileges and Immunities

1. In accordance with the Agreement concluded by the United Nations (UNDP) and the Government concerning the provision of assistance by UNDP, the personnel of UNDP and other United Nations organizations associated with the project shall be accorded rights, facilities, privileges and immunities specified in said Agreement.

2. The Government shall grant UN volunteers, if such services are requested by the Government, the same rights, facilities, privileges and immunities as are granted to the personnel of UNDP.

3. The Executing Agency's contractors and their personnel (except nationals of the host country employed locally) shall:

- (a) Be immune from legal process in respect of all acts performed by them in their official capacity in the execution of the project;
- (b) Be immune from national service obligations;
- (c) Be immune together with their spouses and relatives dependent on them from immigration restrictions;
- (d) Be accorded the privileges of bringing into the country reasonable amounts of foreign currency for the purposes of the project or for personal use of such personnel, and of withdrawing any such amounts brought into the country, or in accordance with the relevant foreign exchange regulations, such amounts as may be earned therein by such personnel in the execution of the project;
- (e) Be accorded together with their spouses and relatives dependent on them the same repatriation facilities in the event of international crisis as diplomatic envoys.

4. All personnel of the Executing Agency's contractors shall enjoy inviolability for all papers and documents relating to the project.

5. The Government shall either exempt from or bear the cost of any taxes, duties, fees or levies which it may impose on any firm or organization which may be retained by the Executing Agency and on the personnel of any such firm or organization, except for nationals of the host country employed locally, in respect of:

- (a) The salaries or wages earned by such personnel in the execution of the project;
- (b) Any equipment, materials and supplies brought into the country for the purposes of the project or which, after having been brought into the country, may be subsequently withdrawn therefrom;
- (c) Any substantial quantities of equipment, materials and supplies obtained locally for the execution of the project, such as, for example, petrol and spare parts for the operation and maintenance of equipment mentioned under (b), above, with the provision that the types and approximate quantities to be exempted and relevant procedures to be followed shall be agreed upon with the Government and, as appropriate, recorded in the Project Document; and

- (d) As in the case of concessions currently granted to UNDP and Executing Agency's personnel, any property brought, including one privately owned automobile per employee, by the firm or organization or its personnel for their personal use or consumption or which after having been brought into the country, may subsequently be withdrawn therefrom upon departure of such personnel.

6. The Government shall ensure:

- (a) prompt clearance of experts and other persons performing services in respect of this project; and
- (b) the prompt release from customs of:
 - (i) equipment, materials and supplies required in connection with this project; and
 - (ii) property belonging to and intended for the personal use or consumption of the personnel of the UNDP, its Executing Agencies, or other persons performing services on their behalf in respect of this project, except for locally recruited personnel.

7. The privileges and immunities referred to in the paragraphs above, to which such firm or organization and its personnel may be entitled, may be waived by the Executing Agency where, in its opinion or in the opinion of the UNDP, the immunity would impede the course of justice and can be waived without prejudice to the successful completion of the project or to the interest of the UNDP or the Executing Agency.

8. The Executing Agency shall provide the Government through the resident representative with the list of personnel to whom the privileges and immunities enumerated above shall apply.

9. Nothing in this Project Document or Annex shall be construed to limit the rights, facilities, privileges or immunities conferred in any other instrument upon any person, natural or juridical, referred to hereunder.

Suspension or termination of assistance

1. The UNDP may by written notice to the Government and to the Executing Agency concerned suspend its assistance to any project if in the judgement of the UNDP any circumstance arises which interferes with or threatens to interfere with the successful completion of the project or the accomplishment of its purposes. The UNDP may, in the same or a subsequent written notice, indicate the conditions under which it is prepared to resume its assistance to the project. Any such suspension shall continue until such time as such conditions are accepted by the Government and as the UNDP shall give written notice to the Government and the Executing Agency that it is prepared to resume its assistance.

2. If any situation referred to in paragraph 1, above, shall continue for a period of fourteen days after notice thereof and of suspension shall have been given by the UNDP to the Government and the Executing Agency, then at any time thereafter during the continuance thereof, the UNDP may by written notice to the Government and the Executing Agency terminate the project.

3. The provisions of this paragraph shall be without prejudice to any other rights or remedies the UNDP may have in the circumstances, whether under general principles of law or otherwise.

