

Sustainable Solutions to Solid Waste (SWM Project)

ANNUAL REPORT (Y2)

September 2019 – August 2020



Sustainable Solutions to Solid Waste Management

UNDP COX'S BAZAR

Funded by SIDA

September 2020



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Summary of the Project

Operation (Project) Name	Sustainable Solutions to Solid Waste: A Local Response to the Rohingya Crisis in Bangladesh
Organisation	UNDP Cox's Bazar Sub Office
City, Country	Bangladesh
Sector area	Early Recovery/ Environment and waste management
Total Budget	4,879,764 USD
Source of Funding	SIDA
Gender and Diversity marker category	Medium
Environmental marker category	High
Project Manager	Marta Kucharski Duran
Project expected results	<p>On an outcome level: Outcome 1: Developing Waste Management Systems Outcome 2: Changing Behaviours and Attitudes</p> <p>At an output-level the mission will contribute to the below results:</p> <ul style="list-style-type: none"> 1.1 A quick-impact waste removal project having been developed. 1.2 Establishment of a basic waste management systems. 1.3 New waste management infrastructure. 2.1 Recycling and livelihoods development activities planned and initiated. 2.2 Local government engagement and enhanced capacity within key functions. 2.3 Household engagement for improved segregation and recycling of waste. 2.4 "3Rs" awareness campaign (reduce, reuse, recycle). 2.5 Contingency planning.
Implementation period	August 2018- August 2021
Reporting Period	September 2019 – August 2020
Report Author	Marta Kucharski – Project Manager SWM Project

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Section 1 – TECHNICAL REPORT

1.1 Summary: progress and achievements to date

This second year of the project has started with the great participation of BRAC and Practical Action as Implementing partners, which has allowed UNDP to significantly increase the implementation capacity in comparison with the first year. However, during the second half of the year, the project has been affected by the COVID19 pandemic. The outbreak has impacted not only on the pace of the implementation, where some activities were held and others slowed down, but also on the nature of the activities included into the COVID19 response plan and the modality of work of the teams due to the restrictions of movements.

Nevertheless, the SWM Project has strategically included the SWM project activities as part of the COVID19 response plan and advocated ISCG of the importance to maintain the communities clean and the regular services of waste collection during the outbreak. Thanks to the joint efforts with the WASH sector Coordinator and ISCG, RRRC included SWM activities as critical services to be maintained and facilitated the access to the camps and host communities for proper operation.

Despite the outbreak, there have been important achievements on the 2nd year of the project:

- 1. Cleaning campaign in the refugee camps of Ukhia Upazila (Megacamp).** Completed a one-off cleaning campaign of solid waste in 27 camps, 4,000m³ waste collected, 974 Rohingya workers engaged as CfW (livelihood generation), 10,408 days of work created (labour/day), 1,458 trips of trucks to the SW Facility (sanitary landfill). 135 banners for 27 camps (5 units each) to prevent waste littering. COVID19 orientation and protective measures ensured (See the report in [Annex 1](#) and [Annex 1.1](#)).
- 2. Temporary Solid Waste Facility (sanitary landfill) for the Ukhia camps.** Constructed a sanitary landfill for the 27 camps in Ukhia Upazila, to safely dispose the non-recyclable waste and reduce the burden of waste in the camps (see [Annex 2](#)). Total 4,000 m³ disposed waste, 15 livelihoods generated, environmental mitigation plan developed (see [Annex 3](#)).
- 3. Municipal Solid Waste collection system in Teknaf Municipality.** Improved the municipal SWM system promoting waste segregation at source, covering approx. 2,000 HH (40% of the total) and 1,000 market shops (100% of the total), 2,338 m³ of waste collected, 25 livelihoods generated (60% women), 1,798 kg of Compost produced. (see [Annex 3](#)).
- 4. Improved Teknaf Municipality Solid Waste Facility (sanitary landfill) and Compost plant.** (see [Annex 4](#)). Two facilities to increase the recovery of waste as new resource and minimize the burden of waste in the municipality.
- 5. Grant Program to support the development of the recycling sector and creation of 2 Association of scrap dealers.** 60 scrap dealers identified, 36 dealers provided with basic training on way of segregation, sorting and value chain, as well as the use of safety and security equipment, 30 scrap dealers provided with Advance Business Plan Development training, 20 scrap dealers granted. 18% of increase income of grantees, 2,439.64 m³ recyclables collected.
- 6. COVID19 response plan.** Distribution of 2,558 HHs (including 228 feriwallas) received 8,953,000 BDT cash for food. 6,684 sets of hygiene items to HH, market stores, 50 scrap dealers and 228 feriwallas (including contain 18,696 masks, 522 pair of gloves, 6,684 bottles of Dettol (100/200 ml each), 47,385 soap and detergent bars, 6,684 of bucket and mug). 750 sets of PPE for Municipality workers, field staff, volunteers and recycling sector workers. 5,964 persons attended COVID19 orientation session, 935

Festoons distributed, 7,801 Leaflets covering key COVID-19 messages, installation of 15 billboards, 134,116 people reached by miking, 7,600 beneficiaries received COVID-19 information based voice messages via SWM (see [Annex 13](#)).

7. **Gender mainstreaming study and strategy.** Conducted a SWM Project Gender and child labour study, training to UNDP and IP staff and field workers, as well as a published a strategic document and shared to the WASH Sector partners.

BRAC is mainly carrying on the quick-impact waste removal and basic waste management system development Output 1.1 and Output 1.2, within project outcome 1.

Practical Action is carrying forward the work of UNDP Output 2.1 organizing and developing the informal recycling sector (IRS), Output 2.3, mapping and engaging Households and market stores in all project locations and Output 2.4 conducting a public awareness communication campaign.

UNDP team is responsible of managing the overall project, and particularly implementing Output 1.3 on construction of SW facilities, Output 2.2 on Local government engagement and capacity building, and Output 2.1 on providing recycling technology to the project locations.

1.2 Results and Activities follow up

OUTCOMES PROGRESS		
	Description	Key findings:
Outcome 1	Developing Waste Management Systems	<p>Impacts of the <u>cleaning campaign in the camps</u> – <i>reduce the burden of waste in the camps & community satisfaction:</i></p> <ul style="list-style-type: none"> • <i>Baseline:</i> estimated 6,000 m3 of waste was found dumped in open areas and drains in Ukhia camps in early January 2019. After completing a cleaning across all these camps, a total of 4,000m3 of waste have been removed and disposed in a sanitary landfill in Camp 20 ext. • <i>Methodology:</i> Questionnaire of satisfaction of the cleaning campaign (Annex 1.1), sent to all camp focal person, 40% of the camps responded. The low number of respondents is explained by the high turn over of the field workers, as well as the preference of non-online tools. <p><i>Results:</i> 80% of the respondents stated that thanks to the UNDP intervention, critical waste was removed from open areas and waste facilities, as well as from drains (67% of respondents) in the camps. The respondents also agreed that the camps are cleaner than before (67% of the respondents), and that this has a direct contribution to mitigate the impacts of the rain in the camps (60%). However, respondents also highlighted that more regular cleaning operations are necessary, above all, waste needs to be removed from the drains. 70% of the camps are satisfied with the support received by UNDP/BRAC. The overall engagement of the social mobilizers to convey messages to stop littering among the communities happened in 87% of the camps, although the banners distributed were not enough to change behaviours according to 53% of the respondents.</p> <p>Generally speaking, the operation was very much welcome and had a positive impact in the camps, but the camps representatives recognize the need for more cleaning operations, as well as strong engagement with the communities to change behaviour and avoid littering.</p> <p>Impact of the <u>improved SWM system in Teknaf Municipality</u> – <i>level of satisfaction of the community:</i></p> <ul style="list-style-type: none"> • <i>Methodology:</i> Covid19 Survey across the group of 100 pilot HH in Teknaf Municipality, in August 2020, 77% female respondents. One or two questions were added to collect information about the impact of the SWM system UNDP supports. Despite the survey target population is small, they represent the pilot group of HH with who UNDP started implementing the project. We understand that if progress is shown in this group, data can be extrapolated to the larger group of HH. More survey will be conducted in the coming year to corroborate the results. • <i>Results:</i> 97% of the respondents are very much satisfied and 3% satisfied with the improved system UNDP put in place to collect waste in Teknaf Municipality.



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Outcome 2	Changing Behaviours and Attitudes	<p>Impact on the <u>behaviour of HHs in Teknaf Municipality – no littering & waste segregation at source</u></p> <ul style="list-style-type: none"> • <i>Methodology:</i> Covid19 Survey across the project 100 pilot HH in Teknaf Municipality, in August 2020, 77% female respondents. One or two questions were added to collect information of the impact of the SWM system. • <i>No littering results:</i> 83% of the respondents are disposing the COVID19 masks, gloves and tissues in the blue bucket distributed to each HH, and 14% of them seal it in a plastic bag. Regarding other harmful waste as medicines, napkins, razors, 53% of the respondents use the blue bucket, 33% they seal these wastes in plastic bag, and 7% still dump it in drains. • <i>Waste segregation at source results:</i> 100% of the respondents affirmed that waste segregation was necessary. 80% answered that the main reason is to be able to produce compost. Other reasons behind pointed out are to avoid mixing the two type of waste streams (7%) , or as per Municipality instruction (9%), to avoid smell (2%), to avoid soil pollution (1%) and promote health wellbeing (1).
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OUTPUTS/ACTIVITIES PROGRESS					
	Description	Initial date	Status C/O/NS	Actual date of completion	Comments
Outcome 1	Developing Waste Management Systems.				
Output 1.1	Quick impact waste removal project				
Activity 1.1.1	Initial assessment	Jan. 2019	Completed	March. 2019	
Activity 1.1.2	Preparing the cleaning campaign	Sept. 2019	Ongoing		<p>In camps. Teknaf: As soon as land is found in Teknaf camps, similar cleaning campaign will be implemented in the camps.</p> <p>In host communities.</p>



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				<p><u>Raja Palong</u>: Cleaning campaign has been planned with Raja Palong Chairman UP and signed letter of agreement.</p> <p><u>Nhilla, Baharchara, Whykong</u>: cleaning campaigns are planned to be conducted before the end of the year in the three remaining project locations in HC.</p>
<p>Activity 1.1.3</p>	<p>Cleaning campaign – on land and drains.</p>	<p>Oct. 2019</p>	<p>Ongoing</p>	<p><u>In camps.</u></p> <p><u>Ukhia</u>: BRAC has already completed the macro cleaning campaign in all camps in Ukhia Upazila (27 camps). SMEP has supported on the cleaning of drains. 974 job opportunities (0% females) have been provided during this phase (10,408 man/day). A total of 10 trucks were hired to collect the waste from each camp and transport to the temporary landfill. PA has provided 135 banners for 27 camps (5 units each) communication materials support as well as coordination with camp management and hygiene promotion initiative. See the overall Clean-up campaign report up to December 2019 (ANNEX 1 and ANNEX 1.1).</p> <p><u>In host communities.</u></p> <p><u>Teknaf Municipality</u>: BRAC has conducted two more cleaning campaigns in Municipality of Teknaf this year: cleaning of the Teknaf Hardboard frequented by tourists, and the main road of Teknaf Municipality. A total of 43,74m³ have been cleaned, 20 livelihood opportunities created (40% females), 97 labour days (ANNEX 5).</p> <p><u>Palong Khali</u>: BRAC has started the cleaning operation in the markets and surrounding areas of Palong Khali UP, Ukhia.</p>
<p>Activity 1.1.4</p>	<p>Recovery of materials</p>	<p>May. 2019</p>	<p>Ongoing</p>	<p><u>In Camps.</u></p> <p><u>Ukhia</u>: A total of 10,000 Kg of recyclables have been recovered from the Camps clean-up campaign, by BRAC in collaboration with PA, and given to the scrap dealers in host community. Besides that, PA has taken initiative to establish a linkage with PA IOM project based Plastic Plant in Leda Camp 24- Teknaf, where suitable non-valuable plastic waste will be transported from January 2020.</p> <p><u>In Host communities.</u></p> <p><u>Teknaf Municipality</u>: BRAC has recovered 51 Kg recyclables from the cleaning campaign and given to the scrap dealers.</p>



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Output 1.2	Basic waste management system			
Activity 1.2.1	Preparation- Design the operation in each location	Juny. 2019	Ongoing	<p>In host communities.</p> <p><u>Teknaf Municipality:</u> UNDP/BRAC/PA have scaled up the SMW system to approx. 2,000 HH and 1,030 market shops in Teknaf Municipality. The scale up approach is based on the lessons learned from the 6-month pilot initiative in 100HH Teknaf Municipality (See Modality consolidated in ANNEX 6). As part of this initiative, UNDP has also conducted a Solid waste characterization and generation in Teknaf Municipality (see ANNEX 6.1).</p> <p><u>Palong Khali:</u> UNDP/BRAC/PA is signing an agreement with Swiss Red Cross/Bangladesh Red Cross and Chairman UP, to jointly establish a SWM system in Palong Khali. The agreement has been draft, as well as agreed the roles&responsibilities of each agency, and the creation of a SWM Steering Committee to follow up the overall operation.</p> <p>In camps, UNDP/BRAC/PA have already started the collaboration with AFAs for selecting the camp locations, where later BRAC and PA will start the operational activities.</p>
Activity 1.2.2	Distributing Waste Bins	June. 2019	Ongoing	<p>In host communities.</p> <p><u>Teknaf Municipality:</u> PA has distributed waste bins in the new working areas:</p> <ul style="list-style-type: none"> • <u>26th November 2020</u>, by organizing a distribution ceremony in Ward 7 for HH and main market areas. A total of 301 sets of small bins for HH were distributed for Ward 7 households for organic and inorganic waste management. Whereas 130 pair of large bins were distributed among market shops under different markets under Teknaf Municipality (ANNEX 6.2). • <u>12th February 2020</u>, Ward 7 was completed with 440 sets of HH bins and 180 bags for recyclables, as well as 103 set of bins for market areas. • <u>29-30 September 2020</u>, distribution of waste bins sets to 1,050 HH. <p>Almost 8,000 set of 2 bins have been purchased and are stored ready to be distributed among the project locations in host communities (ANNEX 6.3).</p>



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Activity 1.2.3	Maintain Rehabilitated Areas	June. 2019	Ongoing		<p>In host communities. <u>Teknaf Municipality:</u> the number of CfW to cover the new working areas has increased. 12 new CfW have been trained and provided with PPE, vaccination and cleaning tools. See Report on SWM system in Teknaf Municipality. (ANNEX 2.3) A monitoring system has been developed to follow-up the performance of the ISWM system in Teknaf Municipality: https://public.tableau.com/profile/tarek.khan#!/vizhome/WasteMonitoring_V3/Story1</p>
Activity 1.2.4	Regular Waste Transport	June. 2019	Ongoing		<p>In host communities. <u>Teknaf Municipality:</u> BRAC has provided 8 number of three-wheeler waste caring van and 4 more are being purchased (ANNEX 6.2). <u>All locations:</u> 6 motorized vehicles have been procured to transport waste within the premises of each project location (one each).</p>
Activity 1.2.5	Improved waste disposal site/construction of new SW small facilities		Ongoing		<p>In host communities. UNDP with collaboration with BRAC is preparing all kinds of construction activity to improve basic waste management system (secondary collection points). <u>Teknaf Municipality:</u> 3 secondary collection points (1 completed) and 1 compost plant (ANNEX 4). <u>Other Union Parishads:</u> identification of land for secondary collection points and composting plants are undergoing. In camps. UNDP already started to collaborate with AFAs for selecting the location where to construct composting units.</p>
Output 1.3	Construction of SW facilities				
Activity 1.3.1	Feasibility Study, Design and Monitoring of Construction	March. 2019	Ongoing		<p><u>Land identification process.</u> 33 land identified and analysed for long-term Landfill. A consultant has been recruited to support the team in land identification and conduct a <u>primary feasibility study</u>, starting in August 2020. In total 3, land areas have been identified as potential land as per date.</p>



Activity 1.3.2	Conduct IEE for short/small SW facilities and EIA for the long-term facility.	July. 2019	Ongoing		<u>Initial Environmental Examination (IEE)</u> was conducted and submitted to the Department of Environment (DoE) in Cox's Bazar for the main big SW facilities constructed last year.
Activity 1.3.3	Construction of SWM facilities and long term RMF/landfill	January. 2020	Ongoing		<p>In camps. 1 Temporary SW facility for Ukha camps (sanitary landfill) has been completed with the support of SMEP as construction partner (ANNEX 3 and ANNEX 4).</p> <p>In host communities. Teknaf Municipality: An improved Temporary SW Facility in Teknaf Municipality has been constructed to mitigate the environmental impacts of the existing municipal dumping site (See report in ANNEX 4).</p>
Activity 1.3.4	Partner Identification for ownership of SWM infrastructures and maintenance (and land identification).	Feb. 2020	Ongoing		A consultative process with the main local government authorities DPHE, AC Land, DC, Union Land Officers, UNOs and Union Chairman have been initiated to build up awareness and ownership of the SW network of infrastructures. Identification of land is still one of the main challenges to infrastructure development.
Outcome 2	Behaviour change and attitudes				
Output 2.1	Recycling and livelihoods development activities				
Activity 2.1.1	Conduct a Recycling Value Change Analysis study	31 Oct. 2018	Completed	January. 2019	Recycling value chain analysis in Teknaf and Ukha. Link to the study: https://www.humanitarianresponse.info/en/operations/bangladesh/assessment/recycling-value-chain-analysis-teknaf-and-ukha-bangladesh
Activity 2.1.2	Registration system for recycling enterprises and groups (Recognition)	Sept. 2019	Ongoing		<p>In host communities. Database for IRS and Training need assessment have been completed and conducted basic training accordingly. Total number of identified dealers is 57, of which 21 from Ukhiya & 36 from Teknaf. Total 36 scrap dealers received Basic training, after design of Training module was completed. (ANNEX 7).</p>



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					<u>Association of scrap dealers.</u> End of February 2020, 2 Associations of scrap dealers have been created, one in Teknaf and one in Ukhia Upazilas. First meetings took place on the 2 nd and 3 rd March 2020 (ANNEX 7.8).
Activity 2.1.3	Provide initial capital outlay and mentoring to the existing and start-up business (grants, training and technical support).	Sept. 2019	Ongoing		<u>Grant program</u> was launched to develop the recycling sector in Teknaf and Ukhia Upazilas. Those dealers who aimed at improving and formalize their business applied for an Advance Training. After the training, those dealers who wanted to receive grants, submitted their business development plan. Panel members (comprised from UNDP, PA & Consultant) short listed 20 scrap dealers in total from Ukhia & Teknaf according to their business proposal & provide grants dividing into three categories as per their capacity and operational activity. The entire procedure was completed successfully within Dec 2020 (ANNEX 7.1-7.6). <u>Covid19 impact assessment to the scrap dealers</u> (ANNEX 7.7).
Activity 2.1.4	Contribute to reduce the barriers/transaction costs that can impair profit.	January. 2020	Ongoing		<u>Strategy to develop the Scrap dealers market linkages.</u> An internal workshop was organized on the 15 th February to define strategy to develop Scrap dealer market linkages. The strategy implementation was postponed due to COVID19 (ANNEX 7.9).
Activity 2.1.5	Overall coordination to establish recycling activities and expand to other locations.	Sept. 2019	Ongoing		<u>Continuous process.</u> Started from September and continued till different stages of program. Mainly with Teknaf Municipality, CICs, WASH agencies at camp and upazila levels, UNOs, UP chairman etc.
Output 2.2	Strengthened local government engagement and enhanced capacity within key functions				
Activity 2.2.1	Assessment Period (gaps in capacity, key stakeholders and build partnerships)	30Nov.2018	Ongoing		<u>Consultative process on roles and responsibilities and gap analysis.</u> The project envisages the development of an Integrated Solid Waste Management (ISWM) Master plan for the targeted area in Teknaf and Ukhia Upazilas. In this regard, UNDP has hired one consultant who will work on the first steps of this process by conducting a consultative process to agree on the medium and long-term responsibilities of the key players on SWM governance and identify technical, legal and financial existing institutional gaps.



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Act. 2.2.2	Mentoring for Government Administrators - Providing training /information / field visits /exchanging sessions.	Sept. 2019	Ongoing		<p><u>2 Introductory trainings</u> on ISWM Systems for Upazila Local government authorities in Teknaf and Ukhia were conducted in November 2019 (ANNEX 8).</p> <p><u>1 Field visit exchange</u> was organized to bring Local government representatives to Malang, Indonesia, to learn from their ISWM system, including a Landfill facility. The trip was cancelled due to COVID19 (See the field plan ANNEX 9).</p>
Act 2.2.3	Model Developed	June. 2019	Ongoing		<p><u>ISWM Model system</u> (draft) has been developed based on the learnings of the pilot phase in Teknaf Municipality (See ANNEX 6).</p> <p><u>Public-Private Partnership (PPP) contract modality</u>. Financial sustainability of the systems in place is one of the key strategies to ensure durable solutions on solid waste. To this purpose, in Teknaf Municipality, the team is planning to implement a Public-Private-Partnership with the Municipality, based on similar modality implemented by ICRC on Faecal Sludge Management System. A break-even analysis of the SWM system started in February 2020 and in March 2020.</p>
Act 2.2.4	Plan developed	January.2020	No started yet		Linked to the activity 2.2.1, after the assignment of the consultant, a Consultancy firm will be hired to start developing the ISWM Master Plan, which will feed the District Development Plan in Cox's Bazar.
Act 2.2.5	Sustainability and Long-Term Handover	January.2021	No started yet		
Act 2.2.6	Integration Across the District	January.2021	No started yet		
Output 2.3	Household engagement for improved segregation and recycling of solid waste				
Activity 2.3.1	Household Organization and Training	June. 2019	Ongoing		Host communities. In all project locations:



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					<p><u>Developed HH and Market store profile</u>, of 2,239 HH and 4,125 stores, including vulnerable families / waste pickers / child labor in Teknaf Municipality, Raja Palong, Palong Khali, Nhilla and Whykong (ANNEX 12).</p> <p><u>Orientation sessions to HH and Market shops</u>. Orientation sessions have been conducted to inform about the use of the 2 buckets and the importance of waste segregation. In total 1,131 household received training from Ukhiya & Teknaf. 350 household from Ukhiya, and 781 household from Teknaf (ANNEX 11).</p>
Activity 2.3.2	Non-Organic Waste: Segregating and Recycling at Source	June. 2019	Ongoing		<p>In <u>Teknaf Municipality</u>, households and shop owners segregate waste at source into organic and inorganic waste. Blue bins are used to dispose the inorganic waste. Inorganic waste is collected by the volunteers by vans and disposed into secondary collection points, which are emptied by the municipality collectors with the municipal trucks and transported to the landfill. Recyclables are stored at the HH or shop and collected by the recycling entrepreneurs (ANNEX 2.3).</p>
Activity 2.3.3	Organic Waste: Household and Community Composting	June. 2019	Ongoing		<p>In <u>Teknaf Municipality</u>, households and shop owners segregate waste at source into organic and inorganic waste. Green bin is used to dispose the organic waste. Volunteers collect organic waste by vans and transported to the compost unit. 1,798 Kg of compost have been generated since the composting process started (ANNEX 2.3).</p> <p><u>Compost quality</u> is being tested to locally commercialize the product.</p>
Output 2.4	“3Rs” awareness campaign (reduce, reuse, recycle)				
Activity 2.4.1	Education campaign	Dec. 2019	No started yet		<p><u>Education program and communication strategy</u>. Internal Workshop PA/UNDP took place on the 30th January to jointly define the Educational program and overall communication strategy for the project.</p> <p><u>Communications materials</u> have been developed to support the project activities and rise awareness among the population (See ANNEX 10).</p> <p><u>Training for children on SWM</u>. In addition, on the 9th December, it was organized a training with children of the pilot ward to engage them on the waste segregation at their HH (ANNEX 11).</p>



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Activity 2.4.2	Bins in Public Places	April. 2020	No started yet		<u>Distribution of bins.</u> On the <u>26th November</u> , during the distribution of bins for HH and market areas, 4 sets of bins were placed in the Police compound, 2 in Municipality, 2 in Madrasa and 1 in school.
Activity 2.4.2	Radio/Tv campaign.	Jan.2 020	No started yet		
Activity 2.4.2	Local consultation.	Jan.2 020	No started yet		
Activity 2.4.2	Cooperation with other agencies	Sept. 2019	Ongoing		Participation to WASH sector HC and Camps in Teknaf and Ukhia.
Output 2.5	Contingency planning				
Activity 2.5.1	Support to the Rohingya ISCG and partners to plan for solid waste management in daily operations and in the case of an emergency	Oct. 2018	Ongoing		<p><u>COVID19 Response plan.</u> As a result of the outbreak of the virus in March 2020, SWM Project prepared a Covid19 response plan to support the project beneficiaries to be protected from the virus. (ANNEX 12).</p> <p><u>Participation in several emergency response sector meetings:</u> WASH, Sanitation TWG, Information Management, Hygiene Promotion TWG, EETWG.</p> <p>UNDP greatly respond to the call of SMS and WASH to conduct the cleaning campaign simultaneously in all refugee camps for the monsoon preparedness and dengue emergency response in 2019/2020.</p>
Activity 2.5.2	Identify emergency dumpsites to accommodate possible disaster debris and hazardous/medical waste In cooperation with the Government	May. 2019	Ongoing		For 2019/2020, the preparedness/emergency response support it is been covered by Output 1.1



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Activity 2.5.3	Selecting, training and providing Personnel Protection Equipment PPE and cleaning tools for a cash workers in the host communities/camps.	April. 2020	No started yet		<u>Provision of 7,500 pairs of gloves</u> to DPHE/WASH sector as contingency stock for emergencies. In August, some gloves were also distributed to Site Management partners who are cleaning drains in the camps.
Activity 2.5.4	Conducting an emergency preparedness waste removal in all refugee camps and host communities through cash for work (CfW) schemes collecting, separating and safe disposing of the uncontrolled solid waste	April. 2020	No started yet		
Activity 2.5.5	Lessons learned of the Emergency preparedness cleaning campaign to the development of the UNDP Project Contingency Plan for waste management.	January.2020	No started yet		
Output 2.6	National SWM Team Capacity building				
Activity 2.6.1	Trainings on the basics of SWM / Project/Composting/Livelihoods/Recycling	Mar. 2019	Completed	May.2019	Training sessions completed.
Activity 2.6.2	On-work training	Feb. 2019	Completed	Aug.2019	Pilot project implementation in Teknaf Municipality has been the best on-work training for the national team to build their capacity and confidence with the project and guide the NGO implementing partners.

1.3 SWM Team composition

The status, roles and responsibilities of the SWM team including external consultants/consultancies are summarized below:

International positions:

- **Project Manager** – Marta Kucharski Duran, on board since Oct 2018. Started as SWM Livelihood specialist till Feb 2019, later as Project Management & Livelihood Specialist, and as Project Manager in June 2020.

National positions:

- **SWM Specialist** – Sayed Hoque Monjur, on board since April 2019.
- **Environmental/Infrastructure Associate (EA)** – Mahmudul Amin, on board since April 2019.
- **Social Mobilizer Associate (SMA)** – Saleha Akhter, on board since mid-December 2018.
- **Monitoring and Evaluation Officer (M&E)** – Safiur Rahman, on board since June 2019.

Temporal national positions:

- **UNV National Communication Officer** – Hasan Mahmudul, on board from Nov 2019 to September 2020.
- **GIS/IM Individual Consultant** – Tarek Khan, on board since mid-May 2019 as UNV and in November 2019 as Individual Consultatn IC.

Temporary Consultancies/Consultants:

Finalized:

- **National Recycling Value Chain specialist** – Fahim Uddin, on board from September to December 2019. Responsible on the design and launch the Grant Program for the Recycling sector in Teknaf and Ukhia.
- **National Gender expert** – Meghna Guhathakurta, on board from December 2019 to March 2020. Responsible to conduct a study to mainstraim gender and child issues in the SWM Project.

Ongoing:

- **National SWM Assessment specialist** – Shoriful Alam, on board from August 2020. Responsible of conductive a consultative process to prepare the SWM Master plan.
- **National SWM Assessment specialist** – Khayrul Alam, on board from August 2020. Responsible of searching feasible landf for SW Facilities.
- **National Public-Private Partnerhip specialist** - Ahmedur Rahman, on board from September 2020. Responsible of designing the Public-Private Partnership contract modality for SWM services in Poroushava and Union Parishads.

NGO Implementing partners:

- **BRAC** – Implementation of the SWM project component, on board since September 2019.

Sl No.	Name of the staff	Designation	Date of joining	Responsibility
1	Md. Shofiqur Rahman	Project Manager	01/09/2019	Project Manager is the key person for plan, implementation, monitoring field activities in the field and submit progress and financial report to the UNDP SWM team.

2	Faruk Rahman to replace Maruf Hossain	Project Engineer	15/08/2020	He is responsible for the design the CFW operational plan for the cleaning campaign and seating the basic solid waste management system, as well as planning the location of SW pits/composting units to construct to the targeting area.
3	Tusher Hossain	Officer Admin & Finance	25/09/2019	He is responsible of keeping all records to the NGO assignment and prepare financial reports as per UNDP requirements and he is responsible for the official management and administrative issues.
4	Tanvir Ahman, to replace Ashit Chandra Bapary	Project Officer	15/08/2020	He is responsible for operational plan for the cleaning campaign, prepare daily report, collaborating to the NGOs & GOs, and supervise to the PA.
5	Tanvir Haque, to replace A.B.M didarul Alam	Project officer	15/08/2020	He is responsible for operational plan for the cleaning campaign, prepare daily report, collaborating to the NGOs & GOs, and supervise to the PA.
6	Abdul Malek	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
7	Ashikul Islam	Project Assistant	17/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
8	Ataur Rahman	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
9	Jamal Hosain	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
10	Md. Ismail	Project Assistant	15/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
11	Md. Misbah Uddin	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
12	Nezam Uddin	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
13	Raian Ullah	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
14	Sayful Islam	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.

- **PRACTICAL ACTION** – Implementation of the Livelihood project component, on board since September 2019.

	Name	Designation	Joining Date	Roles & Responsibilities
1	Omar Khaiam	Project Lead		Overall Direction and Supervision
2	Ahashan Habib Mollick Shakib	Field Coordinator	1 st September 2019	Coordinate at Field level (Ukhiya)

3	Md. Shafiq Islam	Field Coordinator	1 st September 2019	Coordinate at Field level (Teknaf)
4	Sayeed Ahmed	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
5	Nazmul Haque	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
6	Al Fayed	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
7	Bahauddin Zakaria	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
8	Habibur Rahman	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
9	Shahinur Rahman	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
10	Ahoshan Habib	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
11	Shamsur Rahman	Field Facilitator	1 st September 2019	Facilitate at Field level & direct implement
12	Fariduzzaman Shapon	Market Development Field Facilitator	1 st September 2019	Development of Training module, Conduct ToT on project Staff on Capacity building of Scrap dealers and SWM.
13	Fahim Uddin Shuvo	Technical Consultant		Prepare Questionnaire, prepare business module, proposal development and assist grants program module.

1.4 Environment integration

The following table presents a list of environmental measures applied to mitigate potential environmental impacts that the project can cause to the environment:

Potential impacts related to the project implementation	Mitigation measures planned
1) During Cleaning Campaign:	
Physical challenge for workers during cleaning campaign	As a measure we provided PPE materials such as Cap, mask, hand glove, gumboot and First aid kit box.
Increase noise (buzzing of horn) in Camp Areas	As a measure we have strictly instructed to the waste caring truck driver buzz the horn as less as possible.
Spread odour while waste was kept up in public area	We had instructed our project staff to clean this waste as soon as possible and remove all waste properly.
Spreading waste smell in dumping station	Covering the wastes by soil at end of the so that smell not spread into the community
2) Construction of SW Facilities:	
Location of temporary pits/ SW facilities.	<p>Definition of environmental standards for the location of temporary pits and MRF/Landfill.</p> <p>Validation of the locations in accordance with the Environmental standards by the Department of the Environment in CXB.</p>
Construction of temporary pits/SW facilities.	<p>Initial Environmental Examination conducted for 3 facilities: Temporary Landfill in Ukhia, Compost Unit and Improved landfill in Teknaf Municipality.</p> <p>(NEW) Environmental Management Plan for the Temporary Solid Waste Facility (landfill) in Camp 20 Ext (ANNEX 14).</p>

1.5 Gender mainstreaming

This second year the SWM Project has conducted a study to mainstream gender and child labour issues into the project. The outputs of the study are as follows:

- List of recommendations to implement during the project timeline. Activities have been classified as: project activities, advocacy activities and organizational activities.
- SWM Project Gender strategy (published document to circulate).

The following table summarize a list of measures to mainstream gender and child protection into the project:

Gender mainstreaming indicators	Results
Ensure the integration of gender perspective in all TORs developed for the project implementation: YES/NO	YES
Enhance at least 30% of woman participation in the project	Implementation in Teknaf municipality: <ul style="list-style-type: none"> • 80% of CfW for cleaning campaign are women (out of 52 people). • 56% of CfW for daily waste collection are women (out of 25 people). • 90% of direct project beneficiaries are female (out of 100 people). In camps, the availability of female CFWs in Camp level was very rear. BRAC could not deploy female CFWs in Cleaning campaign in Camp zone.
Ensure a proper gender balance within the team:	<ul style="list-style-type: none"> • 40% of the SWM team are women (2 out of 6 people). • 16% of the National external consultants (1 out of 6 people).
Project Gender strategy: YES	Two publications: <ul style="list-style-type: none"> • Study to mainstream gender and child issues into the SWM Project (ANNEX 15) • SWM Project Gender strategy (edited and published) (ANNEX 16).
Gender mainstreaming actions: YES	<ul style="list-style-type: none"> • Progress of the recommended action points to mainstream into the SWM Project (ANNEX 17).

Section 2 – FINANCIAL REPORT

This section includes the budget implemented during the first year of the SWM project, from August 2019 to September 2020. Initial budget was modified in September 2019 to adjust to the needs of the context, and again in February 2020 during the COVID19 response plan. Official approval is necessary after project review with SIDA this month of November 2020.

2.1 Project expenditures

During the period August 2019 to August 2020 the total project expenditure has been of: 1.139.267 USD against the annual budget 1.835.940 USD. The total delivery rate is 62% against the annual budget.

Budget and Expenditure by outcome:

Outcome	Budget targeted (Second year) USD	Expenditure (Second year) USD	%
Outcome 1. Developing Waste Management Systems	661,819	190,608	29%
Outcome 2. Changing Behaviours and Attitudes	656,862	424,253	65%
Project Management costs	381,787	388,933	102%
Total Expenditure	1,835,940	1,139,267	62%

Details break down of the project expenditure is presented in (ANNEX 18).

Overall project expenditures:

Initial grant in USD	Fund received in USD	Total expended in USD	Expenditure rate
3,284,793.10	3,284,793.10	1,552,744 (Year 1 + 2)	47%

Section 3 – NEXT ACTIONS

Cox's Bazar is coming back to the new reality after COVID19. Meaning that activities are being resumed but with precautious measures. The rainy season is almost over, which gives the best conditions for the construction work of SW facilities and implementation of other project activities.

Main activities to implement the next coming months:

IN CAMPS:

- Open the Temporary SW Facility in Camp20Ext to all the camps on the 12th October 2020. SOPs and orientation session on how to use this facility have been conducted on the 7th Oct 2020.
- Expand the construction of the existing Temporary SW Facility in Camp 20Ext, from 20,000 m3 to 40,000m3, with the support of SMEP/IOM. Unofficial approval from RRRC has been provided during a field visit to the landfill.

- Continue providing technical advice to the camps on the management of solid waste.
- Systematize the collection of recyclables in the camps through the Association of the Scrap dealers.

IN HOST COMMUNITIES:

Teknaf Municipality:

- Develop a Public-Private Partnership contract modality between the Municipality and the Private sector to ensure the quality and management capacity of the SWM system. A consultant specialized in PPP is conducting his work on the field.
- Inaugurate the Improved Temporary SW Facility in Teknaf Municipality.
- Mass awareness communication strategy in Teknaf Municipality (including educational program): school campaign, installation of garbage banks, mass awareness campaign (street theater, radio program and IEC materials in bazar and household areas).

Union Parishads:

- Initiate the Cleaning campaign in Raja Palong and Nhilla and the preparatory work for the same operation in Whykong and Baharchara.
- Initiate a Basic SWM system in Palong Khali and the preparatory work for Raja Palong and Nhilla.
- Construction of SW facilities: secondary collection points, compost units and SW disposal sites.

Recycling sector:

- Payment of the third tranche of the grant program to the scrap dealers and prepare the second and third cohort of the Grant program.
- Develop the Strategy of the Association of the Scrap dealers Teknaf and Ukhia by the support of a VCA expert being recruited.
- Implement the Local Recycling Sector development plan by Practical Action team.

SWM Master plan:

- Design and implement a capacity building program to engage and capacitate the local government on the management of SWM systems and infrastructure. A consultant is already on-board conducting field work and developing the program which will be implemented by the end of the year.

Long-term Sanitary landfill:

- One big land is necessary to construct a final disposal facility of SW, to serve Teknaf Upazilla including the camps. Potential land has been identified. Meeting with DC officials to have the approval to use the land for a sanitary landfill will start this month.

IN GENERAL:

Project review with the participation of UNDP and SIDA to discuss about:



- Review and officially approve the changes on the project budget,
- Discuss the project work plan until the end of the project (consider non-cost extension as an option),
- Review the project indicators and targets that may need adjustment due to the changes in the project context since the design of the PRODOC.

Section 4 – LESSONS LEARNED

The project has brought new lessons learned applicable to the project and the overall sector:

- The Contingency plan budget line included in the SWM Project budget allowed the project to quickly respond to the COVID-19 outbreak needs in the project locations. While the majority of the agencies mainly targeted HH, the project has also provided exceptional support to market stores, Municipality waste workers and recycling sector workers and individuals. The plan has greatly complemented other COVID-19 response plans from other agencies.
- SWM services were considered as critical activities to implement during the COVID-19 by the RRRC and ISCG. Thanks to this, the project has had access to the camps and HC and played an important role as technical advisors of COVID-19 waste management within the WASH sector, also for the HEALTH sector partners.
- The absence of SWM systems and proper references led to the need to develop strong advocacy strategies for land acquisition for the construction of SW facilities. Without land, despite waste can be segregated and recovered as new resources, there is still a % of waste that needs a safe place to be disposed. The project has taken a proactive approach to avoid extending the delay of the activities, using temporary assigned lands until the final land for SW facilities is approved.
- The absence of a platform where SWM initiatives can be discussed among NGOs working in camps and host communities results in miscoordination and overlapping of activities and incapability of approaching the SWM sector in a more holistic perspective, where not only domestic waste is addressed but also other components of SWM such as: e-waste, waste prevention, upcycling initiatives, etc. UNDP, WASH sector, SMS sector and Environmental and Energy Technical working group has drafted the TORs for the SWM Group as a new platform to coordinate any SWM initiative in camps and host communities.
- Over the last year there have been an improvement in terms of resources and quality of the SWM systems in the camps. In this regard, UNDP project activities in the camps has evolved towards the provision of technical advice to WASH partners, the sector and DPHE, capacity building, and other needs that can improve/add value to the systems in place. Shifting the project towards this approach, will help UNDP to have access to the camps to allocate the project resources.

Section 5 – PROJECT LOGFRAME

In this section the Project Indicators Framework is presented with Baseline data (April 2019 – before the project implementation) and Progress against targets (up to February 2020). Table colour legend: Accomplishment \geq 50% / Accomplishment $<$ 50%

Project Monitoring and Evaluation Plan

Project Title and Duration:	Solid Waste Management									
Project ID (Atlas)	00112436									
UNDAF/CPD Outcome:	By 2020, relevant state institutions, together with their respective partners, enhance effective management of the natural and manmade environment, focusing on improved									
Strategic Plan Outcome:	Crisis Prevention and Recovery									
A. PROJECT OUTPUT INDICATORS										
Output 1.1: Quick impact waste removal										
Project Output Indicators	Baseline (Year)	Target (Sept18-August 21)	Progress Against Target (M/Y)*	%	Data Collection Methods (M&E Activities)	Means of Verification (data sources)	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
1.1.1 Number of camps/host communities where uncontrolled piles of solid waste have been cleared;	0	25	28	112%	Document review. Physical observation	Sample Before and after picture. CFW Payment sheet. Implementing NGO report	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.1.2 Number of women and men benefitting from waste clearance	0	480.000	741351	154%	HH Interview, FGD,KII, Physical observation	Targeted HH Implementing NGO report	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.



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1.1.3 Cubic meters of waste cleared	0	10.000	4112	41%	Document review	Waste collection register /location Implementing NGO report	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.1.4 Total number of labour days created under quick income schemes	0	18.144	10791	59%	Document review	Sample picture of income schemes CFW Payment sheet Implementing NGO report	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
Output 1.2: Basic waste management system										
1.2.1 Number of camps/villages with functioning SWM system	0	25	28	112%	Document review, Physical observation	Waste collection register /by location Implementing NGO report	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.2.2 Total population benefiting from the established and functioning systems	0	500.000	741351	148%	HH interview, FGD,KII	Targeted HH Implementing NGO report	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.
1.2.3 Number of waste bins distributed at the community level		12.300	4296	35%	Document review, HH interview, KII	Bin distribution master-role, Picture of the distribution event, targeted HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will be available to respond.



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						Implementing NGO report				
1.2.4 Cubic meters of solid waste collected and disposed of through maintenance systems		34000	2444	7%	Document review, Physical observation	Waste collection register and disposed /by location	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.2.5 Reduction in water contamination (presence of solid waste) Y/N	0	Y	Not measured yet	Not measured yet	Document review, KII	Pictures Before after, Waste collection register and disposed /by location	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.

Output 1.3: New waste management infrastructure

1.3.1 Total number of locations / communities served by a new landfill/Material Recovery Facility	0	25	28	112%	Document review, FGD	Landfill waste Register	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will be available to respond.
1.3.2 One New landfill constructed according to standards	0	1	2	200%	Document review	Pictures, Construction documents (approved plan, work order,	yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.3.3 Cubic meters of waste disposed at the new landfill /Material Recovery Facility	0	40000	4010	10%	Document review	Landfill Resister	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.

Output 2.1 Recycling and livelihoods development.



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2.1.1 Cubic meters of waste segregated/recycled by local entrepreneurs/ businesses supported by the project	765	12000	2440	20%	Document review, physical observation.	Informal recycling sector database	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.1.2 Number of small waste recycling business schemes established, inc. in-kind grants (equipment) provided	0	20	20	100%	Document review, physical observation. Interview,	Grants received documents, business proposal, Agreement...	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will be available to respond.
2.1.3 Cubic meters of waste segregated/recycled of waste segregated by the HH level	0	12000	Not measured yet	N/A	Document review, physical observation.	business proposal of CFW/community groups,	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.1.4 Total income generated through waste-related businesses	514530	TBD	Avg. Jan: 656660 Avg. Jun: 606579	18%	Document review, physical observation.	business proposal of CFW/community groups,	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
# of SWE supported by project with increased profitability.		10	5	50%		Accounts book of the SWE				
Output 2.2 Local government engagement and capacity building										
2.2.1 Number of local government staff trained on SWM	0	40	30	75%	Document review, physical observation. Interview	Tanning attendance sheet, Picture ,	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted government staff who are trained will be available to respond.



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2.2.2 Number of local government staff actively participating in the project implementation in a short term (learning by doing)	0	40	2	5%	Document review, KII	Project event report, picture,	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted government staff will be available to respond
2.2.3 Solid Waste Management model developed and owned by the Government	0	1	0	0	Document review, KII	Approved SWM model,	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.2.4 SWM master plan developed and incorporated in the revised District Development Plan	0	1	0	0	Document review, KII	Approved SWM at District	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.2.5 Government budget allocated for SWM in the last year of project implementation	N	Y	N	N	Document review, KII	Municipality/ Upazila/Union Parishad Budget document	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
Output 2.3 HH engagement for segregation and recycling of waste										
2.3.1 Number of households served by waste bins distributed to the household level	0	50000	2270	5%	Document review, KII, HH interview	Bin distribution master-role, waste collection register, Picture of the distribution event	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH are available to respond.
2.3.2 Number of household members sensitized to waste management practices (one person per household)	0	50000	5000	10%	Document review, KII, HH interview	Attendance sheet of awareness meeting/session, and CFW/Community mobiliser's one to one communication. HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will be available to respond



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2.3.3 % of households and market stores composting their organic waste	0	25%	100%	100%	Document review, KII, HH interview	Organic waste register, HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will be available to respond
Output 2.4 Three Rs (Reduce, Reuse, Recycle) awareness campaign										
2.4.1 Number of public facilities equipped with bins and campaign materials/posters # of bins distributed in public location	0	1500	6	0,4%	Document review, physical observation.	Distribution register, Geo-location,	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.4.2 Cubic meters of waste segregated in public places	0	12000	0	0%	Document review, physical observation.	waste segregate register	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
2.4.3 Number of people who demonstrate basic knowledge about RRR (Reduce, Reuse, Recycle) (one per household)	0	80000	1800	2%	HH interview, FGD	Targeted HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.
2.4.4 Number of listeners exposed to radio campaigns (two per household)	0	160000	0	0%	HH interview, FGD	Targeted HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.
Output 2.5 Contingency Planning										
2.5.1 Number of camps and villages covered by contingency plans	0	25	15	60%	Document review	contingency plans	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.



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2.5.2 Emergency scenarios identified	N	Y	Y	Y	Document review	Emergency scenarios Development documents.	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
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B. STRATEGIC PLANNING OUTPUT 3.4.1: Innovative nature based and gender-responsive solutions developed, financed and applied for sustainable recovery

SP Output Indicators with code number	Baseline (Year)	Target (Sept18-August 21)	Progress Against Target (M/Y)*	%	Data Collection Methods (M&E Activities)	Means of Verification (data sources)	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
# of women demonstrate basic knowledge about RRR (Reduce, Reuse, Recycle)	0	60%	70%	117%	HH interview, FGD	Targeted HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.
# of women headed HH increased income through CFW initiative by SWM project.		10%	17	15%						
# of women entrepreneurs become enterprise with the support of SWM project.		10%	0%	0%						



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# of vulnerable people supported	0	TBD	705		Document review	Targeted CfW and scrap dealers and rohingya community	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
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C. PROJECT OUTCOME INDICATORS

Outcome1: Developing Waste Management Systems

Project Outcome Indicators	Baseline (Year)	Target (Year)	Progress Against Target (M/Y)	%	Data Collection Methods	Means of Verification (data sources)	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
1.1 Ratio of waste generated to waste cleared / moved to the landfill (baseline 0, target 90% of not recyclable waste)	0	90	99	110%		Landfill waste register	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review.
1.2 Perception of general improvement in life conditions due to the functioning waste management systems (to be measured upon commencement of the project)	0	90	100	111%		HH, Bin distribution list,	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will respond.

Outcome 2 : Changing Behaviours and Attitudes



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2.1 Ratio of waste generated to waste segregated / recycled (baseline to be measured by project team upon commencement of clearance activities)	0		Organic Ratio: 32 % Inorganic ratio: 187% Recyclable Ratio: 0%	73%		HH, waste register ,	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Implementing agencies will preserve the documents and assist for review. Targeted HH will respond.
2.2 Awareness level of 3R	0	75	0	0%		Targeted HH	Quarterly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	Targeted HH will be available to respond.



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Section 6 – RISK ANALYSIS

During the writing report period, Bangladeshi Government has declared the outbreak of COVID19. Despite the number of cases is still low, prevention measure to stop the spread of the disease are already in place which are restricting movement of the personnel team and IP to the field. In the upcoming weeks, the situation may change drastically towards the withdrawal of project activities in the field.

Updated table of project risks **up to 21/March/2020 – Initial stage of COVID19 crisis**

Project Title: Sustainable Solutions to Solid Waste				Award ID:			Date: April 2019		
#	Description	Date Identified	Type	Impact & probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Local Government does not extend their support to the Project	August 2018	Strategic	Non-cooperative administration, local government to some extent may impact the operational and sustainability of the project P = 2 I = 4	UNDP will carefully tailor its government engagement strategy to make the most of its relationship with key government agencies, expand its connections in other areas to develop strong partnerships built on mutual trust .	Head of Sub Office	Marta Kucharski, Project Manager	Sept-20	A new RRRC government just arrived and introductions must be initiated to ensure their engagement to the project. During COVID access to the camps for SWM activities are allowed.
2	Security in and around the camps deteriorates, access to the project sites is limited	August 2018	Security	Insecure condition may slow down or stop the project activities P = 2 I = 4	The Project will work through a network of local implementing partners, and use a low-key approach . As much as possible, local government counterparts will be involved and present on the ground. The process of selecting beneficiaries will be transparent, participatory, and conflict sensitive . In addition, UNDP will follow advice provided by the UN security experts at UNDSS, and consult them regularly to ensure the project is not attracting negative attention from dangerous actors, and that UN staff and implementing partners are not put at risk.	Head of Sub Office	Marta Kucharski, Project Manager	March-20	Increase security measures while visiting camps has been advised, particularly for female workers to work in pairs, and carry the radio system.



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3	Safety of project staff and implementers during monsoon and cyclone seasons.	August 2018	Security	The weather may deteriorate the field condition P = 4 I = 3	UNDP has clear standard operating procedures for suspension of operations before and during extreme events, and trains its staff for safety in post-disaster locations. Conditions would need to be reassessed and deemed to be safe before resumption of project activities.	Head of Sub Office	Marta Kucharski, Project Manager	March-20	During cyclone and monsoon season, security conditions will be assessed before sending the project staff to the field project locations. COVID19 outbreak requires ensuring the use of protective gears to all staff, IP and beneficiaries.
4	Elections alters the implementation environment. Possibility of using the Project for political gain by external actors	August 2018	Political	P = 3 I = 3	The project will operate through at least two elections: The national parliamentary election is due in late 2018, and local Upazila elections will be held in 2019. UNDP respects the Bangladeshi political process and intends for the Project's activities to remain explicitly apolitical. UNDP will promote a tolerant, inclusive message that should be amenable to all parties. If necessary, UNDP may need to consider shifting some of its activities to the post-election period.	Head of Sub Office	Marta Kucharski, Project Manager	March-20	In December 19, the RRRRC government and the majority of CiCs in the camps changed. The new RRRRC held the construction of the SW Temporary Facility in Ukhaia camps and the Cleaning campaign in the camps till end of February 2020. A new RRRRC government just arrived and introductions must be initiated to ensure their engagement to the project.
5	Lack of co-ordination and/or significant differences within and between Local Government Partners	August 2018	Political	P = 3 I = 3	Since the responsibility for waste management is not clearly defined or allocated to one institution within the local government, some differences in views and approaches may appear. UNDP will engage with all relevant stakeholders, facilitate inclusive consultation and cooperation and ensure that all actors are included into the process to overcome roadblocks.	Project Manager	Marta Kucharski, Project Manager	March-20	A new RRRRC government just arrived and introductions must be initiated to ensure their engagement to the project.
6	Possible political uncertainty post elections	August 2018	Political	P = 4 I = 3	Many of the proposed activities are designed to be responsive to shifting political conditions, and can address new themes and realities as required. Additional partnerships and complementarity with other actors in this field might also help to address ways of keeping the project moving regardless of circumstances.	Project Manager	Marta Kucharski, Project Manager	March-20	No major issues have occurred in this regard.
7	Fraud, corruption and misuse/misdirection of funds	August 2018	Financial	P = 2 I = 3	Strong financial systems and internal audits will be held regularly, and reinforced through quarterly financial reporting. All relevant staff will receive appropriate financial training. The proposed project intends to transfer	Operations Manager	Marta Kucharski, Project Manager	March-20	No issues have been detected in this regard.



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					funds to reputable partners via dedicated accounts and auditable procedures. Financial transparency is to be maintained at all levels. Rigorous attention to quality assurance will ensure that funding goes to appropriate causes and will contribute to the stated objectives.				
8	FOREX losses create a shortage of funds due to fluctuating exchange rates	August 2018	Financial	P = 1 I = 2	UNDP will actively revise its budget and activities based on any changes to international exchange rates.	Operations Manager	Marta Kucharski, Project Manager	March-20	As per Sept. 2019, the current exchange is 1USD = 84,19BDT
9	Lengthy procurement process	August 2018	Operational - Process efficiency - Inflexible operational procedures	The existing operational procedures might prove inadequate and inefficient to cope with the escalating demand Unavailability of services/goods on time resulting delayed in the execution of P = 3 I = 4	Utilization of fast track procurement and recruitment procedures (communication with HQ for guidance). Dedicated Procurement, Vendor mapping, Pre-qualification of NGOs; and Monitoring and Research entities, LTA with national volunteer organizations, National SURGE team, Standard job descriptions and roster	Operations Manager	Marta Kucharski, Project Manager	March-20	No issues have been detected in this regard during the reporting period.
10	Duplication of efforts and missed-opportunities for synergy	August 2018	Operational	P = 2 I = 3	UNDP will coordinate very closely with actors at 3 levels: - Community/camp level through CICs in the camps and Union Parishad representatives in host communities; - District Level through Additional Deputy Commissioner's Office (ADC) for host communities, and RRRD for the camps; - The Inter-Sectoral Coordination Group within the UN.	Project Manager	Marta Kucharski, Project Manager	March-20	Proper coordination with the 3 actors has been ensured while planning the project activities work plan. However, new actors such as Swiss Red Cross has started planning SWM pilot initiatives in Palong Khali. To ensure proper coordination with UNDP project, a Joint SWM Work plan has been developed and approved by the UP Chairman.



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11	Difficulty finding local implementing partners and technical experts	August 2018	Operational	P = 3 I = 2	As more development partners come on the ground there will be increasing demand for skilled, experienced and capable local personnel and implementing partners. A pilot project was implemented recently using local implementing partners, and these positive relationships have already been established. In addition, UNDP has a broad network of implementing partners countrywide. In case of difficulty UNDP can consider bringing in local implementing partners from other locations within Bangladesh.	Operations Manager	Marta Kucharski, Project Manager	March-20	However, due to the COVID19 outbreak the recruitment process of two consultants were postponed and started in August 2020: National IC Public-Private Partnership Specialist and National IC Feasibility Study Consultant.
12	High frequency of natural disasters and occurrence of mega disasters like earthquake or cyclone	August 2018	Operational	Recurring disasters would disrupt and pose challenge to the achievements of the project P = 4 I = 5	The project will aim to build resilience to disasters by adding a solid waste component to the local government's disaster planning. UNDP will monitor weather forecasts and work to prepare a contingency plan (including protection of project staff, equipment storage, radio communication system. etc) in case of emergencies. Should a natural disaster occur, some of the Project's activities might be delayed as a result, and project staff might also be diverted to the emergency response. The presence of solid waste management experts on the ground will likely be of particular value at such a moment, and UNDP would be ready to offer its services to a humanitarian response.	Project Manager	Marta Kucharski, Project Manager	March-20	No issues have been detected in this regard.



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13	Difficulty with land allocation for the landfill	August 2018	Operational	P = 3 I = 4	Difficulty with allocation of a suitable site for the landfill may increase the leadtime to construction. Mitigation measure is early engagement and agreeing more than one possible location for a landfill . The local government will be asked to present 2 – 3 options if possible. The possibility of constructing a landfill has already been discussed with the local government representatives at the Upazila level. Building on this initial engagement, the process of land selection and environmental and health risk assessment of locations will start as soon as the project commences.	Project Manager	Marta Kucharski, Project Manager	March-20	Difficulties in identifying public land feasible for landfill/other UP Solid waste facilities is limiting the sanitation conditions of the camps and delaying the Establishment of SWM regular services in the Host communities. A National IC consultant is hired to support in the identification of feasible land for SW facility.
14	Gender restrictions limit women and girls from accessing the project's benefits	August 2018	Social	P = 4 I = 3	Commitment to gender equality is written into the proposed project and will be consistently monitored with reference to target indicators. However, given the nature of the project, UNDP expects that it may not be culturally sensitive to employ women in all activities, particularly as involve clearance of waste or heavy labour. Therefore, women will be targeted for segregation and recycling livelihoods activities.	Project Manager	Marta Kucharski, Project Manager	March-20	In Refugee camps, the participation of females on SW activities is being hampered by cultural factors. No woman has been hired as waste collectors' volunteers. Whereas in host communities the majority of volunteers are females. However, a gender specialist to identify gender and child protection issues has been hired to define the Project gender and Child protection strategy.
15	Child Labour, Forced Labour, or other forms of illegal employment is used by local partners, particularly in the collection or transport of waste;	August 2018	Social	P = 3 I = 4	As described in detail on pages 7-8, UNDP has developed a 2-pronged approach to ensuring that the project does not support in illicit or immoral activities. These include: Zero-Tolerance Contracting Practices: UNDP shall ensure that all contracts with local partners contain a zero-tolerance clause in reference to child labour or forced labour; Close Monitoring of Work Sites: UNDP will appoint Monitoring & Evaluation Officer who will monitor closely beneficiaries selection and registration, work on sites and payment sites. Community members will also be involved and participate in monitoring visits with UNDP team, and perform law-key spot checks on their own.	Project Manager	Marta Kucharski, Project Manager	March-20	Most of the feriwallas working for the recycling sector are below 18 years old. A gender specialist to identify gender and child protection issues has been hired to define the Project gender and Child protection strategy.



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16	Some community members feel excluded from the Project	August 2018	Social	P = 2 I = 3	Selection of beneficiaries will be done in a transparent and inclusive way. Community representatives will be informed about project activities and invited to monitor project sites. The number of beneficiaries from host and refugee communities for Cash for Work activities will be proportional to the actual population figures.	Project Manager	Marta Kucharski, Project Manager	March-20	No issues have occurred in this regard.
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Annex 12. BGD_COX_PROJECT_LOCATION__HH_SHOP_NUMBER_A0P

Annex 13. SIDA-UNDP COVID-19 RESPONSE PROJECT NARRATIVE REPORT BY PA

Annex 14. Environmental Management Plan_TSWF

Annex 15. Final Report_Mainstreaming Gender in SWM Project

Annex 16. SWM Gender Strategy_310820

Annex 17. SWM Project Gender action points progress

Annex 18. Project financial Report (in a separate file)