

Sustainable Solutions to Solid Waste (SWM Project)

Annual report (Year 3)
September 2020 – August 2021



Sustainable Solutions to Solid Waste Management

UNDP COX'S BAZAR

Funded by SIDA

September 2021



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	5,028,959
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:</p> <p>Outcome 1: Developing Waste Management Systems</p> <p>Outcome 2: Changing Behaviours and Attitudes</p> <p>At an output-level the mission will contribute to the below results:</p> <p>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.</p> <p>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.</p>
Implementation period	August 2018- April 2022
Reporting Period	September 2020 – August 2021
Report Author	Marta Kucharski – Project Manager SWM Project

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List of abbreviations

AC Land – Additional Commissioner Land Office	3R's – Reduce, Reuse, Recycle
CfW – Cash for Worker	SCP – Secondary Collection Point
CiC – Camp in Charge	SD – Scrap Dealers
CXB – Cox's Bazar	SIDA – Swedish International Development Agency
DC – District Commissioner	SOPs – Standard Operational Procedures
DPHE – Department of Public Health and Engineering	SMEP – Site Maintenance and Engineering Project
EETWiG - Environment and Energy Technical Working Group	SWM – Solid Waste Management
FSS – Food Security Sector	SMS – Site Management Sector
HHs – Households	STWiG – Sanitation Technical Working Group
HP -Hygiene Promotion Technical Working Group	UNDP – United Nations Development Program
KAP – Knowledge Aptitude Practises	UNO – Upazila Nirbahi Office
MRF – Material Recovery Facility	UP – Union Parishad
MoU – Memorandum of Understanding	USD – United States Dollar
MC – Management Contract	WASH – Water, Sanitation and Hygiene Sector
PPE – Protective Personal Equipment	WATSAN – Water and Sanitation
PS – Private Sector	WFP – World Food Program

Section 1 – TECHNICAL REPORT

1.1 Summary: progress and achievements to date

During the third year of the project, UNDP has established/reinforced Solid Waste Management (SWM) systems in all project locations formed by 14 market areas (shops and households) in 5 Unions and 1 Municipality, and 27 refugee camps, and achieved significant project outcomes linked to the reduction of environmental and health hazards, community awareness and best practises on SWM. A Knowledge-Attitudes-Practises (KAP) assessment conducted across the project locations in host communities revealed that the direct project beneficiaries formed by HH and shops have gained a clear understanding of the type of waste generated (88% of respondents) and about how to segregate it (97%). Beneficiaries are satisfied with the SWM system in place (99%) and what is most important, 83% of them would pay for the continuity of the waste management system after the project ends. The assessment also points out the need to refresh best practises of waste segregation as only 67% of respondents put this knowledge into practice, and to conduct a general awareness campaign on 3Rs (Reduce, Reuse, Recycle) as only 37% of the direct beneficiaries know about this concept.

Similarly, to the last year, in 2021, Bangladesh entered into a 5-months Government COVID-19 lock-down period after the 7th month of the reporting period, which has disrupted again some project activities. Despite the new COVID-19 wave, important activity achievements resulted from the third year which are summarized below:

Rohingya camps:

1. **Open a Sanitary landfill in Camp 20Ext in Ukhia Rohingya camps.** Landfill was open to the camps in October 2020 after sharing the SOP for external use (see the [link to SOPs](#)). The landfill is only used for non-recyclable waste which accounts for 30% of the total waste generated in camps. Since then, 18 camps (69% of Ukhia camps) have been regularly using the landfill, and safely disposed of 2,081 m³ of waste (see Use of Landfill – [May 2021 Report](#)).



Sanitary landfill Camp 20Ext.

2. **Fire response waste management:** the landfill facilitated a quick re-construction of the 3 camps affected by accommodating 3,920 m³ emergency inorganic waste: Debris, food packages and drainage waste. A total of 223 ton of scrap metals, 70 m³ of soil and organic waste were segregated and recovered before landfilling.



Camp affected by fire incident.

3. **Participation in the WASH Sector SWM agenda.** UNDP is one of the referent partners supporting the WASH sector on SWM issues, providing technical advice and support in workshops, technical documents, and coordination. Recently, an Inter-sector SWM group has been formed and mainstreamed SWM issues across the JSCG coordination sectors ([ANNEX 1](#)).

Host communities:

4. **Quick removal of Solid waste in 13 new project locations in host communities.** Completed a one-off cleaning campaign of solid waste in 5 Union Parishads, 950 m³ of waste collected (546 Kg of recyclables recovered), 208 workers engaged as CfW. COVID-19 orientation and protective measures were daily ensured during the operation (See the report in [ANNEX 2](#)).
5. **Establishment of a basic SWM systems in 5 Unions Parishads.** A total of 159 CfW (15% female) have been recruited and trained to provide daily primary waste collection service in these Union Parishads, 58 CfW engaged to construct SW facilities – e.g., 21 secondary collection points, 4 decentralized compost units and 5 temporary disposal sites - to store, process or safely disposed of waste collected from 1,868 households and 3,946 market stores in the project locations. See the map of the [SWM Facilities Mapping \(arcgis.com\)](#) ([ANNEX 3, 4, 5, 11](#)).
6. **Extension of the Teknaf Municipality primary Solid Waste collection system and engagement of the Private sector.** Scaled-up the primary collection of SWM up to 3,215 HH (65% of the total) total, total 12,978 m³ of cumulative waste collected, 48 livelihoods generated (35% women), 3,773 kg of compost produced and distributed. Private sector engagement and fee collection mechanism have been piloted as a financial sustainable model ([ANNEX 12, 12.1](#)).
7. **Activation of the SWM Governance system.** Build a counterpart for SWM at the local government level and activated and mobilized the SWM stakeholders in Teknaf and Ukhia. Seven (7) WATSAN Committee meetings organized at Union, Municipality and Upazila level, participated by 269 committee members (Male: 247; Female: 22). ([ANNEX 9, 9.1, 10](#)).
8. **Increase the business capacity of the local recycling sector in Teknaf and Ukhia.** A total of 17 grantees (85%) have increased their monthly profit by 39% on average and increased 49% of the recyclables collected in Kg on average since December 2020. Besides the grants, the project is building the capacity of the two **Association of scrap dealers in Teknaf and Ukhia** in the following areas: 1) Increased access to recyclables, 2) Integration/recognition of the recycling sector into the SWM systems in host communities and camps, 3) Better visibility and environmental and social principles compliance ([ANNEX 6, 6.1, 6.2, 6.3, 6.4, 6.5, 6.7, 7](#)).
9. **Knowledge Attitudes and Practises (KAP) survey on SWM.** The Survey was conducted in July 2021 and shows positive changes in awareness and behaviour change among the project beneficiaries ([ANNEX 16](#)). The survey has provided insightful information about current community practises on SWM which has helped to



CfW collecting waste from markets.



Production of compost from domestic waste.



Recycling dealer marking the Principles of the Association of Scrap Dealers Association



Distribution of IEC materials to the shops.

communication campaign. Each HH/shops received IEC materials with information about waste segregation and market valuable recyclables ([ANNEX 8, 13](#)).

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.

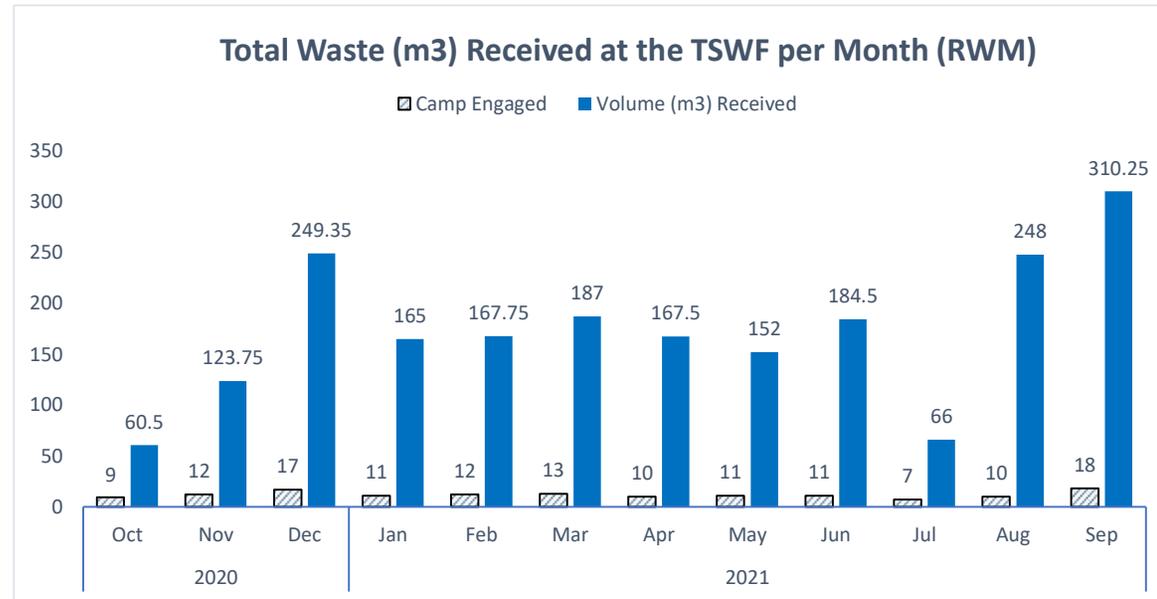
UNDP team is responsible for managing the overall project, and particularly implementing [Output 1.3](#) on construction of SW facilities, [Output 2.2](#) on Local government engagement and capacity building, and [Output 2.1](#) on providing recycling technology to the project locations.

1.2 Results and Activities follow-up

OUTCOMES PROGRESS		
	Description	Key findings:
Outcome 1	<p>Developing Waste Management Systems. Vulnerable households from refugee and host communities have enhanced access to appropriate waste management services and infrastructure, and live in cleaner, healthier and more humane conditions.</p>	<p>Refugee camps - target population: 27 refugee camps (713,351 population, 156,832 Households).</p> <p><i>Background:</i> In 2019 UNDP constructed the first Sanitary landfill in Cox’s Bazar district for the refugee camps in Ukhia Upazila, as well as conducted a massive cleaning campaign operation across all 27 refugee camps in Ukhia. The cleaning campaign helped to remove 4,000 m3 of critical waste accumulated in camps (in open areas and drains) and, despite cleaning is still required, the project contributed to have camps cleaner than before (as stated by camp partners – see the results of <i>Questionnaire of satisfaction</i> and UNDP Annual report (2nd year)). After that, the Sanitary landfill was opened to all camps and since then the waste is disposed of regularly.</p> <p><i>Methodology of measurement:</i></p> <ul style="list-style-type: none"> • Daily Monitoring tool of waste (m3) disposed of the Sanitary landfill. • May 2021 Report - Sanitary landfill 6-month report (May 2021). • Survey of the use of the Landfill (September 2021). The survey has been conducted to assess the level of access/satisfaction with the Sanitary landfill by the WASH partners. 20 participations from 18 organizations and 15 camps. So this is 57% of the camps participated in the survey (See preliminary results in ANNEX 17). <p><i>Annual Results:</i> The Sanitary Landfill in Ukhia camps has contributed to provide a safe place where waste from camps can be finally disposed of after recovering the organic and recyclable material. Before the construction of this facility, camps had no other option than to deal with the waste at the camp level. Due to the lack of space in camps, many WASH NGOs were forced to practise open incineration, open dumping, and bury waste. Gradually camps are using the landfill and changing these practices (69% of the total camps). As the landfill is only for inorganic waste, camps are requested to conduct proper segregation of organic and recyclables which contributes to the production of compost and supporting the local recycling sector. The following graph shows the average waste per month and number of camps engaged in the Sanitary landfill from October 2020 to September 2021. A survey of perceptions was conducted among the WASH partners to know the level of satisfaction with the facility. Among the survey respondents using the landfill 90% seems to be satisfied with</p>



the existence of the facility. To maximize the use of the landfill, the project in coordination with the WASH sector will continue advocating for the use of the landfill and supporting the camps with the project trucks when required.



The Sanitary landfill has supported three main critical activities over the last year: 1) cleaning campaign of 27 camps, 2) regular waste disposal of 27 camps and 3) the emergency waste from the 3 camps affected in early 2021 ([see report May 2021 Report](#)). In total, about 10,834 m³ of waste has been safely disposed of in the Sanitary landfill and avoided additional environmental impacts and health hazards. As further steps, the project is expanding the capacity of this facility from 8,000m³ (original), to 22,000 m³ (completed on 15 September 2021) and up to 40,000 m³ (under planning with SMEP).



		<p>In Host communities: target population - 13 market areas in 5 Union Parishads and 1 Municipality of Teknaf (5,236 HH & 5,390 market shops).</p> <p><i>Background:</i> In October 2018, 5 Union Chairman identified the main locations considered critical due to the generation of large amounts of solid waste. As a result of this, 13 market areas were selected as targeted areas of the project. An initial cleaning campaign was conducted in early 2021 followed by the establishment of a basic SWM service in these 13 locations in 5 Union Parishads. In Teknaf Municipality, the SWM service was reinforced in 2019 in 3 wards and extended in 2021 to all municipal 9 wards (60% coverage of primary waste collection).</p> <p><i>Methodology of measurement:</i></p> <ul style="list-style-type: none"> • Daily Monitoring data system of the SW services established in each project location. • KAP Survey - June 2021, conducted to 465 beneficiaries, both members of HH and shops (314 (67.5%) male and 151 (32.5%) females (ANNEX 16). <p><i>Annual Results:</i> The newly established SWM systems in Unions has resulted in the collection and safe disposal of 24,416 m³ of waste up to August 2021. This represents 71 % of the total waste estimated from 5,236 HH & 5,390 market shops. In total, 12% of the collected waste has been recovered before landfilling: 2,453 m³ organic converted into compost and 55 m³ recyclables transferred to the recycling dealers. Before the project, all beneficiary’s waste was literally dumped into open spaces or rivers as they did not have any other alternative.</p> <ul style="list-style-type: none"> • <u>Organic waste:</u> A total of 6,323 Kg of compost has been produced and distributed initially for free and after sold to the local community or farmers. • <u>Recyclable waste:</u> HH are encouraged to sell their recyclables directly to the recycling sector. However not all HH follow this practise and recyclables are disposed to the landfill, from where the project has recovered 3,130 Kg or 55m³ and transferred to the recycling sector. • <u>Residual waste:</u> 21,964 m³ of waste have been safely disposed of in the Sanitary landfill in Teknaf Municipality, in the Temporary disposal site in Palong Khali and in Temporary land in other Unions.
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		<p>In terms of <u>beneficiary's perceptions</u>, 98.9% of the direct beneficiaries are satisfied with the waste collection service in place; 82.3% feel that the overall livelihoods could be improved by a clean and healthy environment. Regarding the continuity of the service, 83% of them would pay for such a waste management system and allow the daily collection of waste from their place (HH: 82.5% and shop: 83.9%).</p>
<p>Outcome 2</p>	<p>Changing Behaviours and Attitudes. Local waste management behaviours and practices reformed to be more environmentally and health conscious, to prompt a sustainable change in how waste in the affected regions is created, stored, and managed.</p>	<p>In Refugee camps: target population: 27 refugee camps (713,351 population, 156,832 Households) / Local government, RRRC, CiC, DPHE / ISCG WASH Sector & Other sectors partners / Recycling sector.</p> <p><i>Background:</i> UNDP has no direct role in the SWM behaviour change of camp HHs and shops. However, since the landfill was opened in late 2020, the WASH NGOs using the landfill are requested to segregate the waste generated in the camps before disposal to the landfill. Each camp is following its own approach to ensure such level of segregation from HH. At the response level, UNDP has provided technical support/advice to the WASH sector and partners and other sector stakeholders on waste-related activities such as waste in drains, behaviour change, collection of recyclables, emergency waste management, SWM strategy, landfill usage, recycling materials, etc.</p> <p><i>Annual results:</i> At the camp level, at least 69% of the Ukhia camps have consolidated their SWM systems and do segregate their waste and recover organic and recyclables at the camp level. At the response level, UNDP has contributed to set strategies and practises, build awareness and understanding among partners, and put the SWM on the ISCG agenda as a cross-sector related-topic. One successful example was during the campfire incident in early March 2021, where different sectors named WASH, SMS, FSS were engaged and coordinated to properly remove, segregate the organic and inert soil, and safely dispose of only the inorganic waste in the sanitary landfill.</p> <p>In Host communities: target population - 13 market areas in 5 Union Parishads and 1 Municipality of Teknaf (5,236 HH & 5,390 market shops) / Local government / Recycling sector / Local public.</p> <p><i>Background:</i> Before the establishment of the SWM collection services in host communities, all project direct beneficiaries 5,101 HH & 5,184 market shops, were oriented and provided with a set of 2 bins and IEC materials to inform about the importance and how to segregate the domestic waste.</p>



		<p><i>Methodology of measurement:</i> KAP Survey in June 2021, conducted to 465 beneficiaries, both members of HH and shops (314 (67.5%) male and 151 (32.5%) females (ANNEX 16).</p> <p><i>Results:</i> The direct project beneficiaries formed by HH and shops have gained a clear understanding about the classification of their waste generated (88% of respondents) and where they must put their waste (97%). However, it seems that the knowledge is not yet put into practice in most of the cases, as only 67.3% (HH: 70.4%, shops: 64.5%) segregate waste regularly. When it comes to organic waste, 97.2% of the HH respondents dispose of organic waste in the green bin, whereas the percentage is lower for shops, only 59.4%. Regarding the inorganic waste, 42% of the HHs were disposing of inorganic waste in the blue bin, and only 14.3% of the shop had this practice. HH and shops are still mixing the inorganic waste with organic. However, the positive result is that only 8,7% of beneficiaries dispose of waste other than bins or community bins and litter it in open spaces.</p> <p>Finally, the concept of 3Rs (Reduce, reuse, and recycle) is not yet clearly understood among the beneficiaries, as only 36.3% of the respondents had knowledge of it. This can be explained as the communication campaign on the 3R's messages will not be conducted until October 2021, which will reinforce/consolidate the practices of waste segregation at source, as well as raise awareness on the importance to manage the waste. The campaign will also inform about the immediate collection of fees for the SW services by the local government. A final survey will be conducted at the end of the project to also measure the impact of the communication campaign on the 3Rs.</p>
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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	Completed	January 2021	In camps: After completing the cleaning campaign operation (one shot) in the 27 refugee camps in Ukhia in August 2020, no more cleaning operations have been planned in the camps during the current reporting period. However, UNDP is providing technical support to WASH and SMS sector to ensure a proper cleaning and management of waste from the drainage system and the use of the sanitary landfill (ANNEX 1).
Activity 1.1.3	Cleaning campaign – on land and drains.	Oct. 2019	Ongoing	January 2021	<p>In host communities: From October 2020 to January 2021, a cleaning campaign of solid waste was implemented in the 13 market areas under five (05) Unions of both Teknaf and Ukhia Upazilas. A total of 208 CfW (% female) were recruited for the operation (ANNEX 2 – section 2.1).</p> <p>After the cleaning campaign, regular cleaning operations have been planned for 4 days every month in each project location to reinforce the waste collection services and cleanness of the market area. From March 2021, 749.36 m³ of wastes have been cleaned through this cleaning campaign activity. Due to COVID-19 lock-down, the campaign has only been possible from March to June 2021 and will restart from October 2021 in all locations (ANNEX 2 – section 2.2).</p>
Activity 1.1.4	Recovery of materials	May. 2019	Ongoing	January 2021	<p>In host communities: BRAC has recovered 546 Kg of recyclables from the initial cleaning operation and given to the scrap dealers (ANNEX 2 – section 2.1).</p>



Cleaning campaign in Raja Palong.

Output 1.2		Basic waste management system			
Activity 1.2.1	Preparation- Design the operation in each location	June. 2019	Ongoing	April 2022	<p>In camps: After completing the macro cleaning operation in August 2020, UNDP/BRAC opened the Sanitary landfill to all 27 camps in Ukhia Upazila. The sanitary landfill is adding one final step to the waste management systems in the camps: safe final disposal of residual waste. SOPs of the use of this facility has been developed and disseminated among the WASH Partners and published online for easy access to the document (see the SOPs in the link). To provide the same service to the refugee camps in Teknaf Upazila, UNDP with the support of the WASH sector and RRRC is searching for suitable land for constructing a similar infrastructure in Teknaf.</p> <p>In host communities: 13 new SWM systems have been established in 13 market areas of five (05) Union Parishads in January 2021. A total of 207 CfW have been recruited and provided the necessary training and required PPEs, vaccination, and cleaning tools for the regular operation (ANNEX 3).</p> <p>In Teknaf Municipality, the project extended the primary collection system of solid waste to wards 1,2,3,4,5,6 (ANNEX 3): new 86 HH at ward 1, 289 HH at ward 2, 70 HH at ward 3, 55 HHs at ward 4, 140 HH at ward 5, and 140 HH at ward 6.</p>
Activity 1.2.2	Distributing Waste Bins	June. 2019	Completed		<p>In host communities: to ensure the proper segregation of waste at source, a total number of 7,278 pairs of bins (14,556 units) have been distributed among 3,706 HH and 3,572 market areas in 5 Unions (3,661 in Ukhia Upazila and 3,617 in Teknaf Upazila) (ANNEX 4). Out of the total, 960 pairs of small bins have been given to Palong Khali</p>



Bin distribution to HH and shops.

				<p>Market shops and households where Swiss Red Cross/Bangladesh Red Cross is operating, as per agreement.</p> <p>In <u>Teknaf Municipality</u>, for the newly extended area, a total of 780 sets of bins have been distributed to HH.</p>
<p>Activity 1.2.3</p>	<p>Maintain Rehabilitated Areas</p>	<p>June. 2019</p>	<p>Ongoing</p>	<p>In camps: The Sanitary landfill in Camp 20Extension is currently used by 18 camps out of 27. A total of 1,771 m³ of waste has been disposed of since October 2020 (in 614 trips of trucks). On average, this is 161 m³ per month (56 trips/month). A total of 14 CfW and 2 guards are engaged in the operation and maintenance of the Sanitary landfill in Camp 20 Ext (See more details in May 2021 Report).</p> <p>In host communities: A total of 199 CfW (20 of them supervisors) are working on a daily basis to collect waste from Households and shops in 14 project locations of 5 Union Parishads and 1 Teknaf Municipality. Out of the total, 32 are female workers (15%) (ANNEX 3). As a result, 24,416 m³ of solid waste have been collected for proper treatment, recovery, and final disposal.</p>
<p>Activity 1.2.4</p>	<p>Regular Waste Transport</p>	<p>June. 2019</p>	<p>Ongoing</p>	<p>In camps: The project trucks are supporting the camps to transport the non-recyclable waste to the sanitary landfill constructed in camp 20Ext. Out of the total number of trips to the landfill, 88% have been supported by the project trucks (the other trips are covered by the camp agencies).</p> <p>In host communities:</p> <p><u>Teknaf Municipality:</u> BRAC has provided 2 new vans to cover the newly extended area, adding to a total of 14 vans to transport waste from the HH/stores to the SW facilities.</p>



Project truck at Landfill Camp 20Ext.

				<p><u>Union's Parishads</u>: new (25) vans have been provided to the other 13 market areas in host communities for regular waste transportation. Besides the vans, project trucks are being used to transport the non-recyclable waste for long distances within the same Union. Trucks will be replaced by 1 motorized vehicle in each location after finalizing the procurement process.</p>  <p>KUTUPALONG BAZAR (26-1-21)</p> <p><i>Vans with double chamber for waste transportation.</i></p>
<p>Activity 1.2.5</p>	<p>Improved waste disposal site/construction of new SW small facilities</p>		<p>Completed</p>	<p><u>In host communities</u>: During this reporting period, the project has completed the construction of twenty-one (21) secondary collection points (SCP) in the 5 Unions and Teknaf Municipality. Moreover, the extension work of the composting unit in Teknaf Municipality has been completed and the composting unit was officially inaugurated by the Municipality. In addition, a total of five (5) decentralized compost units have been constructed to reduce the volume of waste to finally dispose and produce compost in the Union's Parishad (ANNEX 5) see the map of the facilities.</p>  <p>KUTUPALONG</p> <p><i>Secondary collection point (SCP)</i></p>  <p>Ukhiya Compost Point 21.245359, 92.143384</p> <p><i>Decentralized compost unit</i></p>

				<p>An informative billboard has been installed at The Sanitary Landfill and Compost plant in Teknaf Municipality, as well as the 21 SCP in all Unions.</p>  <p><i>Informative billboards at the compost plant (left) and SCP (right)</i></p>
<p>Output 1.3 Construction of SW facilities</p>				
<p>Activity 1.3.1</p>	<p>Feasibility Study, Design and Monitoring of Construction</p>	<p>March. 2019</p>	<p>Ongoing</p>	<p><u>Land identification process.</u> Through the support of a national consultant, 3 sites out of 33 previously identified were prioritized as potential lands to construct the long-term Landfill in the host community. Only one of the three land reunited all necessary requirements. Despite being approved by the DC Officer, DoE, DPHE and ADC, the land was finally designated for another use by the AC Land Teknaf who would see that site more appropriated to implement another Governmental project.</p> <p>After discussing the case with ISCG, DPHE and WASH sector, and despite all the time assigned to obtain that land, it was decided to prioritize Teknaf camps and provide them with a similar sanitary landfill than in Ukhia camps. Initial field visits and meeting with ISCG, WASH sector, SMS sector, SD sector have been initiated, and land searching is ongoing.</p>



<p>Activity 1.3.2</p>	<p>Conduct IEE for short/small SW facilities and EIA for the long-term facility.</p>	<p>July. 2019</p>	<p>Ongoing</p>	<p><u>Initial Environmental Examination</u> (IEE) was conducted and submitted to the Department of Environment (DoE) in Cox’s Bazar for the main big SW facilities constructed last year.</p> <p><u>Environmental Impact Assessment</u> (EIA) will be conducted to all the project SW facilities. The project has started the recruitment of a firm to collect data, assess and develop Environment Management Action plans for each facility.</p>
<p>Activity 1.3.3</p>	<p>Construction of SWM facilities and long term RMF/landfill</p>	<p>January . 2020</p>	<p>Ongoing</p>	<p><u>In camps:</u></p> <p><u>Temporary SW Facility in Ukhia camps (Camp 20Ext)</u>: during this reporting period, the capacity of the landfill has been extended, from 8,500 (Phase I) to 22,000 m³ (Phase II). After the completion of this work, the project will propose the extension of the landfill up to 40,000 m³ (Phase III) to respond to the needs of the camps for a safe disposal site. SMEP/IOM is the construction partner with who UNDP has signed a UN UN agreement to implement the construction work.</p> <p><u>Temporary SW Facility in Teknaf camps</u>: feasible land is being searched to construct a similar SW facility for Teknaf camps.</p> <p><u>In host communities:</u></p> <p><u>Teknaf Municipality</u>: An improved Temporary SW Facility in Teknaf Municipality has been constructed to mitigate the environmental impacts of the existing municipal dumping site and is fully functional since January 21st 2021. The facility which has a capacity of 800 m³ has been completed with the construction of wash facilities (male & female latrines) and restroom for workers.</p>

				<p><u>Palong Khali</u>: A Material Recovery Facility (MRF) has been jointly constructed with Swiss Red Cross/Bangladesh RC as per agreement. The facility, which includes a sorting area, compost chambers, and safe disposal site was open in August 2021.</p> <p>In other <u>Unions</u>, the project is searching land to construct new MRFs. The project is supporting Chairmen to develop the documentation and submit it to the DC & ADC for approval.</p> <p>See all facilities status and characteristics in ANNEX 5.</p>	 <p><i>MRF in Palong Khali Union, jointly constructed with Swiss Red Cross.</i></p>
<p>Activity 1.3.4</p>	<p>Partner Identification for ownership of SWM infrastructures and maintenance (and land identification).</p>	<p>Feb. 2020</p>	<p>Ongoing</p>	<p>In <u>General</u>, a consultative process with the main local government authorities such as DPHE, AC Land, DC, Union Land Officers, UNOs and Union Chairman has been initiated to build up awareness and ownership for a network of SWM infrastructures. However, the identification of Khash land for SWM facilities is still one of the main challenges for the infrastructure development. Not only for the limited availability of large Khash land feasible to construct a Sanitary landfill, but also for the lack of political interest to provide KASH land (even for small sizes) to SWM infrastructure and pay the corresponded taxes to the Ministry of Land.</p> <p>See section 2.2.5 for the sustainability of the SWM systems.</p>	

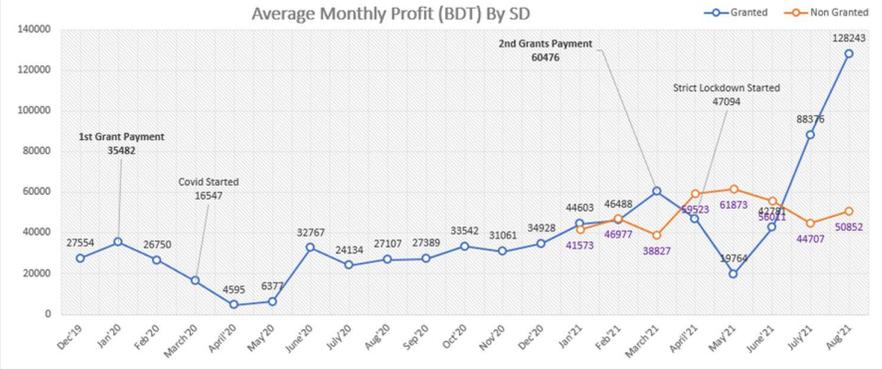


Outcome 2		Behaviour change and attitudes			
Output 2.1		Recycling and livelihoods development activities			
Activity 2.1.1	Conduct a Recycling Value Change Analysis study	31 Oct. 2018	Completed	January . 2019	<p><u>Recycling value chain analysis in Teknaf and Ukhia</u>. This study was completed at the beginning of the project to understand the nature, size, challenges of the local recycling sector and identify interventions to support the development of their business capacity. See the study in the next link: https://www.humanitarianresponse.info/en/operations/bangladesh/assessment/recycling-value-chain-analysis-teknaf-and-ukhia-bangladesh</p>
Activity 2.1.2	Registration system for recycling enterprises and groups (Recognition)	Sept. 2019	Ongoing		<p><u>In host communities:</u></p> <p><u>Scrap dealers’ profile:</u> a business profile of each scrap dealer associated as a member of the Scrap Dealer Association in Teknaf and Ukhia has been prepared and updated every month with corresponding information about the characteristics and size of the business, material collected, incomes generated, costs and profits (ANNEX 6.1, 6.2. 6.3. 6.4).</p> <p><u>Association of scrap dealers.</u> After the formation of the Associations of the scrap dealers in Ukhia and Teknaf in February 2020, the project has started using this platform to support the recycling sector to build up their administrative, management and business capacity. The first meetings of the Association took place on the 2nd and 3rd March 2020, and after COVID-19 outbreak, meetings have been resumed in October 2020 to discuss several topics 1) Association annual plan, 2) Association principles, 3)</p>



				<p>Collection of recyclables from the camps, 4) Third payment of the grant program. Teknaf scrap dealer’s association was officially inaugurated on 31.03.2021 at Teknaf in the presence of honourable UNO, Chairman, UNDP, and other relevant stakeholders.</p> <p><u>Integration of the Recycling sector:</u> all Association members have been provided with ID cards as well as vest having for improving their visibility and identification in the community. A total of 110 vests for Ukhia SD association, 256 vests for Teknaf, 20 ID cards for Ukhia and 23 ID cards for Teknaf were prepared and distributed. The use of IDs is a highly recommended measure proposed by ILO to reduce the engagement of children in the recycling sector.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>১-৫</p> </div> <div style="text-align: center;">  </div> </div> <p style="display: flex; justify-content: space-around;"><i>Vest identification for recycling dealers</i> <i>IDs for recycling dealers</i></p> <p>The Scrap dealers have been integrated within the Municipal/Union/Camp SWM system through different policy/procedures. For instance, in Teknaf Municipality through the Management Contract signed between the Municipality and Privat sector service provider; in the Refugee camps, through the SWM Strategy; in Palong Khali Union Parishad, through the MoU signed among the Chairman, Swiss Red Cross and UNDP.</p>
<p>Activity 2.1.3</p>	<p>Provide initial capital outlay and mentoring to the existing and start-up</p>	<p>Sept. 2019</p>	<p>Ongoing</p>	<p><u>A Grant program</u> was launched to support the development of the recycling sector in Teknaf and Ukhia Upazilas in December 2019. The first cohort comprehended grants for 20 scrap dealers (SD) of Teknaf and Ukhia, divided into 3 payments. The first payment</p>



	business (grants, training, and technical support).			<p>was completed in December 2019, the second payment in March 2020 (before COVID outbreak), and the third payment in March 2021. On average, granted dealers have increased their profit up to 33% since the first payment.</p>  <p style="text-align: center;"><i>Dealers monthly average profit (Dec'19 to Aug'21)</i></p> <p>The graph is showing the profit progress of the dealers (granted-blue and non-granted-orange) from before the first payment of the grant program in December 2019 and up to now. The graph shows the three payments as well as the Covid/Lock down periods faced over the last two years (ANNEX 6).</p>
<p>Activity 2.1.4</p>	Contribute to reduce the barriers/transaction costs that can impair profit.	January . 2020	Ongoing	<p>To facilitate the access to recyclable waste from camps and host communities, the project is implementing the following interventions with the associated members:</p> <p><u>Collection of recyclables from camps:</u> To formalize the collection of recyclables in the camps and avoid informal collection from Rohingya population (mostly participated by children), the project presented a proposal to the WASH sector to operate through the Association of the scrap dealers in the host communities. The approach is to ensure that only associated dealers are collecting waste from the camps and no Rohingya or children are involved. The proposal has been approved and integrated into the WASH Sector</p>



				<p>SWM Strategy. Dealers have agreed to collect the recyclables from camps for free and distribute the benefit among the associated members.</p> <p><u>Association’s principles:</u> To gain recognition and reliability within the community and local authorities, the project has developed a framework of principles for the Association that each associated member must comply: 1) Stop child labour, 2) Safe work environment, 3) Proper disposal of waste, 4) Membership of the association with all required documentation in place, and 5) Gender balance. (ANNEX 6.5, 6.6).</p> <p>The dealers have received 2 trainings on the topics during the month of February 2021 (18 scrap dealers from Ukhia and 22 scrap dealers from Teknaf scrap dealer’s association) and received IEC materials to place inside and outside their compounds (See ANNEX 8 – section 14).</p> <p><u>Catalogue of recyclables and price list:</u> To raise awareness among the community about the value of recyclables and promote their recovery, the project has developed a catalogue of recyclables and a detailed price list which will be subjected to updates every six months (See ANNEX 8 – section 14). The catalogue has been included in the WASH Sector SWM Strategy to promote the segregation of recyclables at camp level and has been distributed among the HH and market stores in host communities.</p> <p><u>Association branding:</u> To gain visibility of the associated members and gain formality among the community and local government, the project has supported the Association to develop the following materials:</p> <ul style="list-style-type: none"> • A logo for each association • A letter templates • A Scrap dealer street billboard – one per each associated dealer • Monthly monitoring tool for the principles’ compliance • Association principles festoon – a set per each associated dealer
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				<p><u>Collection of recyclables in host communities:</u> The catalogue of recyclables has also been distributed among the project locations (HH and market stores) to raise awareness of the value of waste and promote its segregation. While recyclables are mainly collected by dealers directly at HH/store level, those not recovered and entered the SWM system are segregated at the end of the disposal site by the CfW and sell it to the dealers (see Output 1.2).</p>
<p>Activity 2.1.5</p>	<p>Overall coordination to establish recycling activities and expand to other locations.</p>	<p>Sept. 2019</p>	<p>Ongoing</p>	<p><u>Continuous process.</u> The coordination with Teknaf Municipality, WASH agencies at camp and Upazila levels, UNOs, UP chairman etc started in September 2019 and continued till different stages of the program.</p> <p><u>UNDP-WFP agreement:</u> UNDP has signed an agreement with WFP to support their project initiative as technical partners for the Upcycling centres in the camps. The Upcycling centres main activity is to upcycle non-recyclable waste generated during the food distribution activity (aluminium foil plastic packages) and produce reusable bags and other items designed by Rohingya community representatives.</p> <p><u>WASH Sector SWM Strategy:</u> ISCG/WASH sector has recognized the 2 Associations of the scrap dealers as key players of the SWM systems in camps. The WASH sector has acknowledged the importance of supplying the recyclable materials generated in camps to the associated scrap dealers as an approach to support the local recycling sector and integrated this initiative into the WASH Sector SWM Strategy.</p> <div data-bbox="1276 701 1787 966" data-label="Image">  </div> <p data-bbox="1354 982 1732 1039"><i>Upcycled items made with WFP food distribution waste (aluminum foil waste)</i></p>



					<p><u>Bring-back policy</u>: the project is advocating for establishing a bring back policy mechanism through the e-voucher system of WFP and UNHCR in the camps. By giving the chance to the households’ representatives in camps to bring the recyclables generated and exchange their value for e-voucher cash or food items or non-food items, the camps are reducing the cost of segregating it later and stopping the child labour engaged in informal collection of recyclables in camps. This policy will be promoted during the next months.</p>
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	Completed		<p>The project envisages the development of a Solid Waste Management (SWM) Master plan for the targeted area in Teknaf and Ukhia Upazilas. The Master plan will be embedded into the District Development Plan for Cox’s Bazar. As part of the preparatory work for the SWM Master plan, the project has implemented the next studies:</p> <p><u>SWM stakeholders mapping and Gap analysis</u>: In late 2020, the project conducted a SWM gap analysis to determine the technical, financial, legal gaps and resources of the local government engaged in SWM activities. One of the <u>key findings</u> of the assessment was the need to activate and mobilize the SWM stakeholders (the counterparts in each project location and overall governance system) and provide key information on the SWM as preparatory work to the consultative process for the formulation and implementation of the Master plan. The Assessment found that nearly all-important stakeholders are inactive in terms of Solid Waste Management. Inactive means, as for example there is almost no formation of the WATSAN or standing committees, somewhere if they are formed; found that no meetings have been held following the regulation of those committees (See ANNEX 9).</p>



<p>Act. 2.2.2</p>	<p>Mentoring for Government Administrators - Providing training /information / field visits /exchanging sessions.</p>	<p>Sept.2019</p>	<p>Ongoing</p>	<p>Following the <u>2 Introductory trainings</u> on SWM Systems for Upazila Local government authorities in Teknaf and Ukhia conducted in November 2019, the project has taken a more systematic approach and targeted the key SWM stakeholders and provided them orientation on the SWM topic:</p> <p><u>1) Formation of SWM counterparts in the local government of CXB:</u> Facilitation has been done to form SWM counterparts in Teknaf Municipality and other areas for the project at Union, Upazila and District level.</p> <p><u>2) Mobilize and activate SWM stakeholders of each targeted project local government:</u> UNDP has arranged a round of meetings to activate 7 WATSAN committees in the project locations and Upazila level. A total of 229 committee representatives have participated (207 male and 22 female) in these meetings:</p> <ul style="list-style-type: none"> • 5 WATSAN Committee meetings at Union Level: Nhilla, Baharchara, Whykong, Raja Palong and Palong Khali. • 2 WATSAN Committee meetings at Upazila Level: Teknaf and Ukhia <p>In <u>Palong Khali</u>, in addition to the WATSAN Committee, a SWM Standing Committee has been created jointly with the Swiss Red Cross/Bangladesh Red Cross as the main counterpart of the project.</p> <p>See final report in ANNEX 10. A second round of WATSAN committee meetings will start in September 2021.</p>
<p>Act 2.2.3</p>	<p>Model Developed</p>	<p>June.2019</p>	<p>Ongoing</p>	<p>In 2019, the project consolidated and documented the <u>SWM Model in Teknaf Municipality</u> that would be taken as a reference and scaled-up in other project locations in host communities. Consequently, at the beginning of 2021, the same model approach has been implemented in 5 Union Parishads.</p>



					<p><u>Project locations profile:</u> The SWM models in each Union Parishad has been documented (ANNEX 11) and mapped using an interactive tool that allows the design and monitoring of the systems: HH, stores, secondary collection points, compost plants, sanitary landfill, etc. See the map in the following link: https://sustainable-swm.maps.arcgis.com/apps/View/index.html?appid=fbab0ed7cf6b46f3a6eb65f4864c7858</p>
Act 2.2.4	Plan developed	January .2021	Ongoing		<p><u>Master plan for SWM in Teknaf and Ukhia.</u> In August 2021, the project has hired a consultancy firm that has initiated its work to develop the SWM Study for Master Plan. As agreed with SIDA, the results of the study will be embedded into the District Development Plan (DDP) for Cox’s Bazar and agreed with all the respective District Authorities.</p>
Act 2.2.5	Sustainability and Long-Term Handover	January .2021	Ongoing		<p>From Oct 2020, the project has started the <u>engagement of the private sector as a new component of the SWM system model.</u> Financial sustainability of the systems is one of the key issues to ensure durable solutions to solid waste. To this purpose, in Teknaf Municipality, the team has supported the municipality to develop a Management Contract (MC) – agreement with a third party, similar modality implemented by ICRC on Faecal Sludge Management System. The MC has been developed and validated based on an extensive consultative process of key SWM stakeholders of the Municipality (see ANNEX 12). The Private sector was recruited in March 2021 and has been operating with the support of Brac and Practical Action from then. On 23rd June, a workshop was organized to enhance capacity of 3rd party and discussing the whole activity that he must be performed (ANNEX 12.1). A pilot process has started to collect fees from 1,681 HH in Wards 7, 8 and 9, and accumulated 84,050 BDT for the SWM fund.</p> <p>In <u>Union Parishads</u>, the engagement of the private sector/collection of fees to ensure the sustainability of the SWM systems in place will start from October 2021.</p>

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.20 19	Ongoing		<p>Host communities.</p> <p><u>Developed a HH and Market store profile.</u> The project has surveyed and collected basic information including the GPS location of 5,251 HHs and 5,390 stores in Teknaf Municipality, Raja Palong, Palong Khali, Nhilla, Whykong and Baharchara.</p> <p><u>Orientation sessions to HHs and Market shops:</u> Orientation sessions have been conducted to inform about the use of the 2 buckets and the importance of waste segregation to HH and stores' representatives. All HHs and stores in Teknaf and Ukhia have received training and provided IEC materials: festoon for waste segregation and catalogue of recyclable waste (ANNEX 13).</p>  <p><i>IEC materials for HH/shops.</i></p>
Activity 2.3.2	Non-Organic Waste: Segregating and Recycling at Source	June.20 19	Ongoing		<p>In <u>Teknaf Municipality</u>, households, and shop owners segregate waste at the source level into organic and inorganic waste. Blue bins are used to dispose of the inorganic waste. Inorganic waste is collected in vans by the volunteers and disposed of into secondary collection points, which are emptied by the municipality collectors with the municipal trucks and transported to the improved sanitary landfill. Recyclables are stored at the HH or shop and collected by the recycling entrepreneurs AND/OR segregated at the Sanitary landfill by the CfW.</p>

				<p>In <u>Union Parishads</u>, the SWM systems were established mainly to target the market stores and surrounding HH. Waste is collected at source and segregated into organic and inorganic (green and blue bucket). Inorganic waste is transported to the secondary collection points constructed in each market area. Recyclables are stored at the HH or shop and collected by the recycling entrepreneurs and/or segregated at the secondary collection point and linked with the recycling sector. Inorganic waste is disposed of into temporary disposal sites while waiting for permanent land to be given by the Union chairman to construct MRFs.</p>  <p style="text-align: center;"><i>HH blue/green bin</i></p>
<p>Activity 2.3.3</p>	<p>Organic Waste: Household and Community Composting</p>	<p>June.2019</p>	<p>Ongoing</p>	<p>In <u>Teknaf Municipality</u>, households and shop owners segregate their waste at source into organic and inorganic waste. A Green bin is used to dispose of the organic waste. Volunteers collect organic waste by vans and transport it to the single compost unit in the Municipality.</p> <p><u>Compost quality test</u> has been undertaken in Teknaf Municipality. The results are up to the minimum quality parameters requested by the Department of Cooperatives of Government of Bangladesh.</p> <p>In <u>Union Parishads</u>, the SWM systems were established mainly to target the market stores and surrounding HH. Households and shop owners segregate their waste at source into organic and inorganic waste. Organic waste is transported to the secondary collection points constructed in each market area. Compost is produced either in the same secondary collection point or in decentralized compost units constructed at the market level.</p>

				<p><u>Compost production and distribution:</u> A total of 6,323 Kg of compost have been produced since the composting process started in host communities. On 15th and 30th June 2021, in coordination with Upazila Chairman, Upazila Agricultural officer and Teknaf Municipality Mayor the project has distributed 214 kgs of organic compost among local beneficiaries for free. As a part of marketing and commercialization of compost, Teknaf team have successfully managed to sell 138 kgs of organic compost at 10 taka per kg among local farmers. For Ukhia, compost has been distributed for free among UNDP agriculturally based project, and local nurseries. In the second round, they will purchase the produced compost at market price.</p>  <p><i>Compost distribution in Teknaf Municipality</i></p>
Output 2.4	“3Rs” awareness campaign (reduce, reuse, recycle)			
Activity 2.4.1	Education campaign	Dec.2019	Ongoing	<p><u>Knowledge-Aptitudes-Practises (KAP) survey.</u> To identify the present practices of solid waste management, source segregation, community perception etc. at household and market shop the project (Practical Action) has conducted a community assessment survey in both project Upazila locations. Orientation for the data collectors was organized on the 10th of June 2021, and the field survey was completed at the end of June. A total of 454 beneficiaries were surveyed across Ukhia and Teknaf Upazila, in addition to 5 FGDs, 9 KIIs, and 4 case studies. See KAP Draft report in ANNEX 16.</p>

				  <p>Orientation to Data enumerators KII with Palong Khali Union Chairman</p> <p><u>Education program and communication strategy.</u> A communication campaign based on the 3R's has been designed across all project locations in host communities in Teknaf and Ukhia, starting in October 2021.</p> <p><u>Communications materials</u> have been developed to support the project activities and raise awareness among the population. New materials for the 3R campaign have been developed aligned with the communication campaign (See ANNEX 8 – Section 15).</p>
Activity 2.4.2	Bins in Public Places	April. 2020	Completed	<p><u>Public places served by bins.</u> Initially, the project did not target markets areas but households only. However, the project changed the approach targeting the main market areas where waste is generated in large quantities. By integrating the market areas, the public places have been also covered providing access to bins for customers and shop owners.</p> <p>A total of 5,390 stores have been provided with bins that can be used by customers and store owners in the project locations of host communities.</p>
Activity 2.4.2	Radio/Tv campaign.	Jan.2020	Ongoing	<p>Primary information collection regarding TV campaign such as type of messages, mode of presentation such as scrolling news or advertisement, etc. has been drafted. Discussion on broadcasting tenure and broadcasting cost, etc. is in progress. The</p>

					project has plan to start Radio/Tv campaign on next quarter following the 3R's campaign.
Activity 2.4.2	Local consultation.	Jan.2020	Ongoing		There is a plan to initiate the communication campaign in October 2021.
Activity 2.4.2	Cooperation with other agencies	Sept.2019	Ongoing		Coordination is ongoing through the WASH sector coordination platform for the host community and camps activities in Teknaf and Ukha.
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>Fire waste management response:</u> The sanitary landfill has received 3,920 m³ of debris from fire-affected camps which helped the quick re-construction of shelters and camp facilities in March 2021 and following three months. Several visits to coordinate the response and ensure a proper use of landfill were taken in coordination and support of the Inter Sector Coordination Group (ISCG) – WASH, SMS, FSS, SMEP, etc.</p> <p>Besides setting guidance on the waste management, the project linked scrap dealers to collect recyclable materials from the final landfill site at camp 20 Ext. A total of 223 ton of scrap metals, 70 m³ of soil and organic waste were segregated and recovered before landfilling.</p>



Sanitary landfill Camp 20Ext. activity during the fire incident response.

					<p><u>COVID-19 Response plan.</u> As a result of the outbreak of the virus in March 2020, the SWM Project prepared a COVID-19 response plan to support the project beneficiaries to be protected from the virus. The COVID-19 second wave surged in March 2021 again and the government-imposed lockdown to mitigate the Covid-19 situation and to limit the virus from further spreading. As a part of creating community awareness about COVID-19 situation among the local people, UNDP through Practical Action has taken a 7-day long COVID-19 awareness miking program from 16th to 22th July 2021 in both Teknaf and Ukhaia project locations aiming to aware people about the Covid-19 second wave.</p>  <p><i>Community miking for COVID19 awareness.</i></p> <p><u>Participation in several emergency response sector meetings:</u> WASH Sector, Sanitation Technical Working Group (STWiG), Information Management, Hygiene Promotion Technical Working Group (HPTWiG), Environment and Energy Technical Working Group (EETWiG), and most recently the Intersectoral SWM group.</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	June 2020	WASH sector through the Intersectoral SWM group is leading the discussion with Emergency Preparedness group to identify new sites for waste segregation and emergency disposal in case of a disaster.
Activity 2.5.3	Selecting, training, and providing Personnel Protection Equipment	April.20 20	Ongoing		<u>Provision of 7,500 pairs of gloves</u> to DPHE/WASH sector as contingency stock for emergencies. In August 2020, some gloves were also distributed to Site Management



	PPE and cleaning tools for a cash worker in the host communities/camps.				partners who were cleaning drains in the camps. In 2021, the project has procured rain jackets for all cash workers which will be distributed during the month of September.
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	Ongoing		UNDP greatly responded 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. This activity has been reported under Output 1.1.
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	Completed		<u>Lessons learned:</u> The project developed the lessons learned from the cleaning operation conducted in the refugee camps in 2019-2020 and shared in a workshop participated by the WASH-SMS partners in November 2020 (ANNEX 14). <u>Contingency plans.</u> Throughout the experience of cleaning the camps as well as the host communities, the project is preparing a contingency plan document to complete the SWM systems in each project location (ANNEX 11).
Output 2.6	National SWM Team Capacity building				
Activity 2.6.1	Trainings on the basics of SWM /	Mar. 2019	Completed	May.2019	A refreshing training was conducted for the Implementing partners in Ukhia and Teknaf in December 2020 on basics of SWM. Two more trainings for Brac team are planned for September 2021.



	Project/Composting/Livelihoods/Recycling				
Activity 2.6.2	On-work training	Feb. 2019	Completed	Aug.2019	The pilot project implementation in Teknaf Municipality in 2019 was the best on-job training for the national team to build their capacity and confidence with the project and guidance to 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** – Mahmudul Amin, on board since April 2019.
- **Social Mobilizer Associate** – Saleha Akhter, on board since mid-December 2018.
- **Monitoring and Evaluation Specialist** – Hindole, on board since March 2021.

Temporal national positions:

- **GIS/IM Individual Consultant** – Tarek Khan, on board since mid-May 2019 as UNV and in November 2019 as Individual Consultant IC.

Temporary Consultancies/Consultants:

Ongoing:

- **Waste Management Consultants** – on board since July 2021 to conduct the SWM study embedded into the District Development Plan of Cox’s Bazar.
- **Garbageman Limited** – on board since August 2021 to support the two Associations of the Scrap dealers in Teknaf and Ukhia.

Finalized:

- **National Recycling Value Chain specialist** – Fahim Uddin, on board from September to December 2019. Responsible for the design and launching of 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 for conducting a study on mainstream gender and child issues in the SWM Project.
- **National SWM Assessment specialist** – Shoriful Alam, on board from August 2020. Responsible for conducting a consultative process to prepare the SWM Master plan.
- **National SWM Assessment specialist** – Khayrul Alam, on board from August 2020. Responsible for searching feasible land for SW Facilities.
- **National Public - Private Partnership specialist** - Ahmedur Rahman, on board from September 2020. Responsible for designing the Public-Private Partnership contract modality for SWM services in Pouroshova and Union Parishads.

NGO Implementing partners:

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

SI 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	Ashit Chandra Bapary	Senior Program Organiser	01/09/2019	Responsible for operational plan for the cleaning campaign, preparing daily report & submitting to the supervisor and responsible for supervising project assistants.
7	Abdul Malek	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
8	Md. Sajjad Hossain	Project Assistant	13/07/2020	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
9	Ataur Rahman	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
10	Jamal Hosain	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.

11	Md. Ismail	Project Assistant	15/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
12	Md. Misbah Uddin	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
13	Nezam Uddin	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
14	Raian Ullah	Project Assistant	01/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
15	Sayful Islam	Project Assistant	04/09/2019	Execute field operation, supervise field volunteer, daily work preparation, cumulative daily report to PO.
16	Kamrul Islam	Project Assistant	21/01/2020	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	Mamun Chowdhury	Project Lead	9 th December, 2020	Overall Direction and Supervision
2	Md. Shafiq Islam	Field Coordinator	1 st September 2019	Coordinate at Field level
3	Sayeed Ahamed	Documentation and Communication Officer	2 nd May 2021	Documentation, Communication and Reporting.
4	Khushnur Jahan	MEL-Officer	5 th May 2021	MEL Officer
5	Shahinur Rahman	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
6	Al Fayed	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
7	Rezwan Sarker	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement

8	Abdul Hamid Kafia	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
9	Aminul Islam	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
10	Shamsur Rahman	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
11	Mahmudul Hasan Bappy	Assistant Field Officer	1 st September 2019	Facilitate at Field level & direct implement
12	SM Mafazzel Hossain	Assistant Field Officer	1 st September 2019	Development of Training module, Conduct ToT on project Staff on Capacity building of Scrap dealers and SWM.
13	FariduzzamanShapon	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.

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, the project has 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, the project has strictly instructed the waste caring truck driver to buzz the horn as less as possible.
Spread odour while waste was kept up in public area	The project has instructed the 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 SW facilities.	<p>Definition of environmental standards for the location of 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>Temporary disposal sites in Union Parishads have been constructed with liner base and fenced to reduce environmental impact and access to animals. As waste is segregated before disposal, little amount of organic waste is disposed of, and the generation of leachates is reduced.</p> <p>Initial Environmental Examination conducted for 3 facilities: Temporary Landfill in Ukhia, Compost Unit and Improved landfill in Teknaf Municipality.</p> <p>Environmental Management Plan for the Temporary Solid Waste Facility (landfill) in Camp 20 Ext.</p> <p>(NEW) Recruitment of a consultancy to conduct an Environment Impact Assessment (EIA) and Environmental Management Plan for all project SW facilities.</p>

3) Maintenance of SW Facilities:	
Sanitary landfill in Camp 20Ext.	(NEW) SOPs for the use of the sanitary landfill by camp partners have been developed, circulated, and provided training. Clear guidance on only disposing of non-recyclable waste allows to reduce the organic component and the generation of leachates at landfill level. In addition to that, waste is cover by soil and compacted daily which reduces the smell and attraction of animals, keeping the landfill in good sanitary conditions.

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 summarizes 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	<p><u>Cleaning campaign:</u></p> <ul style="list-style-type: none"> • 80% of CfW for cleaning campaign in Teknaf Municipality were women (41 out of 52 people). • 0% of CfW for cleaning campaign in Union Parishads were women (0 out of 208 people). • 0.2% of CfW for cleaning campaign in Refugee camps were women (2 out of 950 people). <p><u>Regular waste collection:</u></p> <ul style="list-style-type: none"> • 35% of CfW for daily waste collection in Teknaf Municipality are women (17 out of 48 people). • 15% of CfW for daily waste collection in Union Parishads are women (15 out of 159 people). <p><u>Construction of Secondary collection points/ compost units:</u></p> <ul style="list-style-type: none"> • 0% of CfW for construction of SW facilities in host community are women (0 out of 229 people).

	<p><u>WATSAN SWM participants:</u></p> <ul style="list-style-type: none"> • 9% of trained WATSAN Committee members are women (22 out of 229 people). <p>In camps, the availability of female CFWs at Camp level was very rare. BRAC could not deploy female CFWs in cleaning campaign in Camp zone and Construction work in host communities.</p>
Ensure a proper gender balance within the team:	<ul style="list-style-type: none"> • 40% of the SWM team are women (2 out of 5 people). • 16% of the National external consultants (1 out of 6 people).
Project Gender strategy: YES	<p>Two publications:</p> <ul style="list-style-type: none"> • Study to mainstream gender and child issues into the SWM Project • SWM Project Gender strategy (edited and published)
Gender mainstreaming actions: YES	<ul style="list-style-type: none"> • Progress of the recommended action points to mainstream into the SWM Project.

Section 2 – FINANCIAL REPORT

This section includes the project budget implemented from September 2020 to August 21, 2021 (year 3). The initial budget was modified in September 2019 to address the needs of the context, and again in February 2020 to implement the COVID-19 response plan. A new budget revision was conducted in July 2021, when a non-cost extension of the project was approved until April 2022. The budget targeted for Year 3 has been distributed among the 8 remaining months until the end of the project.

2.1 Project expenditures

From September 2020 to August 2021 the total project expenditure has been 1,563,637 USD against the total budget of 5,028,959 USD.

Budget and Expenditure by outcome:

Outcome	Annual project Expenditure (Year 3) USD
Outcome 1. Developing Waste Management Systems	743,847
Outcome 2. Changing Behaviours and Attitudes	425,862
Project Management costs	308,395
GMS	85,533
Total (without GMS)	1,563,637

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

Section 3 – NEXT ACTIONS

The main activities to implement in the next coming months are summarized as follow:

IN CAMPS:

- Coordination support and technical advice to WASH Sector in camps and host communities and Intersectoral SWM group. Specific topics: emergency waste contingency plan, new landfill in Teknaf camps, mainstreaming SWM in other sector responses.
- Operation and maintenance of the Sanitary landfill in Camp 20Ext. To promote the use of the Landfill and ensure access to facility to all Ukhia camps, as well as to expand the construction of the Landfill, from 22,000 m³ to 40,000m³ with the support of SMEP/IOM.
- Formalize the collection of recyclable waste throughout a clear SOP with the Association of the scrap dealers in Teknaf and Ukhia. Initial pilot will be implemented in camp 15.
- Construction of a Sanitary landfill for the Teknaf refugee camps.

IN HOST COMMUNITIES:

Project Exit Strategy (PES):

- Optimization of the SWM systems in the 5 Unions and Municipality of Teknaf by ensuring a good Key performance, quality, and efficiency indicators.
- Build a financial model based on fee collection from users. To that, it will be necessary to, build the capacity of the local government and strengthen the SWM governance system in each project location (WATSAN committee as the first counterpart for SWM within the local government).
- Development of the SWM study for the Master Plan in Teknaf and Ukhia that will be later embedded to the District Development Plan in Cox's Bazar.

3R's Communication awareness campaign:

- Mass awareness communication campaign across all project locations in host communities to raise awareness on the '3Rs reduce, reuse, recycle' approach to consolidate best solid waste management practises within the communities.

Construction of SW Facilities:

- Construction of Union Material Recovery Facility (MRF) in Baharchara, Whykong, Nhillia and Raja Palong.

Support to the Local Recycling sector:

- Launch the second and third cohort of the Grant program to support the recycling sector and identify innovative solutions for dealing with waste without value and/or as an alternative to one-single-use plastics.
- Build up the management, administrative and institutional capacity of the two Scrap Dealers Association in Teknaf and Ukhia to upgrade the business modality and consolidate the marketplace of the local recycling sector.

- Integrate the recycling sector into the Municipality, Unions and Camps SWM systems by developing strategies that facilitate the access to the scrap materials and consolidate the role of the recycling sector in Teknaf and Ukhia Upazilas.

Section 4 – LESSONS LEARNED

The project has brought new lessons learned applicable to the project and the overall sector which are summarized below:

- The high demand in the use the Sanitary landfill to dispose of debris and other cumulated waste in drains from the affected camps during the fire incident response in March 2021 brought up the issue of the urgent need to identify land for waste segregation and alternative disposal sites. In the case of an event that leads to a large waste generation, such as a disaster or the cleaning of waste from drains, the camps have no mechanism/capacity in place to proper manage waste without additional environmental impact. There is a need to define a protocol in which agencies' responsibilities, cash workers for waste removal, resources such as machineries, open sites and logistics are well defined to properly deal with waste and allows the provision of aid and reconstruction of the camps as priority.
- Regular information sharing on SWM approaches, activities, issues to WASH partners and other Sector partners/agencies such as WFP, resulted in a common understanding, better performance, and the creation of synergies between partners and sectors in the regular operations and during emergencies: WASH-SMS: drain cleaning, WASH-FSS: reduction of emergency food distribution packages and compost distribution for gardening activities, WASH-HEALTH: medical waste management, UNDP-WFP: Upcycling centre, SMEP-UNDP: cleaning campaign, and construction of sanitary landfill, etc. As a result of this, SWM has become a clear cross-sector issue and an Intersectorial SWM Group have been created formed by WASH, FSS, SMS, HEALTH, etc. sectors and partners.
- Showing and experiencing well operated SW facilities and functional SWM systems ease the comprehension and willingness of local authorities and communities to develop proper solid waste management services. This is the case of RRRC visiting the Sanitary landfill at camp 20 Ext., the Union Chairman visiting the SWM system in Teknaf Municipality, and the Market committee members and community willing to pay for the waste collection service in all project locations.
- Building a new culture on Solid waste management in which predominates a minimum level of awareness of the importance of proper manage waste and where good practises on waste segregation and no littering are consolidated takes more than a project time. At the same time, building financial models to minimize the cost of SWM the operations through the collection of service fees requires time and supervision and additional budget for maintenance of infrastructure, tools, vehicles. New seeds are growing towards this new culture of waste, but continuous support is still critical for the project locations and surrounding Unions after the project ends.
- To develop a Master plan for SWM in Cox's Bazar it is necessary to identify who are the government and non-government stakeholders and which are the gaps and existing resources (technical, legal, financial, etc) to understand the current situation. In Teknaf and Ukhia, it was also necessary to activate the governance system (mainly vehiculated through the WATSAN committees at Union/Municipality, Upazila and District level), firstly, to build a common understanding of the importance of having a proper SWM system, and secondly, to initiate consultations about the key immediate and long-term



development. The development of basic services of waste collection in all the Union Parishads and Municipality, allowed the understanding and willingness of engagement and setting of priorities.

- Regular orientation sessions to implementing partners and on-job trainings to CfW and supervisors on SWM issues contribute to build knowledge and expertise, as well as improve the quality and efficiency of the SWM systems in place.

Section 5 – PROJECT LOGFRAME (indicators)

In this section the Project Indicators Framework is presented with Baseline data (April 2019 – before the project implementation) and Progress against targets (up to August 2021). Table colour legend: Accomplishment ≥ 100% / Accomplishment ≥ 50% / Accomplishment < 50% / Not measured

Summary table of the project indicators:

Total number of indicators	Accomplishment ≥ 100%	Accomplishment ≥ 50%	Accomplishment < 50%	Not measured
A. Output indicator = 32	19	6	6	1
B. Strategic planning = 4	1	1	1	1
C. Outcome indicators = 4	0	2	2	-
TOTAL = 40	20 (50%)	9 (23%)	9 (23%)	2 (5%)

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)*	%	Comments	Means of Verification (data sources)	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
1.1.1 Number of camps/host communities where	0	25	42	>100%	DESCRIPTION: The project has cleaned 42 locations: 27 refugee camps and 15 locations in 5 Unions	Sample Before and after picture.	Yearly	SWM project team and	Local travel Section 3.7 of	Implementing agencies will preserve the



uncontrolled piles of solid waste have been cleared					and 1 Municipality. OBSERVATIONS: Teknaf camps have not been cleaned due to lack of land for safe disposal.	CFW Payment sheet. Implementing NGO report		UNDP staff member.	donor budget. SWMP	documents and assist for review.
1.1.2 Number of women and men benefitting from waste clearance	0	480,000	930,573	>100%	DESCRIPTION: Population from 42 locations: 27 refugee camps and 15 locations in 5 Unions and 1 Municipality.	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.
1.1.3 Cubic meters of waste cleared	0	10,000	10,536	>100%	DESCRIPTION: A total of 8,753 m3 from refugee camps and 1,785 m3 from host communities.	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	19,012	16,936	89%	OBSERVATIONS: Regular cleaning in host communities for the next 8 months will contribute to meet the target.	Sample picture of income schemes	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.
						CFW Payment sheet				
						Implementing NGO report				
Output 1.2: Basic waste management system										
1.2.1 Number of camps/ villages with functioning SWM system	0	25	42	>100%	DESCRIPTION: Total of 15 project locations in host communities and 27 refugee camps. All of them have access to a safe final waste disposal service. OBSERVATIONS: Now only 18 camps are using the sanitary landfill to dispose safely of the waste (69%).	Waste collection register /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.
						Implementing NGO report				
	0	500,000	930,573	>100%		Targeted HH	Quarterly			



1.2.2 Total population benefiting from the established and functioning systems					Population from 15 project locations in host communities and 26 refugee camps.	Implementing NGO report.		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	0	12,300	16,982	>100%	<u>OBSERVATIONS:</u> The project has purchased 8,461 sets (16,922 bins), and distributed 8,446 sets of bins (16,892 bins). There are only 30 bins left.	Bin distribution master-role. Picture of the distribution event, targeted HH 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. Targeted HH will be available to respond.
1.2.4 Cubic meters of solid waste collected and disposed of through maintenance systems	0	34,000	26,187	77%	<u>OBSERVATIONS:</u> Waste is collected in each project location at HC and from camps on a regular basis.	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		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	>100%	<u>DESCRIPTION:</u> 2 sanitary landfills serving 27 refugee camps and 1 Municipality.	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	>100%	DESCRIPTION: 1 in Ukhia camps and 1 in Teknaf Municipality (respective capacity: 22,000 m ³ + 800 m ³).	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	0	40,000	13,153	33%	DESCRIPTION: This is the total waste recovered in the two newly constructed landfills in Ukhia camps and Teknaf Municipality. OBSERVATIONS: to meet the target the project needs to construct the new landfill or the Union MRFs where waste will be safely disposed of.	Landfill 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.
Output 2.1 Recycling and livelihoods development.										
2.1.1 Cubic meters of waste segregated/recycled by local entrepreneurs/businesses supported by the project	0	12,000	27,997	>100%	DESCRIPTION: This indicator measures the quantity of recyclables collected by the granted dealers for the last year. Total amount purchased is 27,997m ³ (8,707,116 Kg) which represents an average increase of 410m ³ (127,367 Kg) per month since Sept.2020. An increase of 49%.	Informal recycling sector database / business profile	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	0	20	20	100%	A total of 20 recycling dealers were granted in three tranches: 2019, 2020 and 2021.	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.



(equipment) provided										
2.1.3 Cubic meters of waste segregated/recycled of waste segregated by the HH level	-	12,000	13,224	>100%	<p>DESCRIPTION: In the SWM systems established in the refugee camps and host communities, all waste collected is segregated at source. Thus, recyclables are either collected by the recycling sector directly at HH or shop level, or at landfill level through a second level of segregation before disposal.</p> <p>In total 55 m³ of recyclables have been recovered at the disposal site in each project location (about 9% of the total recyclables).</p>	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 (BDT)	27,554	20% increase	38,925	>100%	<p>DESCRIPTION: The indicator measures the average monthly income generated by all scrap dealers the project is supporting through the Grants in Ukhia and Teknaf (not all Associated members).</p> <p>BASELINE: average monthly income of the grantee scrap dealers before the first payment was given (Dec 2019).</p>	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.	0	10	17	>100%	<p>DESCRIPTION: Number of supported dealers that has increased profitability on a monthly basis/during the period. 2 scrap dealers closed the business due to COVID 19.</p>	Account's 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	269	>100%	DESCRIPTION: The project activated the WATSAN committees in 5 Unions and 1 Municipality. First round: Total participants oriented on SWM: 269 = Male: 247; Female: 22. Second round: September 2021.	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.
2.2.2 Number of local government staff actively participating in the project implementation in a short term (learning by doing)	0	40	37	93%	DESCRIPTION: 5 Members in Teknaf Municipality, 15 members of Steering Committee in Palong Khali. 1 DPHE District and 2 DPHE Upazila. At least 1 Chairman and Secretary in each Union in charge of arranging WATSAN Committee on a monthly basis. 2 UNO and 2 Upazila Chairman responsible for arranging WATSAN Upazila Committee regularly.	Project event report, picture,	Yearly	SWM project team and UNDP staff member.	Local travel Section 3.7 of donor budget. SWMP	
2.2.3 Solid Waste Management model developed and owned by the Government	0	1	2	>100%	DESCRIPTION: 1 Teknaf M. 1 Camp system. In Unions, a consultative process to start this year to validate the SWM model developed	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	OBSERVATION: The consultative process will consolidate the Master plan document and be integrated it into the DDP CXB District. <i>Process ongoing</i>	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	Y	N	OBSERVATION: Teknaf Municipality has provided land, assigned one truck, and is recruiting a Conservancy inspector for SWM. Other Unions not	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



					yet engaged, but fee collection mechanisms are planned to start.				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 and market shops level	0	8,400	10,626	>100%	<p>CHANGE OF TARGET: Initially the project was designed to distribute 1 large bin for 5 HH. So, by distributing 10,000 bins, a total of 50,000 HH would be reached. In practice, the project changed the approach, and distributed small set of 2 bins per HH, as well as 1 large bin per 5 market stores (more recently 1 set of small bins for stores too). Segregation at source helps to have quality organic material for compost. Besides that, door-door primary collection avoids waste littering. <i>The target of this indicator must be adjusted to the new SWM approach: New proposed target: 8,400</i></p> <p>The project has purchased 8,461 sets (16,922 bins), and distributed 8,446 sets of bins (16,892 bins). There are only 30 bins left.</p>	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 and store owners sensitized to waste management practices (one person per household)	0	8,400	10,626	>100%	<p>CHANGE OF TARGET: According to the 2.3.1 indicator, <i>the target of this indicator must be adjusted to the new SWM approach: 8,400.</i></p> <p>DESCRIPTION: This indicator measures the number of HH and stores provided with bins and trained on waste segregation and management.</p>	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



2.3.3 % of households and market stores composting their organic waste	0	25%	12%	48%	DESCRIPTION: The SWM model put in place (source segregation) in the project locations allows 100% of HH and market stores engaged in waste segregation and composting. However the level of segregation at source allows the recovery of 10% of the organic waste.	Organic waste and compost production register, HH, selling compost 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
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	5,430	>100%	Initially, the project did not consider the market area, but households only. In practise the project changed the approach targeting the main market areas where waste is generated in large quantities. By integrating the market areas, the public places have been also covered providing access to bins for customers and shop owners. DESCRIPTION: A total of 5,629 stores have been provided with bins which can be used by customers and store owners.	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	11,245.47	94%	DESCRIPTION: The indicator measures all waste collected in market areas and other public places where bins are located.	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.



<p>2.4.3 Number of people who demonstrate basic knowledge about RRR (Reduce, Reuse, Recycle) (one per household)</p>	0	80,000	36,3% of current beneficiaries	0%	<p><u>DESCRIPTION:</u> the indicator measures basic knowledge acquired by the community throughout the communication campaign and measured by the monitoring system plan in the same campaign. Communication campaign must start by PA in October and measure the impact on behaviour change and awareness raising.</p>	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.
<p>2.4.4 Number of listeners exposed to radio campaigns (two per household)</p>	0	160,000	0	0%	<p><u>OBSERVATION:</u> Radio program will start aligned to the communication campaign of PA. PA to decide if radio program is necessary for the communication campaign or to be replaced by another communication channel to reach the target.</p>	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.
<p>Output 2.5 Contingency Planning</p>										
<p>2.5.1 Number of camps and villages covered by contingency plans</p>	0	25	15	60%	<p><u>DESCRIPTION:</u> The project activated a COVID 19 Response plan (contingency plan) to prevent the spread of the disease among the 15 project locations in host communities: dissemination of key information (leaflets, posters, billboards, miking), distribution of hygiene kits (HH, stores and recycling sector) and cash for food (most vulnerable group of HH, recycling sector).</p> <p><u>OBSERVATION:</u> contingency plan for SWM activities before the Rainy season in each project location yet to be drafted and annexed into the</p>	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.



					Union Contingency Plan developed by DRR Project. A contingency plan will also be drafted for the refugee camps and the use of the Sanitary landfill Camp 20ext.					
2.5.2 Emergency scenarios identified	N	Y	Y	Y	DESCRIPTION: 3 scenarios have been identified and supported: COVID-19, Rainy season, and campfire.	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.

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	Target	Progress Against Target (M/Y)*	%	Comments	Means of Verification	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
	(Year)	(Sept18-August 21)				(data sources)				
# of women demonstrate basic knowledge about RRR (Reduce, Reuse, Recycle)	0	60%	0%	0%	To measure when the communication campaign is completed by end of the year.	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%	32	15%	32 female out of 207 cfw.					
# of women entrepreneurs become enterprise with the support of SWM project.		10%	0%	0%	Female are engaged in the recycling sector but as staff not owning the business.					



# of vulnerable people supported	0	TBD	2,558	N/A	DESCRIPTION: Number of feriwalla, dealers and vulnerable households.	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	Target	Progress Against Target (M/Y)	%	Comments	Means of Verification	Frequency	Responsibilities	Resources (M&E Cost)	Assumptions and Risks
	(Year)	(Year)				(data sources)				
C 1.1 Ratio of waste generated to waste cleared / moved to the landfill (baseline 0, target 90% of not recyclable waste)	0	90%	71%	79%	DESCRIPTION: The indicator measures the total waste collected vs estimated waste generated in the target areas.	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.
C 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	100	98.9	98.9%	INFORMATION: KAP survey was conducted to 465 beneficiaries, both members of HH and shops (314 (67.5%) male and 151 (32.5%) female). DESCRIPTION: 98.9% of the respondents are satisfied with the waste collection service in place; 82.3% feel that the overall livelihoods could be improved by a clean and	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.



					healthy environment. <u>OBSERVATION:</u> A second round of the survey will be conducted after the Mass awareness communication campaign by the end of the year.					
Outcome 2: Changing Behaviours and Attitudes										
C 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: 12 % Inorganic ratio: 213% Recyclable Ratio: 1%*	13%	<u>DESCRIPTION:</u> the indicator measures the total amount of waste collected recovered before final disposal (organic + recyclable waste). *Recyclable material is segregated at source level and sold by the HH/Shop directly to the dealers. In this indicator, the project is measuring the recyclables recovered before final disposal (organic and recyclables).	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.
C 2.2 Awareness level of 3R	0	75%	36%	48%	<u>INFORMATION:</u> KAP survey was conducted to 465 beneficiaries, both members of HH and shops (314 (67.5%) male and 151 (32.5%) female). <u>DESCRIPTION:</u> the indicator measures the % of responders who have knowledge on the 3Rs concept.	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.



Section 6 – RISK ANALYSIS

During the writing report period, Bangladeshi Government has declared the outbreak of COVID-19. 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 COVID-19 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-21	RRRC government is fully supporting UNDP SWM activities in the camps. The sanitary landfill and SWM approach that UNDP is proposing is very well received and approved by RRRC. The local government Unions and Municipality also welcome the support on their SWM systems.
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	Sept-21	Access to the camps and HC has been established after the COVID19 lock down ended in August 2021. Increase security measures while visiting camps has been advised, particularly for female workers to work in pairs, and carry the radio system.



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	Sept-21	During cyclone and monsoon season, security conditions are assessed before sending the project staff to the field project locations. COVID-19 outbreak requires 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	Sept-21	Third Government of RRRC after the beginning of the project has been elected in early 2021. No major issues identified. Local government elections at Union and Municipality will take place in September-November 2021.
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	Sept-21	UNDP project is being implemented in coordination with District, Upazila and Union Parishad/Municipality authorities, including RRRC for camp activities.
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	Sept-21	No major issues are expected 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 funds to reputable partners via dedicated accounts and auditable procedures. Financial transparency is to be maintained at all levels. Rigorous attention	Operations Manager	Marta Kucharski, Project Manager	Sept-21	No issues have been detected in this regard.



					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	Sept-21	In Sept. 2019, the exchange rate was 1USD = 84,19BDT. In 2020, the current exchange rate is 1USD = 84.5 BDT. In 2021 Aug: 1USD = 84.64 BDT
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	Sept-21	No issues have been faced 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	Sept-21	Proper coordination with the 3 actors has been ensured while planning the project activities work plan. Main participated platforms of coordination: - WASH Sector meeting in Cox's and Host communities. - WATSAN committees at Union and Upazila level. - SWM Inter-sector group at ISCG level. - Bilateral meetings/agreements.



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	Sept-21	No major issues faced in this regard. Close follow up and regular trainings/orientation sessions are implemented with the IP to build their capacity and ensure quality of the project implementation.
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 value at such a moment, and UNDP would be ready to offer its services to a humanitarian response.	Project Manager	Marta Kucharski, Project Manager	Sept-21	COVID19 lock down started from April to August 2021 disrupting the path of the project implementation. Camp fire in early March 2021, changed all ISGC sector priorities to respond the camps and reconstruct the affected HH and facilities. Disaster waste management plan is being initiated within the Emergency Plan and lead by WASH sector with support of UNDP among others.
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 lead time 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	Sept-21	Difficulties in accessing public land for landfill/other UP Solid waste facilities is limiting the sanitation conditions of the camps and Host communities. A new approach has been implemented in all project locations prioritizing the use of temporary disposal sites to be able to conduct the cleaning campaign and regular waste collection services in 5 Union Parishads. Gradual transfer to permanent SWM facilities has started.



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	Sept-21	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 in camps. Whereas in host communities the participation of women as volunteers is larger.
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 about child labour or forced labour. Close Monitoring of Work Sites: UNDP will appoint Monitoring & Evaluation Officer who will monitor closely beneficiary's 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	Sept-21	Most of the feriwallas working for the recycling sector are below 18 years old. Through the Association of the scrap dealers in Teknaf and Ukhia the project is working to ensure environment and social principles, such as no child labour. Dealers are being tracked by the project and shown zero tolerance.
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	Sept-21	No issues have occurred in this regard.

List of Annexes

- Annex 1.** UNDP presentations/support to WASH Sector SWM agenda
- Annex 2.** Cleaning campaign in host communities report
- Annex 3.** Regular waste collection report
- Annex 4.** Bins distributed in host communities
- Annex 5.** Solid waste facilities in host communities
- Annex 6.** Associated scrap dealers' profile
- Annex 7.** Meetings/events with the Association of scrap dealers
- Annex 8.** Communication materials developed under the project
- Annex 9.** SWM Gap analysis in Teknaf and Ukhia
 - Annex 9.1** Roadmap report for SWM Master plan with capacity building
- ANNEX 10.** Mobilize and activate SWM stakeholders of each targeted project local government
- ANNEX 11.** Project locations profile in host community
- ANNEX 12.** SWM Management Contract (MC) for third party in Teknaf Municipality
 - ANNEX 12.1** Consultative process for private sector engagement ISWM contract Teknaf Municipality
- ANNEX 13.** Household and stores engagement in project locations
- ANNEX 14.** Lessons learned of the solid waste cleaning campaign in Ukhia camps
- ANNEX 15.** SWM Project Gender action plan
- ANNEX 16.** Draft report – KAP survey
- ANNEX 17.** Preliminary results survey Use of landfill Camp 20Ext.
- Annex 18. Project financial Report**