PROJECT DOCUMENT

Scaling-up Integrated and Inclusive Waste Management Models through Empowering the Informal Sector and Fostering the Circular Economy (Phase 2)

2021-2023

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PROJECT SUMMARY

The rationale for the project lies in the significant, albeit overlooked, role undertaken by the informal sector in waste collection and segregation, and in the lack of local waste and recycling collection centres that respect environmental and social standards in Viet Nam. Linked to this is the significant role women play as informal waste collectors, and the opportunity for this project to contribute to both gender-inclusive development and building back better through a green recovery.

The theory of change for this project is that enhanced community capacity for waste management, when supported by an effective enabling environment, piloted and tested models, and the adoption by municipalities and businesses of the circular economy principles, will contribute to delivering sustainable and transformative solutions.

The piloting of different intervention models during Outcome 1 – covering a series of on-the-ground IWW support interventions, a sector-level approach and an ecosystem-level value chain approach – will allow the models to be tested, including the level of support inputs such as capacity development and training, and the requirements at the enabling environment level to allow the models to function effectively. The learning from this process will allow the models to be refined and adapted as necessary under Outcome 2, with a view to facilitating their take-up for scaling and replication, along with implementation support, while the knowledge assets and toolkits created will be made available at both national and regional level.

I. DEVELOPMENT CHALLENGE

1.1 Waste and Plastic Management in Viet Nam

Between 2015 and 2020 the average annual rate of municipal waste in Viet Nam increased from 21 million tons to some 35 million tons (ISPONRE, 2017) and is projected to further increase to 52 million tons by 2025) – in other words, a 2.5-fold increase within a decade. Some 70% of waste is disposed of in landfills, while the remaining 30% is burned or illegally dumped. In urban areas, more than 85% of waste is collected, but in rural areas the collection rate drops to approximately half of the urban collection rate, ranging between 40% and 45% (ISPONRE, 2018). Plastic waste, in particular, accounts for between 10% and 12% of the total amount of solid waste generated in Viet Nam, amounting to approximately 1.8 million tons every year.

Although essential to the improvement of waste management systems, at-source separation is not commonly found in Viet Nam. Challenges include the lack of commitment from households to separate their waste, lack of infrastructure to collect segregated waste, the difficulties for the city municipalities to select a location to install the infrastructures, common complaints from the households with respect to the smell, health concerns etc. There is however, some spontaneous waste separation that exists, driven mainly by the economic gains of reselling some recyclables, such as glass, carton, plastic. Pilots took place in Hanoi and Ho Chi Minh City, but these have rarely been sustainable.

The already difficult situation has been further exacerbated by the on-going COVID-19 pandemic, which has seen significant increases in the use of single-use plastics and an enormous volume of untreated masks and other Personal Protective Equipment (PPE) being discarded without clear disposal guidance, and this has become a growing challenge to waste management systems. Informal waste workers (IWWs) face high exposure to biological and chemical hazards due to their precarious working conditions because of the lack of systematic segregation of waste. The increase in PPE/COVID-19 related waste means that waste workers face greater risks of being exposed to contaminated materials that are not properly disposed of by households, quarantine facilities, and hospitals.

Due to their informal status, informal waste workers fall outside of the Social Protection (SP) package put in place by the Government of Viet Nam in response to COVID-19. During the nationwide COVID-19 lockdown in April 2020, many business activities slowed down or came to a complete halt, which significantly reduced the amount of tradable waste to be collected. Unable to wander the city searching for waste, many IWWs lost their primary source of income. During the peak of the first wave of the pandemic, almost 60% of surveyed informal workers were considered poor, while 6% were considered near-poor. While transient income poverty decreased in May 2020, the smallest decreases were registered among informal workers and women-headed households (UNDP RIM-2020 survey).

Following the economic downturn associated with COVID-19, there is an opportunity to build back better, prevent further job losses to the extent possible (avoided employment destruction), and create alternative income-earning opportunities for workers in the informal sector or for those who normally work in micro and small enterprises affected by the slowdown in business activities. In this context, it is critical to increase the skills of these workers by investing more in vocational training, education, and soft skills, but at the same time seeking to provide models in which they can create (or improve) sustainable livelihoods.

1.2 Policy frameworks on Waste and Plastic Management in Viet Nam

In 2019, Resolution No. 09/NQ-CP (February 3rd, 2019) was issued, in which the GoV has assigned the Ministry of Natural Resources and Environment (MONRE) to be the focal point of unified state management of solid waste. MONRE issued Decision No. 849/QD-BTNMT on the plan to implement Resolution No. 09/NQ-CP to ensure the integrated and unified state management of solid waste from central to local levels. It is expected that this Plan will create a positive change in solid waste management, especially for domestic solid waste, contributing to the successful implementation of the National Strategy on the Integrated Management of Solid Waste by 2025, vision to 2050 approved by the Prime Minister in Decision No. 491/ QD-TTg on May 7, 2018.
On plastic waste, in December 2019, the first National Action Plan for Management of Marine Plastic Litter was issued by the Prime Minister (PM). The plan sets the target of reducing marine plastic litter by 75%; collect 100% of abandoned, lost, or discarded fishing gears and put an end to the disposal of fishing gears in the sea; prevent the use of single-use plastics and non-biodegradable plastic bags in 100% of coastal tourism areas, tourist attractions, tourist accommodations, and other seaside tourism services; and strive for 100% of marine protected areas to be free of plastic litter, by 2030. On August 20, 2020, the Prime Minister issued Directive 33/CT-TTg on strengthening the management, reuse, recycling, treatment and reduction of plastic waste. The PM instructed ministries, branches and localities to issue directives and plans to reduce and recycle plastic waste; as well as to minimise the use of disposable plastic products, and prioritise the selection of recycled and environmentally friendly products. The Directive also requests agencies and public institutions to minimise the use of disposable plastic products and reinforces environmental protection legislation to tackle environmental challenges. This is a strong signal given to line ministries and will foster the formulation of sectoral plans to reduce plastic pollution.

In November 2020, the revised Law on Environmental Protection (LEP) was adopted. It builds the institutional basis for the development of a circular economy and strengthens the stipulation on solid waste management directives?. Article 142 gives the first definition of Circular Economy, in which “design, production, consumption and service activities reduce the extraction of raw materials, materials, extend product life, reduce generated waste and minimize negative impacts”. Articles from 75 to 79 of the revised LEP provide regulations on domestic solid waste collection and treatment service based on the sorted amount of waste, according to which: domestic solid waste must be classified into, solid waste that can be reused or recycled; food waste; other domestic solid waste. They must be stored in different packages to be collected and disposed of. The collection points and transfer station must have different

areas to store the classified domestic solid waste, ensuring classified wastes are not mixed up. Solid waste that is reusable, recyclable, and hazardous waste generated from households and individuals has been classified according to regulations without having to pay for collection, transportation and treatment services. For other types of solid waste, it must be stored in the packages prescribed by the People's Committee to be collected and recycled. Domestic solid waste collection entities have the right to refuse collection of domestic solid waste from households and individuals that fail to classify and use packaging in accordance with regulations.

1.3 COVID-19 Country Update

As of 20th March, Viet Nam had reported a total of 2,275 cases, with 35 deaths, and 2,233 persons recovered. Since the coronavirus (COVID-19) pandemic was first recorded in Viet Nam on January 23, 2020, three waves of outbreaks took place in the country (by April 2021). In response, the Vietnamese authorities took swift action through testing, contact tracing, quarantine and social distancing measures to curtail the spread and limit community transmission. Therefore, Viet Nam continues to be commended for its early, low-budget, contact-tracing, isolation and treatment response, which has led to a relatively low number of cases compared with some of its ASEAN neighbours. Nevertheless, the COVID-19 pandemic has substantially affected the economy and most vulnerable people and household businesses.

Output and revenue in Viet Nam's manufacturing, tourism, and transport sectors all dropped sharply during Q1 of 2020, while agricultural commodities produced for export have also been affected. An increase in inflationary pressures and a significant reduction in GDP growth in 2020 were projected. Based on the RIM survey 2 conducted by UNDP Viet Nam; 63% of all households experienced at least one of these employment impacts (members laid off, temporary break from work, reduced working hours) of the pandemic. The poverty rate of the affected population increased substantially between December 2019 and October 2020 across poverty lines used and across different segments of the population. If a World Bank's poverty line of USD 3.2 is used,, the poverty rate for the affected population rose from 6.4% (Dec. 2019) to 15.1% (Oct. 2020).

The percentage of households using electronic payment increased to 10.1% of households in October 2020, from 6.9% in April 2020. Such a change is encouraging, indicating Viet Nam is turning challenges into opportunities for accelerating digital transformation. 13% of households did online shopping.

COVID-19 Impact on Waste Management in Viet Nam

As mentioned above, the pandemic has seen a surge in single-use plastic driven by a number of factors, such as the spike in home delivery, the (incorrect) fear of virus transmission via reusable packaging, and the daily use of protective equipment globally. Although Viet Nam rapidly ramped up management of infectious and occupational health in national hospitals, the lack of systematic segregation of waste poses

a risk to waste workers and citizens alike. Beyond the increase in plastic litter, there is very limited understanding among Vietnamese citizens of the health-related effects of hazardous waste.

In Viet Nam, and more widely across ASEAN countries, the enormous volume of untreated masks and other protective materials being discarded without clear disposal guidance has been described as a 'time-bomb', posing serious potential health and environmental challenges. This waste includes both medical waste from healthcare facilities as well as discarded PPE such as masks used by the general population. Inappropriately discarded masks also pose a threat to the environment, including marine, terrestrial, and avian life.

The pandemic's impact on employment has been dramatic, with an estimated 31.8 million workers in total having either lost their job or had their working hours reduced in September 2020, according to a report by Viet Nam's General Statistics Office. The impact is particularly pronounced for poor or near-poor segments of the population - UNDP's initial rapid consultation with the Women's Unions in the five provinces/cities covered by the DWP5C project indicates that urban poor and near-poor households are facing extreme difficulty due to loss of income and increased expenditures/livelihood costs. Poor households are worried about the coming months and do not have the financial resources and assistance to overcome difficulties. Migrant workers, such as waste collectors and street vendors, recorded a sharp decrease in income during the first months of 2020.

Despite the intended results of preventing vulnerable people from falling into poverty, the Government's SP support policy has faced several challenges in both its design and implementation. Some of the challenges impeding the effective delivery of the SP package include complicated rules and procedures for identifying and verifying eligibility, which have prevented several targeted groups from accessing it (e.g., informal workers who lost their jobs and/or experienced drops in income to below the poverty line). The feedback from surveyed MSMEs concerning the Government of Viet Nam's support during the pandemic identified 3 main difficulties: access to specific information about the application procedure, filing applications for support, and the verification process for support approval. 17.5% of households received some form of support. The support coverage was modest as compared to the percentage of households affected by the pandemic (63.3%).

The targeting program has so far done well with regards to the “fixed” targets, as evident by positive assessment of the support by the recipients as documented in RIM 2 survey. However, it generally failed to hit the “moving targets”, i.e., unable to deliver the support to people in the so called “missing middle” who are not the program’s list, but are hit hard by economic shocks. Although the Government’s Resolution 42 intended to support numerous groups of informal workers, the lack of information and the resultant high transaction costs of verification of eligibility of the spatially and occupationally mobile workers often prevented them from accessing the support package. Although the need for informal workers to access the support declines as the economy is recovering; important lessons need to be learnt to improve the coverage, speed and thereby the effectiveness of the social assistance program in the future.

1.4 Role of Informal Sector/Waste Workers in the Formal Waste Management System

Profile of Informal Waste Workers

The informal sector plays a pivotal role in the solid waste management system in Viet Nam as over 30% of the waste is estimated to be collected through this channel. The majority of IWWs are women. Also known as 'Dong Nat,' they buy or collect waste from households to resell to larger recyclers, which supply craft villages. Between 10,000 and 16,000 waste pickers work every day in Hanoi and Ho Chi Minh City respectively. Their role in material recovery and diverting waste from landfills is often overlooked by both the local authorities and the authority-licensed municipal waste collection services. Although IWWs in Viet Nam are often portrayed as dirty, poor and at the bottom of the waste sector, these IWWs are in fact the real workhorse of the waste collection system in Viet Nam and make a significant contribution to the economy and society - if they did not exist, the country would be facing even more insurmountable waste management problems.

The typical Informal Waste Picker (IWW) is a middle-aged woman on a bicycle going through pre-selected neighbourhoods to pick up waste either from her established contacts or randomly from households/businesses, earning between 100,000-200,000 VND/day. An established network is the main work resource for any IWW. As waste picking is not exactly a highly desirable job for most people, IWWs only enter the business on the advice of a trusted contact. They are vulnerable to fluctuating prices, exploitation by waste aggregators and traders, health hazards and injuries etc.

The comprehensive research and surveys of IWWs conducted by UNDP in Da Nang provided a number of insights into IWWs working lives and social conditions. Although IWWs are working independently, their livelihood is related to the quality of their professional networks. By establishing long term relationships with business contacts, they can avoid collecting trash from the streets and the bins, but rather directly collect from them. IWWs also suffer from societal stigma and poor social status, a lack of recognition, and general misconceptions about them among the general public. In Da Nang, for instance, our study estimated that they recover between 7 and 10% of municipal waste, which considerably reduces the amount of waste brought to the landfills.

The relationships between the formal waste management system, the informal waste sector, the collection and segregation centres, and households and businesses are complex and multi-faceted. For example, in Da Nang, it was found that IWWs play a significant role in the overall recovery of recyclable waste, with a total collection rate of between 6% and 7.5% compared to the volume brought to the landfill (approximately 1,000 tons per day). In Da Nang, it is clear that the formal municipal waste management and the informal waste sector are already intertwined, however, this relationship currently exists only at an informal level. This includes municipal waste workers segregating tradeable waste from their collection points and selling it to informal aggregators; municipal waste workers informing IWWs about larger amounts of tradeable waste identified on their route that cannot be picked up; and IWWs supporting municipal sites by keeping them clean. These collaborations showcase the strategic integration and collaboration between the informal waste sector and the overall waste management system.

Impact of COVID-19 on Informal Waste Workers

As mentioned above, IWWs' informal status has meant that they have fallen outside of the SP package put in place by the Government of Viet Nam. Many women IWWs eke out a living by collecting, sorting waste, and selling materials for recycling. During the COVID-19 lockdown, many businesses activities slowed down or came to a complete halt, which significantly reduced the amount of tradable waste being generated. Unable to wander the city searching for waste, many informal waste workers lost their primary source of income, and had to return to their hometown during the cities' lockdown. Moving to other jobs during a pandemic may often mean workers are accepting higher health risks and lower income (or taking on multiple jobs, as reported by the media).

During the peak of the pandemic, almost 60% of surveyed informal workers were considered poor, while a further 6% were considered near-poor. Based on the other results stating they could use their savings for two months approximately, it can be expected that a very abrupt reduction in income would push these informal workers to move from transient to chronically poor. It is expected that Phase 1 and the inception activities of Phase 2 While transient income poverty decreased in May 2020, the fewest improvements were observed among informal workers and women-headed households.

In addition to economic loss, informal waste workers face high exposure to biological and chemical hazards due to their precarious working conditions and their daily work. Specifically, during the pandemic, waste workers faced greater risks of being exposed to contaminated materials if these are not properly disposed of by households, quarantine facilities, and hospitals. UNDP will collaborate with the health-environment programmes to access and communicate the risks of leakages from the facilities (if any). Besides, their fragile households often live on the edge, in unsanitary shelters and face the risk of falling back into extreme poverty. Moreover, many are migrants from other provinces who are currently unable to send remittances back home due to their lack of income, which may jeopardise the education of their young children.

II. STRATEGY

2.1 Objectives and Theory of Change

The objective of Phase 2 is to deploy and test a range of interventions (including on the ground support interventions for IWWs, a sector-focused WM model in fisheries, and an ecosystem-level approach at innovating the value chain through an MRF), and then refining these models based upon the deployment and learning with a view to continued and scaled-up deployment supported by a programme of capacity development and knowledge creation, sharing and dissemination.

The rationale for the project is twofold: (i) the significant, yet overlooked, roles undertaken by the informal sector in waste collection and segregation; and (ii) the lack of local waste and recycling collection centres that respect environmental and social standards.

The theory of change for this project is that enhanced community capacity for waste management, when supported by an effective enabling environment and the adoption by municipalities and businesses of the circular economy principles, will contribute to delivering sustainable and transformative solutions.

The hypothesis is underpinned by the following design features: (i) strengthening and empowering local waste workers and associations to play an increasing role in waste management; (ii) engaging with the government in responding to policy frameworks' objectives and testing regulations that are conducive to the sustainability of the pilots; and (iii) adopting an innovation-focused approach, and establishing a series of interventions to quickly learn and assess/evaluate the sustainability and effectiveness of supports to the informal waste sector; and (iv) establishing mechanisms to disseminate learnings at regional/national levels conducive to the scaling-up of the pilots.

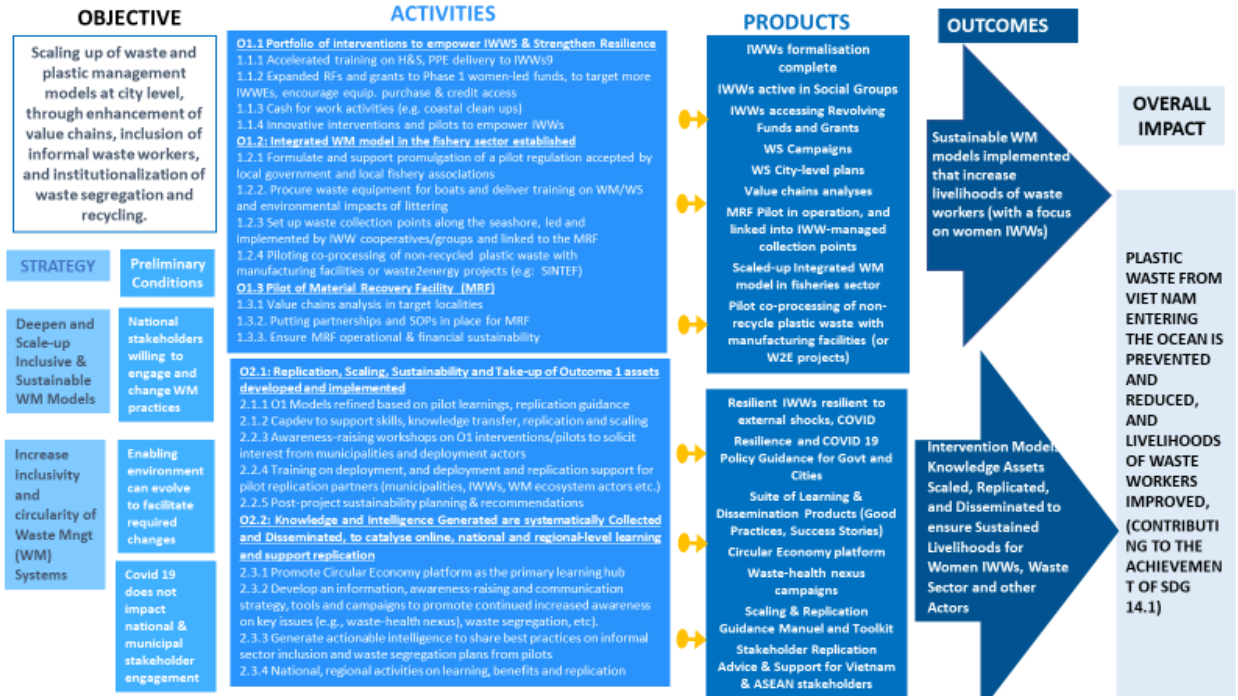
The piloting of different intervention models during outcome 1 – covering a series of on-the-ground IWW support interventions, a sector-level approach and an ecosystem-level value chain approach – will allow the models to be tested, including the level of support inputs such as capacity development and training, and the requirements at the enabling environment level to allow the models to function effectively. The learning from this process will allow the models to be refined and adapted as necessary, with a view to facilitating their take-up for scaling and replication, along with implementation support, while the knowledge assets and toolkits created will be made available at both national and regional level.

The project structure reflects this causal flow of effect, with the structure comprising 2 outcomes:

Outcome 1: Sustainable models of waste management that increase livelihoods of waste workers (with a focus on women informal workers), implemented

Outcome 2: Scaling and take-up of sustainable and inclusive waste management models and interventions through replication support, capacity development and knowledge-sharing

Figure 1: Overview Theory of Change – Phase 2



Objectives and Expected Impacts

The combined Phase 1 and Phase 2 of this Project will contribute to the achievement of the following impacts:

- Contribution to poverty reduction, through increased income and livelihood opportunities for the waste workers and in particular women and the informal sector, directly contributing to SDG1' Poverty Reduction'.
- Promotion of women empowerment, through training and access to revolving funds, that will help in building the social and financial capital of waste workers, and in this process contributing to SDG5' Gender Equality'.
- Contribution to environment protection, through the implementation of sustainable value chains that reduce the amount of waste burned or landfilled, while encouraging the collecting and reuse of recyclable materials, thereby contributing to SDG9' Sustainable Consumption and Production' and SDG11' Sustainable Cities and Communities'.
- Prevention of marine plastic pollution, through increased engagement of the fishery, contributing to SDG14' Life Below Water'.

Enhancement of DWP5C Phase 2, building on Phase 1

Phase 2 builds on, deepens, and scales up the intervention's achievements, lessons and good practices obtained over the course of the implementation of Phase 1. It also utilises the results of the UNDP RIM-2020 survey, the rapid impact assessment conducted with Women's Unions during COVID-19, and the research on the informal waste sector conducted in Da Nang.

Under Outcome 1, Phase 2 will develop and deploy models of collection/recycling centres and fishery/waste management models, that fully include and enhance the roles and contributions of the informal waste workers, along the plastic and waste value chains. During the deployment of these pilots, the project will also seek to optimise the prospects for these models to become as financially viable/performant as possible, and in a 'living lab' type approach explore what factors can help to optimise delivery performance and results.
Under Outcome 2, the project will refine these pilot interventions based on the implementation and wider learning experience, with a view to delivering bigger results and strengthened resilience of informal waste workers. Refining and improving these models will be key first step to being in a position to scale or replicate these models, which in turn will require; while building the capacity of institutional and delivery partners and creating actionable intelligence and knowledge.
The strong focus on scaling and replication will also be accompanied by a comprehensive approach to optimising prospects for success by developing replication guidance manuals and toolkits, to ensure the knowledge bank developed can be fully available to engage and encourage other stakeholders across Viet Nam and across the ASEAN region to take up the sustainable waste management agenda.

Table 1 summarises the key activities and results expected to be delivered under Phase 1 and Phase 2 and how these will complement each other to achieve maximum impact.

Table 1: Comparison of activities between Phase 1 and Phase 2

Areas of work	Phase 1 – Replication of the Hoi An model (2019-2021)	Phase 2 – Expand Support and Scale-up models (2021-2023)
Component 1: SCALING-UP SOCIALISED MODELS OF WASTE MANAGEMENT WHICH INCREASE LIVELIHOODS OF INFORMAL WASTE WORKERS		**OUTCOME 1: SUSTAINABLE MODELS OF WASTE MANAGEMENT THAT INCREASE LIVELIHOODS OF WASTE WORKERS (WITH A FOCUS ON WOMEN INFORMAL WORKERS), IMPLEMENTED**
Partnerships (and scaling-up)	• Selection of local partners to implement the sub-projects through the UNDP/GEF Small Grant Programme in 5 sites	• Expand beneficiaries in Quy Nhon, Ha Long Bay, and/or Da Nang/ Hoi An
Integrated models of waste management	• Small scale (18 wards and households) with limited interventions • Relationships developed with core groups of informal waste workers • General training on waste segregation with pilot of two categories: organic and recyclable waste.	• Scale up 2 models (fishery sector and Material Recovery Facility) • Extensive training on waste segregation, with pilots on three categories: inorganic, recyclable and other waste.
Support to informal waste workers	• PPE provided to 600 informal waste workers (120 for each of the 5 sites) • Basic training on health and safety • Revolving funds serving 60 waste workers per site	• PPEs provided to another 600 informal waste workers • Social inclusion and acceptance of informal waste workers with the establishment or support of cooperatives/sub-unions • Training of women waste workers on cooperative management, financial literacy, self-development, leadership and communication skills • Training on simple recycling technologies (plastic cleaning and shredding, composting, fishing gears and equipment etc) • Expanded Revolving funds serving up to 300 IWWs to secure safe and modern equipment • Cash for work activities targeting 800 IWW
Linkages between formal and informal waste management	• Mapping and promoting information sharing between different stakeholders on solid waste • Multi-stakeholder consultations in each site,	• Enhance collaboration between the formal waste management system and IWWs through joint waste segregation campaigns • Develop partnerships between waste workers group (under Women's Union), with scrap

	including local government, waste workers, CSOs etc.	traders and the material recycling facility and the fishery pilots
Acceleration of innovation		• Series of bottom-up innovative interventions to empower IWWs and increase the livelihoods of IWWs
Component 2: FAST TRACK THE INTRODUCTION OF CIRCULAR ECONOMY PRINCIPLES		**OUTCOME 2: SCALING AND TAKE-UP OF SUSTAINABLE AND INCLUSIVE WASTE MANAGEMENT MODELS AND INTERVENTIONS THROUGH REPLICATION SUPPORT, CAPACITY DEVELOPMENT AND KNOWLEDGE-SHARING**
Communication & awareness	• Baseline study of KAPs of citizens on plastic • 2 Local events in each project site • Communication campaigns in 5 provinces • Mobile app to map trash hotspot developed and linked with MONRE/VASI policies • Lessons learned shared among the five cities and at national level	• Media campaign to raise awareness on reduction of plastic pollution/ and circular economy for waste • Collaboration with youth union on beach clean-up campaigns /waste audit and innovations to beat plastic pollution • Awareness raising /campaign among young fishermen groups "bring home plastic waste, fishing gears, nylons" • Full rolling out of a mobile app to map plastic hotspots in Binh Dinh
Engagement and training of business	• 10 business trained on the adoption of Circular Economy principles in 1 province	• Capacity building, technical support and engagement of the waste management ecosystem (recycling business, MRF, MSMEs operating in the sector) • Enhancement of the relationships with the IWWs to increase their livelihoods
Policy and institutions	• Local regulations adopted/ strengthen on waste management • 1 pilot experimentation in Da Nang on waste segregation • 1 network and a Circular Economy platform is proposed and approved	• Collect and update all learnings on the Circular Economy platform led by ISPONRE • Policy advisory to MONRE and MARD and PPCs related to Directive 33, especially policy and local regulation for implementation and replication of models from Outcome 1. • Learning and advocacy for a better inclusion of IWW in the municipal waste management system
Knowledge/ collective intelligence	• 5 waste profiles developed for each site • Mapping of the full lifecycle of plastic in one site	• Mapping of waste value chains for 3 streams of waste in 1-2 sites • Gender perspectives across the integrated system of waste management and entry points for gender empowerment

	• 1 Comprehensive research on the informal waste workers in Da Nang	• Establish community learning hub on waste management operated by Women's Union (waste tour) (key facilitators: IWW/traders/restaurant owners) • A suite of attractive *deployment, scaling and replication guidance manuals and toolkits* for key 'waste movers', in particular national government and municipal policy setters and implementers; based on the learnings under Outcome 1.

2.2 Key Beneficiaries and Target Groups of Phase 2

The primary beneficiary group of Phase 2 are the waste workers and in particular the women and informal sector. This group is often marginalised because of their social status, poverty levels, lack of recognition by the municipalities, etc. They are typically middle-aged to older women, often over the age of 50, who have been working in the informal waste sector for 15 to 24 years. 70% do not have any other employment beyond waste picking, meaning that they rely solely on this income. IWWs can earn, on average, from 1.3 million VND (US$55) to 5.2 million VND (US$223), per month. They work on average 4-5 hours per day, while the rest of their time is dedicated to other household duties.

Investing in the informal sector represents an effective mechanism for improving waste management systems – in particular the collection, segregation, and landfill diversion of waste – while simultaneously improving their working, health, and sanitary conditions and contributing to SDG1 of reducing poverty. Phase 2 intends to change the narrative that depicts informal waste workers as a city burden generating pollution, by putting forward the economic and environmental value that this stakeholder group brings to the system through waste recycling in general. Waste workers are in fact conducting a utility service for free, yet they crucially lack recognition from the city management.

Secondly, the project will benefit local municipalities and representatives of mass/representative organisations. This includes Women's Unions, as well as professional associations such as the fishery associations and waste management system bodies. Under Phase 1, the Women's Unions have received the UNDP/GEF Small Grant Programme to develop multi-stakeholder collaboration with local partners, implement local models of integrated waste management, and establish revolving funds serving the IWWs. Phase 2 takes a deep dive in 1 locality (Quy Nhon in Binh Dinh province) and will continue to build their capacity through the establishment of the Material Recovery Facility and waste segregation campaigns.

Thirdly, the project will support Micro, Small and Medium Sized Enterprises (MSMEs) in the waste sector, including waste collection points and consolidation centres. Many MSMEs are essential actors in waste value chains and some of them are included in the formal economy since they are required to have land titles and pay taxes. However, many do not apply environmental standards and are driven solely by market prices, which means they dispose improperly the materials that are not valuable. Similarly, the

project will also entail benefits for the other actors in the waste value chain (such as aggregators, processors, traders, small-scale recyclers).

Fourthly, the project will support the Government of Viet Nam, and in particular the Ministry of Natural Resources and the Environment (MONRE), in the implementation and enforcement of current and upstream legislation on waste management and the circular economy.

Other beneficiaries, at a more indirect level, will include some of the above stakeholders (e.g., municipalities) in areas of Viet Nam not targeted by the project, who benefit from the project experience exchange, good practices and dissemination experience, as well as regional stakeholders such as other ASEAN governments, municipalities and possibly international financing agencies (IFIs) who adopt the model in their financing and investment portfolios. Similarly, the citizens of the beneficiary municipalities, who will derive some benefits from improved and more sustainable waste segregation and some reduction in public health risks.

2.3. Gender as a Cross-Cutting Objective

During COVID-19, gender-based roles and gender stereotypes have come into sharper focus, manifesting themselves for example in increased work burdens on women for responsibilities associated with care and domestic work, which was also accompanied by an associated higher risk of infection from routine household tasks such as purchasing daily necessities, as well as a higher risk of gender-based violence as expressed in respondents' to UNDP survey sharing about higher tensions and stress at home.

Most informal waste workers are women, but men and women do not collect the same streams of waste: men generally use bikes and collect metal, which is the highest-value waste; whereas women do not have access to the recyclables with the highest value. Due to their precarious working conditions, including night shifts, women waste workers are also at increased risk of violence.

The project is designed to benefit and support women waste workers in many different ways. It includes financial support, vocational training, as well as activities designed to address the social exclusion and stigma issues than often come with this work. The establishment or strengthening of unions and cooperatives has proven to be an effective mechanism in other countries to strengthen women leadership, foster a sense of community, and encourage collaboration and peer to peer moral support.

In order to foster the efficiency of the waste recycling value chains and improve environmental sustainability, Phase 2 will engage with the "intermediaries' (aggregators, processors, traders, small-scale recyclers) and train them on environmental technologies and standards. The module will also include some basic training on the waste hierarchy, the risks posed by pollution to health and the environment etc.

During implementation, the project team will seek to locate gender at the heart of the project in a truly-cross-cutting manner. This will involve not only monitoring and reporting on IWWs and beneficiaries in a gender-sensitive manner, but also bringing a gender-lens in a holistic manner to the work on stakeholder

engagement and ecosystem strengthening, support for replication and scaling, etc. This would mean for example including a clear gender dimension to the Guidance Package on Replication and Scaling. The team will also consider how the project can possibly generate new learning/bring a pioneering approach on the gender dimension, such as by considering the financial (and other indirect) costs and benefits of female IWWs in dealing with the less lucrative areas of waste that male IWWs tend not to favour, as well as the indirect societal benefits (family, family health, safety and education for children etc.) from female IWWs that are gainfully employed and supported. We would also explore if a costs-of-inaction approach could be implemented in calculate the various levels of cost from not taking action (e.g. the cost of not supporting an IWW that is at risk of losing her work due to e.g., COVID -19 impact is not just the loss of her income, but increased vulnerability risk, as well as follow-on risks such as her children in a more precarious situation, education and schooling risks, health risk etc etc.)

2.4 New-normal

Phase 2 of the DWP5C is designed for the implementation in the 'new normal' environment of "co-existing with COVID-19." Given the profound socio-economic impacts of COVID-19, marked by a surge in inequality and uncertainty, the design of the project combines core activities to build the resilience of vulnerable households, with a technical support to the local and national governments to continue fostering an enabling environment for enhanced sustainable waste management in cities and in Viet Nam.

The design of Phase 2 allows for flexibility in activity implementation in order to quickly respond to changes such as the emergence of new COVID-19 cases, a city lockdown, or further directives. Recognising the fast-changing nature of the current situation, the project may reallocate the sequence of activity delivery in order to deliver an effective, sustainable, and gender-sensitive project. It will also design agile activities to respond and adapt quickly to new potential shocks.

The significant focus on the creation of attractive knowledge products and the development of engaging toolkits and guidance manuals for key stakeholders to facilitate learning and accelerated take-up and replication of the project's models – inside and outside of Viet Nam – is also designed to provide further project resilience by allowing for a significant e-push in high-quality online engagement, communication and dissemination and stakeholder value even in operating environments that might be heavily restricted by COVID-19 (e.g. travel restrictions, social distancing requirements that complicate medium-size events, etc.). This will also help ensure a high visibility for Norway regardless of the COVID-19 situation.

2.5 Moving from traditional approaches to portfolio design to address uncertainty

This project aims to support waste workers, and in particular, the women working in the informal sector. Given these beneficiaries' typology, this project intends to experiment with a new way of working in line with UNDP' Accelerator Lab and Deep Demos new programmatic responses to wicked development challenges. By doing so, it intends to take a more modest approach towards reality.

The informal sector exhibits specific characteristics: self-employed, micro-enterprises, rarely integrated into socio-economic plans or covered by social packages, extraordinarily diverse and multi-sectoral, multi-activities, cross-provinces, underestimated in official statistics. Due to their informality, informal workers

rarely can benefit from support packages; therefore, supporting them presents a number of challenges, which calls for a different approach to development. In addition, and this is exemplified by the COVID-19 pandemic, the strict planning of activities to achieve pre-defined results applied to informal employment will likely be irrelevant. No matter how we plan it, humans have their behaviours. We shall acknowledge that, only by interacting with complex systems, can we intervene.

Overall, it is critical to keep in mind that the mechanisms to formalise and socialise the waste workers are highly context-specific and will differ from one city to another. This is why the mechanisms to formalise and socialise the waste workers across different city settings will be highly scrutinised under this project. These will then be highlighted in the guidance material produced for national governments and municipalities to help them plan the replication and deployment of the models developed and validated by the project. Overall, Phase 2 supports the development of an enabling environment conducive to better recognition of informal waste workers since it is clear from Phase 1 that this informality represents an impediment to an increase of their livelihoods and working conditions.

Phase 1 allowed us to draw some key lessons such as: the behaviours of informal waste workers is not predictable, or linear, or only driven by market prices, it is highly context-specific, and depends on several social networks; vast discrepancy exists among the group in terms of livelihoods, experience resulting in different levels of (in)formality. The study conducted under Phase 1 about the informal sector routes in Da Nang has proven to be invaluable source of insights to design the next sequence of activities, address gaps, and mobilise additional funding. Yet, it is clear that the informal sector in Binh Dinh will behave differently. We don't currently have the answer to the question 'How can we increase the livelihoods of women working in the informal waste management sector in a sustainable way?'

Therefore, under Output 1.1 (Component 1), this project makes the assumption that, when dealing with such a complex situation, our main focus should be to understand the system, and from there rapidly designing a range of interventions that we would pilot, test, assess and through a well-established learning loop with our local government partners. Our intent is clear: we aim to empower informal waste workers & strengthen their resilience to withstand shocks, taking into account the gender specificities of the sector. In doing so, we put in place a number of principles such as:

- Collaboration and information sharing generously
- Rapid testing and feedback loop
- Ethnographic approach and research, rather than quantitative tools
- Continuous learning and adaptation towards the defined outcome

Under Output 1, we will partner with the EU Rethink Plastic programme, the Hanoi University of Architecture, and other NPAP network members to share resources, insights, and methodologies to design cross-cutting transformative portfolios and develop new social narratives around the role of informal waste workers. The funding allocated under this Output will enable us to manage the portfolio dynamically while generating regular insights at the provincial, country, and regional level. The programme will apply the portfolio approach methodology and related tools we developed in Viet Nam and intend to build and embed these local governments' capabilities.

Since this project intends to strengthen the resilience of informal waste workers, a number of suggestions were extracted from the UNDP- RIM 2 survey, related to the factors that would help their inclusion under

the formal system of social protection, as follows. Firstly, it is important to move from a residence-based system of social protection, which excludes Vietnamese migrant workers, to one based on national citizenship. Secondly, digital technologies would help to substantially cut down transaction costs associated with eligibility verification and delivery of cash handout to recipients. The latter is a big challenge during times of lockdown, and when there is a need to reach out to people in remote areas in a rapid manner. Accelerating inclusive digital transformation in tandem with the Government's plan to abolish the resident registration (Ho Khau) in 2021 and with the recently started pilot of mobile money would mark a turning point in the reform of the social assistance program in the digital age. It is also worth considering central government matching grants to provinces with limited financial resources to increase coverage and accelerate implementation

Figure 2: From Planning to the emergence

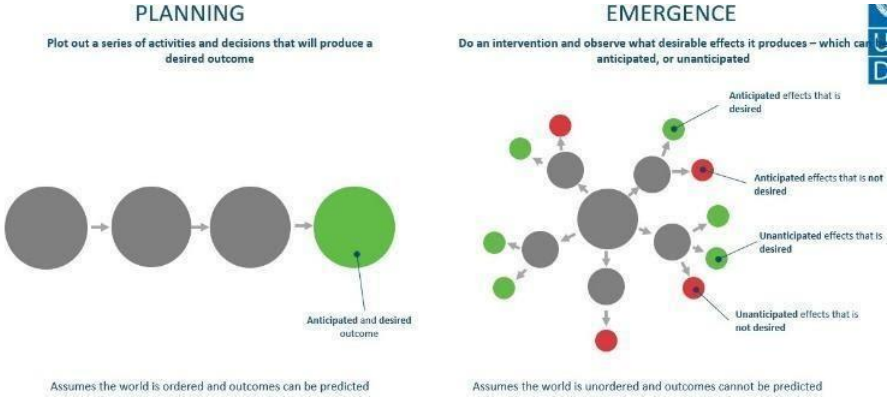


Figure 3: From Business as Usual to future practice

From Business as usual		To Future practice
Measuring to validate and justify	MEASUREMENT	Measuring to learn and, improve
Validating decisions already made	DOCUMENTATION	Documenting practice to enable new possibilities
Centralised planning & control	MANAGEMENT	Empowering local accountability and variance
Retrospective focus on processes and outputs	PERSPECTIVE	Forward-oriented focus on effects and conditions
Updating logframes and reporting on projections	DATA	Assessing outcomes and their link to strategy
Stabile measurement indicators and probabilities	INDICATORS	Continuous development and adaptation
Supporting traditional project management	APPROACH	Supporting portfolios of complementary activities

2.6 From Pandemic Management Success to Waste Management Success?

The current crisis can also be seen as a real opportunity for learning and creating positive and sustainable change. As seen, Viet Nam faces considerable challenges in creating a more sustainable waste management system, as part of the wider challenge it faces with regard to environmental and climate change challenges.

On the other hand, Viet Nam has been more effective– relatively speaking – in dealing with the COVID-19 crisis, and it is possible that some learning can be extracted from this experience to help the Government start addressing more effectively and urgently the waste management challenge (and wider environmental challenges). The COVID-19 experience has shown policy makers the value or acting with urgency, taking the right measures at the right time, and developing collective vision and encouraging innovation and experimentation. This project can make a contribution to this process, as it already builds on a Phase 1 that used innovative approaches to tackling Vietnam's acute waste management crisis, and now seeks to bring further innovation, fresh thinking and an ambition to scale and replicate such innovation solutions.

III. RESULTS

3.1 Norway cross-sectoral themes

Climate and Environment

Municipal solid waste (MSW) management is currently one of the major environmental problems facing Viet Nam. Improper management of MSW causes adverse impacts on the environment, community health, and socio-economic development. This project is built on the recognition that the current waste management system is causing significant environmental damages in Viet Nam, and that the scale of this environmental degradation is increasing apace with the rapid growth in municipal waste. Within this, there is also significant degradation alone due to plastic waste, which accounts for more than 10% of total solid waste.

Human Rights

A rights-based approach is at the core of Phase 2 of the DWP5C, taking due account Norway's longstanding frontline reputation and legacy of contribution in this area. Firstly, the primary target group that will benefit from this Project - Waste Workers and in particular, the informal sector– represent a vulnerable group who operate in a relatively high-risk and non-regulated work setting. Their unregulated and non-organised activity deprives them of the rights that many workers can take for granted, such as the right to safe working conditions, the right to be protected from dangerous substances/materials, the right to work in an environment with safe/acceptable levels of pollution. Not only that, but their precarious work and livelihood conditions also entail significant risks for their children and wider families. COVID-19 has provided a stark reminder of their significant vulnerability to such shocks, while the experience in other countries (e.g., India) shows how the pandemic has rolled back decades of progress in tackling child labour and exploitation.

A real strength of the proposed Phase 2 is the focus on sustainable development of women IWWs work activity, to support them increasing their income and providing increased financial sustainability (and stability) prospects, improved representation, organisation and recognition, and more sustainable integration into the wider municipal waste management system – and at the same time creating a more

environmentally sustainable waste management system and promoting a greener and more circular economy.

Gender (See also Section 2.3)

Gender is at the heart of this Phase 2 Project, in particular in the primary focus on Women IWWs. The wide range of support to women IWWs, not least in formalisation of their organisation in representative bodies, safety training and enhancement, improved formalisation and recognition of their role in municipal waste management systems, are just some of the ways in which this sector will become more attuned to the important contribution of women IWWs, but also help them develop their work activity, grow their income and become more resilient to shocks. This improved situation will not only lead to improved livelihoods for these women, but also have a significant knock-on impact on their families and households, leading to improved work and financial stability (and a reduction in the precariousness of their work situation). This in turn will lead to improved livelihoods for their households, in particular children and young persons, ranging from less risk of being forced to drop out of school, improved nutritional security, and more healthy lives (due to reduced financial, mental, emotional stress and occupational health risks). Importantly, as this Phase 2 is centred on building sustainable improvements in waste collection and management, and in the livelihoods of IWWs, these improvements are targeted to sustain beyond the project end.

Corruption

Anti-corruption/fight against corruption is not a core focus of this project. However, that said, the project seeks to increase the formalisation of IWWs, and the transparency of their work and involvement in the wider municipal waste collection and management system. In this sense, the project may indirectly contribution to reducing opportunities to corrupt or exploit IWWs, in particular vulnerable women IWWs, from those engaged in criminal or racketeering activities.

3.2. Expected Results

Outcome 1: Sustainable models of waste management that increase livelihoods of waste workers (with a focus on women informal workers), implemented

Output 1.1 Series of Interventions to empower IWWS, and strengthen their resilience to withstand shocks, including the impacts of COVID-19, implemented

Considering Section 2.5, this Output intends to utilise the sustainable livelihood frameworks to enhance the livelihoods, social inclusion, and social protection of women IWWs building and expanding Phase 1. The learnings under this Output will contribute to the activities of UNDP on resilience & COVID-19 green recovery guidance for municipalities and national government. Activities are twofold.

Firstly, the project will deliver direct support to an additional number of IWWs (building on Phase 1) in the form of PPEs, soap, masks, and hand sanitisers, and augment the dotation of the revolving funds established under Phase 1 to target more beneficiaries in 2-3 sites. Secondly, this Output will design a number of interventions that seek to respond to the following strategic questions: '**What is needed to increase the livelihoods of IWWs sustainably, empower them and strengthen their resilience to shocks, including COVID-19?'.**

The "GoVN Social Protection Support to the affected people by COVID-19" was designed to protect the livelihoods of vulnerable people and boost domestic demand, but it reached only a limited number of workers. Given that informal waste workers are not registered as a business, nor are they in a formally registered work relationship, they were unable to access the social protection funds established to support the most severely affected workforce. The experiences of the pandemic have reinforced the need to revisit the design of support transfer programs in Viet Nam. Therefore, under this Output, Phase 2 will design a number of pilots to test different protection support mechanisms and test their initial roll-out for a limited period of time to evaluate if the mechanism is sustainable in the long term. Activities under this Output may also assess the opportunity of collaborating with Viettel and VNPost, since both organisations are currently disbursing cash transfers to vulnerable households.

Activities will be centred around a series of innovative interventions to empower IWW, strengthen their resilience and social inclusion; including implementing a pilot in one site.

Cash for work activities

UNDP RIM 2 survey found that 57.4% of respondents had a reservation wage (i.e., the minimum level of wage they require in order to accept the work) of under VND 120,000 (if they live in urban areas) or VND 95,000 (if they live in rural areas). The former falls into a lower range of regional minimum wages for 2021 while the latter is well below the range. This implies that demand for public work in time of economic downturn is relatively high, while it is cost effective. Activities will be organized by local government agencies that have a backlog environment restoration that could be started and completed quickly. Such programs need to be designed and implemented in a fast and gender-sensitive manner to meet the differentiated needs of female and male workers.

Bottom-up Innovative interventions

Some of the activities included may include: offering a voluntary registration process for IWWs, enabling them to participate in the social system and receive basic health and social protection, give them access to morale and financial support mechanisms. Expanded access to credit is also critical for many vulnerable people that have been hit hard by the pandemic. The output may assess innovative solutions, such as supporting financial service providers that serve household businesses and micro and small enterprises working in the informal sector. Enabling intermediaries to bring digital financial services to underserved groups is also crucially needed. Such solutions should be designed and implemented with gender-sensitive approaches to address the chronic issue of women-led enterprises having less access to credit. Technological innovations, including mobile money and direct deposit options (e.g., through traditional top-up of phone card with small cash), have the potential to expand access to and use of savings accounts. Most recently, the Prime Minister agreed to pilot mobile money for two years, starting from 9 March 2021. This is a big step forward for promoting financial inclusion in general and raising savings in particular. This Output will continue to leverage the capacity of the UNDP's Accelerator Lab to identify and support promising innovations in the informal sector. The hypothesis underpinning the last activity is that informal workers are incredibly resourceful and, taken together, their individual innovations could have a spill-over effect at the ward, city, or even national level. It also aims at empowering those who are often left behind in the 'innovation' narrative and equip them with the technical and financial support they need to thrive and scale-up. Therefore, the project will strive to

promote grassroots innovations developed by informal waste workers, ensuring their scale-up and sustainability.
Finally, the project will design a robust monitoring framework to estimate the effectiveness of the above support and its impact on poverty reduction and resilience.

Activities include

1.1.1 Accelerate training on health/safety and disseminate PPEs to waste workers to cope with COVID-19: including, soap, masks, and hand sanitisers.

1.1.2 Expand revolving funds and grants to the existing women-led funds set up in Phase 1, and promote bottom up innovative solutions to empower IWW, strengthen their resilience and social inclusion, targeting additional informal waste workers to encourage the purchase of equipment and access to credits.

1.1.3 Implement cash for work activities (e.g.: coastal clean ups)

Output 1.2: Integrated waste management model in the fishery sector established

This Output is set to create additional income-earning opportunities for the IWWs in the fisheries sector, while encouraging waste collection mechanisms from fishing boats. The fishing industry is responsible for the majority of marine plastic pollution and a large proportion of marine plastic found on the shores. The activities under this Output will enhance the linkages among fishermen and women-led cooperatives. To do so, fishing vessels will be asked to bring waste back to the land, instead of discarding this waste in the sea. When vessels come back to the port, they will have the opportunity to dispose of the waste accumulated during their time on the sea, with the women cooperatives. The cleaning, segregation and reselling of recyclable waste will generate additional income for women waste workers organised into cooperatives (Output 1.1).

Where possible, downstream activities will be promoted, whereby cooperatives would be supported for instance, to transform fishing gears into commercial recycled products or to sell unrecyclable waste to cement factories. The activities under this Output will contribute to the implementation of the Viet Nam National Action Plan for Management of Marine Plastic Litter that set the targets to collect 50% of abandoned, lost, or discarded fishing gear by 2025 and put an end to the disposal of fishing gear into the sea by 2030.

The project will also link with cement factories and other manufacturing facilities to co-process non-recyclable plastic or pilot waste to energy models, collaborating with SINTEF,for instance. This is acknowledging that processing of plastic waste is the least desirable option of the waste hierarchy, yet the project will evaluate emission reductions brought by co-processing. Viet Nam recently submitted its Nationally Determined Contributions to the UNFCCC and waste to energy is mentioned as one of the key measures to reduce emissions from landfills.

Activities include

1.2.2 Conduct a Rapid need assessment, formulate and support the promulgation of a pilot regulation accepted by the local government and local fishery associations
1.2.3 Procure waste equipment for the boats and deliver training on waste management/segregation and environmental impacts of littering
1.2.4 Set up waste collection points along the seashore, led and implemented by IWW cooperatives/groups and linked to the Material Recovery Facility
1.2.5 Pilot of co-processing of non-recycle plastic waste with manufacturing facilities or waste to energy projects (e.g.: with SINTEF)

Output 1.3: An inclusive Material Recovery Facility for Improved Local Material Value Chain piloted and established

Currently, there is a limited increase in income opportunities for informal waste workers who sit at the bottom of the value chain. They collect, segregate, and sell recyclable materials to local aggregators, who then proceed to package it and arrange transportation to massive and centralised recycling factories, such as the hubs for recycling located near Ho Chi Minh City or Hanoi. The lack of city, district or even provincial recycling facilities hinders the development of waste management models that efficiently avoid the loss of materials and preserve their economic value. The transportation costs contribute to reducing potential profits and therefore exclude the majority of waste from the informal recovery system.

This Output intends to pilot the establishment of a Material Recovery Facility (MRF) that is financially and operationally sustainable and employs informal waste workers both as operators of the facility as well as suppliers of waste. The primary objective of this initiative is to identify, invest and build a systematic waste collection system in addition to setting up a traceable collection system through a focus on inclusion activities. It builds on the success of UNDP in India, who has established 25 MRF across the country (see Annex 5).

The project will set up the MRF system with principles of fair wages and no deductions of weight, fostering sustainable livelihoods for the informal waste workers. After reaching the premises of the MRF, waste will be sorted and segregated based on its qualities and thickness; and pre-processed (e.g., shredding, bailing, extruding, etc.) as per the end-use requirement. It will also entail the establishment of links with the municipalities on the collection processes. Several agreements will be signed with local business/NGOs selected in the city, through UNDP's competitive bidding process, for operating the recycling activities (i.e., collection, segregation, recycling etc.) and managing the small recycling centre. Other important agreements to be obtained include the certification signed with the waste workers of each city ward for collection and segregation of waste at defined pricing that they will receive, mutual agreements signed with the local municipalities for providing the land and for setting the recycling centres (subject to availability of capital like land/ space/ machinery), and mutual agreement signed with final end-of-life processors and other users/recyclers. Under this Output, the project will collaborate with the government to establish the list of official registered recycling for re-processing the different plastics and waste in an environmentally sound manner.

The Output will be designed as a blueprint for replication in Viet Nam and ASEAN. Learnings from the implementation in one city will be documented to aid in strategies formulation for replication in additional cities under a potential Phase 3.

Recently, the social enter**prise Evergreen Lab set-up** a waste collection/segregation facility in Hoi An, Quang Nam province. This MRF is at an early stage and mainly designed for engagement and awareness raising, no recycling activities are carried out here. However, this is also a positive sign for the establishment of the MRF in Quy Nhon and the project may engage this company to implement some elements of the MRF.

Finally, waste segregation activities intend to focus on a smaller size city Quy Nhon where there is strong leadership from the local policymakers to support the local roll-out of the campaign. It will build on the network of informal waste workers to uplift their knowledge and utilise their existing connections with households and businesses from which they collect waste. They will receive specific training that will build their capacity to meet with residents and communicate new initiatives, such as a waste segregation campaign, and advocate for better waste management practices. Since behavioural change is a critical aspect of waste segregation, this activity will put in place door to door campaigns, capacity building, training at schools, among other activities to promote segregation at source, build awareness, and educate on the 4Rs – Reduce, Reuse, Recycle, Refuse on waste segregation. Under this activity, the project will engage CSOs, who may for instance, wander the city announcing the importance of segregating waste at source, playing pre-recorded jingles and messages for the public microphone etc.

Activities include

1.3.1 Conduct a value chain analysis (including aggregators, traders and recycling facilities) & map the informal waste sector (including gender-sensitive analysis) in the locality
1.3.2 Design/facilitate partnership agreements between local government, waste management companies, recycling facilities, and informal waste workers (including allocation of land title, permit to operate, and bidding process to run the facility)
1.3.3 Establish and introduce Standard Operating Guidelines, procure machinery and oversee operations. Set-up revenue generation models for waste workers based on the supply of segregated waste
1.3.4 Ensure the financial and sustainable operationalisation of the facility (including business development opportunities by utilising the network developed under the EPPIC project)
1.3.5 Develop waste segregation plan and technical guidelines to support the implementation plan, including tailored guidance for each respective actor
1.3.6 Support for the procurement of waste collection and segregation infrastructures (including sorting equipment, bins) and setup in critical locations in the city and pilot extended waste segregation campaigns at schools, restaurants, hotels, beaches; including with the use of incentives to motivate stakeholders.

Outcome 2: Scaling and take-up of sustainable and inclusive waste management models and interventions through replication support, capacity development and knowledge-sharing

Outcome 1 is about testing deployment of a wide-ranging portfolio of interventions, including on-the-grown interventions for Women IWWs, a sector-specific approach (Fisheries Sector Pilot) and an ecosystem level approach (MRF). Outcome 2 is about distilling the knowledge creation and learning from this, creating a comprehensive set of guidance to maximise large-scale replication and scaling, as well as knowledge dissemination and learning, creating a detailed strategy and implementation plan.

The issue of waste management is fast-changing, complex and multi-faceted and requires multi-stakeholder collaboration at the national and local level. As observed during Phase 1, municipalities are often overwhelmed by the increase in the quantity of waste and the challenges of complex regulations, increasing number of players, and enforcement. This outcome comprises activities that intend to build the technical knowledge of local actors, strengthen their capacity to comprehend complex systems, and establish mechanisms to support enforcement of pilots, as well as innovations and plans/regulations. It will provide technical advice to MONRE and MARD at the central level, as well as to DONRE and DARD and mass organisations at the city level. In line with the commitments made by the Government of Viet Nam to promote a low-carbon and circular economy, Phase 2 will support the dissemination, uptake and adoption of these models.

The outputs under this outcome intend to build the capacity of key actors in the waste management systems, through a different set of interventions, the strengthening of institutional capacity, and the generation and dissemination of intelligence. Activities will also support the formulation of a new narrative that contributes to changing the ways IWW are perceived and open opportunity for being appropriately integrated and recognised as integral components of the waste management systems.

Outcome 2 has been deliberately designed to focus on a wide number of sustainability outcomes, as implied in the Output 2 title above, and specifically:

- Sustainability through Replication and/or Scaling – full replication or scaling of one of the outcome 1 pilot interventions
- Sustainability through targeted capacity development to support the above replication/scaling work, as well as creating comprehensive deployment and replication guidance material for deploying the Outcome 1 pilots
- Sustainability through sharing and dissemination knowledge, ranging from specific good practices (e.g., gender-inclusive informal waste management solutions centred on women IWWs) to presentations and full guidance packages on the models tested and refined during the Outcome 1 work
- Sustainability through working at the policy, regulatory and institutional level, by identifying areas for improvement, blockages etc., and preparing short policy briefs/discussion papers to feed into focussed policy discussion workshops with government, municipal and other WM stakeholders.

The outputs under Outcome 2 will follow a logical, process-driven process, and are structured as follows:

1. Output 2.1 focusses on development and implementation of the replication, scaling strategy:

a. the necessary preparation work – including (market) research, pilot refinement and documenting, development of capacity building and awareness-raising tools to plan a comprehensive and systemic sustainability effort encompassing Scaling, Replicating, Knowledge Creation, Sharing and Dissemination

b. implementing the above Scaling, Replicating, Knowledge Creation, Sharing and Dissemination work programme, and represents thus the biggest work effort under Outcome 2.

2. Output 2.2 is centred on a comprehensive knowledge creation, sharing and dissemination support programme, with a significant online dimension (in particular on developing the circular economy platform) to support the (above) Scaling, Replicating programme, as well as the capacity development and awareness work, as well as national policy workshops and the regional knowledge-sharing and dissemination dimension. The strong online dimension also provides increased resilience for any COVID-19 or other pandemic constraints that might emerge during the implementation cycle of the project.

Output 2.1: Replication, Scaling, Sustainability and Take-up of Outcome 1 assets developed and implemented

This output is critical in allowing the project team, partners and beneficiaries to consider how the learning and experience from the various pilots can be taken on board, and where necessary refining models and interventions as deemed necessary. It will involve reflecting how these models can be either scaled or replicated, (or both), to increase significantly their reach and impact on final beneficiaries such as women IWWs, as well as other target groups (fisherfolk, waste management stakeholders, municipalities.). This will include considering how to present the results and benefits as widely has possible, solicit interest from parties interested, and explain and train them up on the various models and how to implement them. This will require thinking on how the approach can be made as systemic as possible, and how maximum leverage and momentum can be built in, for example having a clear capacity development strategy that creates momentum and sustained capacity in target pilot replication hosts by training counterparts in a training-of-trainers approach.

This will be the most significant area of work focus under Outcome 2, given that it represents not just the planning and preparation actions but also the implementation of the comprehensive Replication, Scaling, Sustainability, Knowledge-Sharing and Dissemination. It should be emphasised that the preparation of the implementation of the scaling and replication will involve significant complexity. For example, in addition to the comprehensive approach on capacity development of target stakeholders at target sits that will be required, awareness-raising activities will also be required in numerous cases. For example, where the interventions are also looking to address at-source separation, significant stakeholder engagement and awareness-raising will likely be required, given that at-source separation is not commonly found in Viet Nam. Challenges include the lack of commitment from households to separate their waste, lack of infrastructure to collect segregated waste, the difficulties for the city municipalities to select a location to install the infrastructures, common complaints from the households with respect to the smell, health concerns etc.

Activities include:

2.1.1 Refine Outcome 1 Models and Interventions (IWW support, MRF, fishery sector pilot) based on pilot experience learnings, analysis and feedback, and develop detailed Guidance Packages to support replication and take-up

2.1.2 Develop a capacity development plan to support skills and knowledge transfer, a replication and scaling plan, and a knowledge sharing plan (national and regional dimensions)

2.2.3 Organise a series of workshops to raise awareness on the interventions/pilots under Outcome 1 to solicit interest from municipalities and actors willing to deploy one or more of the models

2.2.4 Create enabling environment for the implementation and replication of Outcome 1 Models and Intervention: support to policy at central level and regulation at local level; develop guidelines for access to finance

2.2.5 Develop a sustainability plan and the recommendations for post-project sustainability, including continued and accelerated replication and scaling of models developed

Output 2.2: Knowledge and Intelligence Generated are systematically Collected and Disseminated, to catalyse online, national and regional-level learning and support replication

Knowledge sharing will mainly focus on two features. Firstly, based on the learnings and trainings delivered under Output 2.1 (and earlier under Outcome 1), the project intends to share with the Government representatives in Viet Nam and ASEAN, practical strategies to scale-up the models to other provinces, with priority to the five project sites under Phase 1. Throughout this first area for knowledge sharing, the project aims to fast track the learning curve of all stakeholders when it comes to plastic reduction and waste management. Signatory of the Bangkok Declaration on Combating Marine Debris, Viet Nam has set ambitious targets in this regard, which is especially challenging given the country topography and its long coastline. This area of knowledge exchange will therefore look at plastic reduction from a waste management perspective in order to demonstrate the effectiveness of multi-stakeholder and cross-sector collaboration, building on the two pilot projects.

Secondly, the experience generated from the interventions to increase the livelihoods of informal waste workers (output 1.1) will be shared in Viet Nam and other countries; with a focus on the specificities of each pilot project and municipalities waste systems and the different strategies put in place to enhance their roles and recognitions. Informal waste workers play a predominant role in waste management systems across many ASEAN countries, such as Thailand and Indonesia. It is increasingly recognised that the circularity transition of urban centres cannot happen without them.

Also critical to the transition to a circular economy is the capacity of the government and its partners to sustain and scale-up successful practices, business models, and policies. As such, Phase 2 will also leverage bilateral and multilateral cooperation channels between the central and provincial governments, in addition to the ASEAN forums and working groups, to disseminate best practices across the region.

UNDP, through its Accelerator Lab networks – the world's largest learning network for development challenges – is well placed to collect, analyse, and disseminate actionable intelligence to the Governments and other development partners.

Activities include:

2.3.1 Promote and disseminate the Circular Economy platform designed under Phase 1 as the primary learning hub for government partners in plastic pollution reduction and waste management, update and manage the content based on the project learning

2.3.2 Develop information, awareness-raising and communication strategies, tools and campaigns to promote continued increased awareness on key issues (e.g., waste-health nexus), waste segregation, the strong contribution potential of IWWs in gender-inclusive green recovery

2.3.3 Generate actionable intelligence to share best practices on informal sector inclusion and waste segregation plans from the series of experimentations and promote exchanges among cities and countries including field visits

2.3.4 Organise national and regional seminars on Phase 2 learning, benefits and replication opportunities and engage with other national and ASEAN stakeholders, advising them on strategies and measures to implement waste models, as well as hosting site visits (onsite, or e-visits if COVID-19 restrictions require).

IV. PARTNERSHIPS

Under Phase 1 of the Project, UNDP/GEF delivered grants to the Women's Union and the Farmers' Unions based on their longstanding experience in community mobilisation, as well as their extensive network of actors, and relationships with the local government. Phase 2 will utilise these existing partnerships to reinforce community mobilisation and coordination of actors at the local level.

The project will continue to foster engagement with existing partners to mainstream the Circular Economy approach in Viet Nam. Through Phase 1, UNDP is supporting the formulation, establishment, implementation, and sustainability of the Circular Economy platform initiated by ISPONRE. Furthermore, it will collaborate with the systemic investing research on the circular economy being developed by development partners in Viet Nam to attract public and private funding to the Circular Economy business models in the project localities.

Pursuing the objective of deepening the target audience in each locality, the project will further assess, in close coordination with existing partners, the opportunities and practical mechanisms to collaborate with other mass organisations towards one shared goal of increasing engagement of citizens. For instance, the Ho Chi Minh Communist Youth Union (HCMCYU) has the capacity to mobilise 5.6 million members across the country and plays a critical role in bridging the gap between young people and the state. On Youth Environmental Day, they had planned a large-scale beach clean-up in Ha Long City, a project supported

by the United Nations Task Group Adolescent and Youth. Youth are critical actors in the transition to a sustainable economy, according to a recent survey by UNTGAY showing that their awareness of and concern about the environment is one their highest priorities.

In the inception meeting with the Binh Duong People Provincial Committee (PPC) to discuss potential scaling up of Phase 1, the local leaders showed strong commitment and assigned DONRE to be the focal point working with UNDP Viet Nam. The involvement of DONRE would bring advantages to the project formulation as DONRE is the Department in charge of regulation and management on solid waste, land allocation and usage which is vital part for the establishment of Material Recovery Facility.

Links with the Norad-funded Project Ending Plastic Pollution Innovation Challenge (EPPIC)

During Phase 1 of the Project, UNDP developed a strategy to ensure synergies with the Ending Plastic Pollution Innovation Challenge (EPPIC). Through Phase 2, the project will build on the entry points developed under Phase 1 and utilise new ones. Key entry points to ensure synergy of efforts between the two projects are presented below:

- The **introduction of the circular economy** principles to both waste and plastic management will be of utmost importance for Viet Nam as the country transitions to a low carbon economy and pursues the achievement of the SDGs. To this end, UNDP has developed a portfolio of projects spanning from energy efficiency, nature-based solutions, to responsible business practices, and green public procurement. The resources of both Norway-funded projects are central to this portfolio and will continue to be maximised to achieve an enhanced capacity of national and local partners; and increased awareness of businesses on resource efficiency.
- **Accelerate Inclusive Innovation**: The EPPIC sourced and selected a portfolio of highly contextual innovative solutions to address the issue of plastic pollution, such as: alternative materials, education campaigns, bio-fences, or mobile-app/gamification. Phase 2 will ensure that these solutions are mainstreamed and introduced to the local implementing partners, with the aim of sustainable establish some of the solutions in the project sites. This will require significant time and support, as innovation and entrepreneurship research show that supporting innovative solutions through development and testing up to market uptake requires significant support.
- **NAP on Management of Marine Plastic Litter**: UNDP through the EPPIC project has been supporting the Vietnamese Administration of Seas and Islands in the formulation and implementation of this national framework. The fishery industry is extremely affected by plastic pollution, while being one of the largest generators of plastic waste. Therefore, Phase 2 will develop integrated waste management model in the fishery/aquaculture industry, designed in a way that allows for knowledge sharing and rapid dissemination of lessons learned/best practices.

Phase 2 also complements the Ending Plastic Pollution Innovation Challenge (EPPIC) in the following aspects.

- **The circular economy approach is mainstreamed at the local and national level,** and mechanisms are in place to leverage and disseminate lessons learned from the models in the project cities at the national level. The upcoming platform on Circular Economy hosted by the Government of Viet Nam through the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) will contain a database highlighting essential resources and case studies from different sectors (including

the plastic industry), technical guidance geared towards businesses interested in transitioning to circular models, and an online and offline community of practice. Further, the platform will be designed in such a way that it can act as an entry point for Viet Nam to share their lessons learned with other ASEAN member states, such as their key successes around plastic pollution and waste reduction.

- **Phase 2 will also utilise and scale-up some of the innovations from the EPPIC Finalists** in the implementation of the interventions that support the social inclusion of waste workers for instance. Furthermore, the project may collaborate directly with some of the EPPIC winners during the design and implementation of the models of waste management in the fishery sector and the MRF.
- Both projects develop and **disseminate communication messages around waste prevention, waste hierarchy, waste segregation**, **health impacts of mismanaged waste**, etc. In addition, the mobile app will request users to precisely map plastic hotspots, which will further contribute to the mapping of the plastic lifecycle in one city currently being developed in Quang Ninh. Lastly, the Norway-funded projects are contributing directly to the formulation and implementation of the National Action Plan on Management of Marine Plastic Litter by 2030.

Lastly, this project intends to support and leverage all activities by utilising the innovation capability developed within UNDP Viet Nam through a number of projects (e.g. EPPIC, HackCovy, Youth Co:Lab, DNES, Imapct Aim). In particular, Phase 2 will continue to engage with the innovation networks established during the Norad-funded Ending Plastic Pollution Innovation Challenge (EPPIC) project.

V. KNOWLEDGE

This project put a strong emphasis on knowledge generation, leaning, and dissemination as outlined in the activities under Outcome 2. As such, it will develop learning and knowledge management mechanisms, including documentation of all aspects that may be instrumental in knowledge dissemination during and even beyond the project period to enable various stakeholders/ actors in the ecosystem to replicate the project template, both within and outside the project area. Best practices will be documented and published as lessons learned over the project period. The standard operating guidelines developed on process steps for the development of the Material Recovery Facility and waste management in the fishery sector will be made available. In addition, videos, infographics and briefs will be developed, reflecting the best practices on plastic and waste management, adopted through project initiatives. The knowledge material will be available in both English and Vietnamese to ensure the uptake by the local CSOs/NGOs and municipalities. The project will also continue working with UNDP Accelerator Lab, which promotes a 'working out loud' approach, ensuring that success, challenges and learnings are communicated widely.

Outcome 2 will utilise human-centred innovation and portfolio design as critical tools to achieve the desired outcome of building the capacity of different stakeholders operating in the waste management systems. This approach is gaining traction in Viet Nam among our government partners as well as

internationally with donors and development partners; therefore, we expect that the learning generated throughout the process will generate considerable interest and traction. In addition, the project will utilise established networks such as the National Plastic Action Partnership and the Development Partner Working Group on Plastic led by the World Bank and the upcoming ASEAN Center on Combating Marine Debris to share such results. Finally, the project will build on the already established some strong bilateral collaboration and communication channels with VASI (under MONRE) to maximise the uptake of the results of the pilot into the national policy frameworks and at the ASEAN level.

VI. SUSTAINABILITY

The project activities have been designed with sustainability at the core, as they are mainstreamed into the programmes of mass organisations and local governments. The project aims to build the capacity and capabilities of mass organisations, as well as local and national government partners, in the fields of integrated waste management and circular economy. In order to ensure the sustainability of the project after the end of Phase 1 and 2, UNDP will deploy a set of mechanisms.

The regular consultations with stakeholders, including local PPCs and DONREs, informal waste workers, CSOs, businesses, industry representatives, etc., will work towards the increased collaboration of local actors around the topic. The revolving funds established under Phase 1 and expanded under Phase 2 will ensure long-term access to equipment for informal waste workers. The mapping and studies of informal waste workers' contributions to urban systems and value chain assessments will provide useful learnings for the local government and partners alike to develop projects that yield high levels of social acceptance and ownership from the communities. In parallel to this project, UNDP will deploy technical advisories to the central and local government aimed at fostering an enabling environment for the development and uptake of circular solutions. Given that the incentives for plastic recycling facilities and alternative materials are mainly driven by market forces, they would likely receive long-term funding sources; as consumer-good brands are increasing the quantity of recycled plastic in their products. A further source of sustainable impact will be the significant learning and knowledge creation programme, which is designed to provide a suite of ready-2-go guidance manuals and replication toolkits for key stakeholders, and is also set up to be largely COVID-19-resilient.

Overall, the project has a significant focus on all four core parameters of sustainability – institutional sustainability, policy sustainability, and environmental and financial sustainability.

VII. RESULT FRAMEWORK

The result framework is included in Annex 1.

VIII. RISK ASSESSMENT

The table below sets out the risk assessment for the project, identifying internal and external risks. We attempt to categorise risks based on whether they are considered primarily an external or internal risk, but it should be noted that some risks have both an internal and external dimension.

Table Legend:

Internal Risk	
External Risk	

#	DESCRIPTION	RISK CATEGORY	IMPACT & PROBABILITY	RISK MITIGATION
1	General lack of registration of informal waste workers makes it difficult for CSOs to deliver support on-time	External risk Operational and Financial	P: High I: Medium	The project will use traditional and new mechanisms (such as digital/mobile payment, post-office etc) to reach IWWs and deliver support. Information regarding cash for work will be placed at strategic locations (landfills, aggregator, segregation shops), where waste workers meet.
2	Lack of trust/ social capital of informal waste workers	External risk Technical and Operational	P: Medium I: Medium	UNDP will identify 'champions' informal waste workers who can act as the ambassadors of the project, teach and mentor their peers. The CSOs will oversee the training under Phase 2, including capacity building on necessary soft skills such as financial literacy etc.
3	Environment and climate change Small and medium enterprises operating in the segregation, aggregation or recycling business may be unfavorable to incorporating environmental standards or changing their operations	External risk Technical and Operational	P: Low I: Medium	As part of the training, the project will focus on the economic benefits brought by enhancing recycling standards, such as the inclusion into national value chains, and the higher price of recyclable plastics. UNDP Viet Nam is also developing a comprehensive package to build the resilience of the SMEs, from which Phase 2 will extract key findings and recommendations.

4	Gender - Women waste workers may feel that the project implementing parties are insufficiently sensitive to their needs	External risk Technical and Operational	P: Low I: Medium	Project implementing parties will receive training and awareness-raising regarding women workers potential sensitivities. Participation by populations will be closely monitored, and grievance recourse mechanism to receive and address complaints will be established.
5	Gender Negative perception(s) from some stakeholder groups (e.g., male IWWs) regarding support for female IWWs	External risk Strategic / Operational	P: Low I: Low	The project will seek to improve the understanding of the role female IWWs and clearly present the nature and benefits of same, including for example that women IWWs are generally complementary in focus to male IWWs. Looking at both direct and indirect costs and benefits, as well as possibly the costs of inaction, may also be potentially important here.
6	Implementation delays due to COVID-19	External risk Financial and Operational	P: Medium I: Low	To date, Viet Nam has 600 cases, Da Nang and Quan Nam are quarantined. If the event of a new outbreak in one of the project locations, UNDP will focus efforts on specific outputs that don't require in-person meetings in other locations.
7	Hazardous waste and COVID-19	External risk Technical	P: Low I: Medium	This project focuses on domestic waste and doesn't intend to work with quarantine facilities/hospitals, as this type of waste generated on these premises would fall under the authorities of the Ministry of Health (and not MONRE). The project staff, including consultants, trainers, facilitator, and grants recipients and implementing partners will all be required to follow health and safety measures put forward by the Government of Viet Nam.
8	Lack of acceptance cooperation from the citizens to implement waste segregation programmes in the city	External risk Technical	P: Low I: Low	UNDP will conduct preliminary consultations in targeted wards to ensure that the segregation bins are located in convenient areas and don't cause a nuisance to the population; since this has been identified as the main barrier to participate. Further, UNDP will build on the learnings and insights collected during the segregation pilot project in Da Nang in designing bins and implementing control mechanisms.

9	Implementation challenge as a result of working in target cities in different provinces	External risk Technical and Operational	P: Low I: Medium	The project will take advantage of existing knowledge and practice, effective communication channels and coordination network with local partners, developed under Phase 1. This project mainly focused on Quy Nhon but will continue to work with Provincial People's Committees, authorities and associations in the four other provinces to further strengthen collaboration for the project execution and avoid any ad-hoc issues. As environmental protection and waste management are challenges that receive priority from the government, it is most likely that the project will receive strong support by both authorities and local communities.
10	Operational delays in disbursing cash transfers to beneficiaries	External risk Financial and operational	P: Medium I: Medium	UNDP will work closely with the authorities to ensure the rapid, effective, and transparent disbursement of the support package to the target groups. The project will benefit from lessons learned of the activities delivered under the COVID-19 response, and in particular the cash for work and mobile money transfer.
11	Poor sustainability of the project	External risk Strategic	P: Low I: Medium	The project proposes to build the capacity of local and national stakeholders in the field of waste management through a number of training, workshops, available resources. The platform on CE is designed to be owned by the Government of Viet Nam: IPSONRE (under MONRE). The local authorities in the project sites have co-financed the SGP projects, demonstrating their commitment to this issue.
12	Lack of sufficient Human Resources to carry out the project	Internal risk Organisational	P: Low I: Medium	The UNDP Viet Nam country office (henceforth, CO) has strong inhouse management and technical capacities, as well as proper set up, to provide oversight and financial management of the project. The overall technical oversight is provided by the Environment and Climate Change Team, while the fiduciary oversight is supported by the Operation Team. The project will utilise existing human resources working under the Chemical/waste management portfolio. It will also appoint a new National Consultant based in the project site and in charge of overseeing all the inception activities in the localities. The project will also benefit from the expertise of the senior technical advisor in charge of strategic guidance, project quality assurance, and technical oversight.
13	Weak baselines, or lack thereof, on socio-economic data of IWWs	Internal risk Organisational	P: Medium I: Low	There is no systematic inventory of data related to the socio-economic of IWW, and sex-disaggregated data are scarce. To-date, the project could only utilise existing data from Phase 1, and the results from a longitudinal survey performed by Ha Noi University of Architecture.

				However, there is little other option but to invest time and costs to build a baseline data. This will require initial research, baseline data development for numerous activities, in particular to those such as Output 1.2 and Output 1.3 on developing (respectively) a Fisheries Sector pilot and an MRF, in the same way that a value chain development project would need to start with value chain analysis activities. This adds time, costs and complexity to the project but needs to be done, in order to build sustainable models and ensure a solid project monitoring and impact assessment framework. The project will continue to collaborate closely with the EU-funded Rethinking Plastic programme, to share methodology, raw dataset, host joint dialogues and ensure that collected data can be used by other partners. The outcome of which is to be able to show the extreme diversity of situations of the IWW based on their localities and to present the joint results into policy papers and workshop to the MONRE and other development partners active in the field.
14	Team management and stakeholder mobilisation – it is possible that prolonged continuation of COVID-19 might present a challenge to stakeholder engagement and mobilisation.	Internal risk Organisational	P: Low/ Medium I: Medium High	It is possible that prolonged continuation of COVID-19 might present a challenge to stakeholder engagement and mobilisation. This risk is real, although we believe UNDP Viet Nam has to-date been relative successfully in working in the COVID-19 environment, and has obtained valuable learning in this process. Another 'asset' will be the relationships and trust cultivated during Phase 1. This risk might most affect efforts to secure effective replication and/or scaling of the models generated, where sustained in-person engagement can also be critical. Right now, the main mitigation effort would be to seek to engage with potentially interested stakeholders (e.g., other municipalities) as early as possible. UNDP Viet Nam already hosted a meeting in November 2020 with Binh Dinh municipalities to discuss the implementation of Phase 2 and the development of the fishery pilot and the MRF. So far, the project has received support and positive feedback from the PPC and the local DONRE.
15	<u>Corruption</u> Delay or issues in delivering Cash for work activities	Internal Risk Financial Operational	P: Medium I: Medium	Disbursing cfw activities represents a complex implementation process. UNDP Viet Nam has experience in implementing cash for work schemes, and has developed a good understanding of key risks to be managed, approaches and solutions that work, and how to ensure transparent scheme management. Th project team have had several meetings with UNDP staff colleagues that have implemented cash for work schemes as a response to COVID-19targeting 3,000

				beneficiaries in 3 provinces. The learning has been used, and used this in the development of this proposal. Moreover, detailed implementation guidance will be developed during the project Inception phase to provide a clear operations framework and guidance for team members implementing this component of the project. Finally, the team members who were in charge of implementing the cash for work activities previously will be hired under this project to lead on the operational aspect of the disbursement of the cash for work.
16	Corruption Risk related to the management of conflict of interest in general	Internal risk Operational	P: low I: medium	This risk also related to conflicts that may arise from procurement decision-making processes at project level. UNDP CO applies HACT/PCAT assessments which identify and manage conflicts of interest at the level of IP. UNDP Request for Procurement (RFP) or Invitation to Bid (ITB) templates already include ''Conflict of Interest" conditions to request bidders to avoid and prevent the occurrence of "Conflict of Interest". At the project level procurement decision-making processes, the evaluation panel, by signing the "Declaration of Impartiality and confidentiality" before assessing bids/proposals, are fully accountable to prevent any conflict of interest to happen for that procurement case. In addition, during the technical evaluation process, the Evaluation Panel are requested to assess and confirm in the Technical Evaluation Minutes that "submitted bidders were NOT involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in the RFQ" before technically assessing them to avoid Conflict of Interest.
17	Lack of limited oversight in the project site since UNDP Viet Nam is based in Ha Noi	Internal risk Operational	P: Low I: Medium	The project will be implemented in line with UNDP's rules and regulation and the UNDP M&E manual. UNDP CO has a M&E Focal Point, who is in charge of the overall M&E plan of all projects at CO. S/he will coordinate, and oversee the monitoring visits/ missions and guide the M&E of the full project, once designed. Standard UNDP regulations on Programme and Operations Policies and Procedures (POPP - which could be publicly accessed: https://popp.undp.org/SitePages/POPPRoot.aspx) will be applied. The CO has developed further detailed Standard Operating Procedure (SOPs) project formulation, implementation, monitoring and evaluation, which are used during the whole project cycle management. The detailed M&E activities are included in Annex xx and included in the budget (Annex 3) for the full project. In addition, during the implementation of the full project, relevant responsible staff from UNDP CO will be

				engaged in monitoring the project planning process (e.g., review of the annual & quarterly plans) and also carrying out programme visits and spot checks minimum once a year for the Implementing Partner/Responsible Parties as part of HACT assurance regulations, following which, CO does regular monitoring visits and spot checks. The overall project progress, challenges and/or bottlenecks encountered as well as strategic/adaptive management measures will be discussed, verified and/or endorsed at yearly Project Steering Committee (to be established when the project start implementation) meetings, and captured annually in reports. Finally, the project will recruit one National Expert to work in the project site for the first year of the project implementation to ensure the efficient and timely delivery of the plan and activities.
18	Lack of capacity of the implementing partners to implement the project successfully	Internal Risk Organisational	P: Medium I: High	Following UNDP' SOP, a HCAT/PCAT will be conducted at inception of the project to evaluate the capacity of implementing partners. All invitations to bid and ToRs will be publicly advertised as open-bidding following UNDP rules and regulations related to procurement. The project will outlines several capacity-building actions and/or enhanced monitoring and assurance activities as part of the Risk Mitigation strategies, which will be included in the Project Document. The project will work with partners who can demonstrate proven experience in setting-up pilots in similar contexts. In particular, the project will seek to collaborate with EPPIC finalists who have received extensive training on operational, financial, technical aspects to scale-up their products/services.
19	Limited co-financing from the private sector or the provinces to implement the project	Internal risk Financial	P: medium I: medium	Official letters supporting co-financing commitment will be included as part of project annual reporting documents. UNDP CO will review the annual planning and reporting processes. This includes the engagement of partners into annual planning meetings where the project's co-financiers, including government partners and non-government stakeholders will confirm and commit their respective activities and co-financial figures. This will be tracked through meeting minutes and/or agreements. Annual reports with detailed figures of co-financing activities will be provided by the project for timely measures to reinforce the realization of co-financing.
20	Limited links and lack of	Internal risk	P: low I: medium	The project will continue to collaborate closely with other Norway-funded projects in Viet Nam and other

	synergies with other plastic/waste related projects in Viet Nam			partners operating in the field of plastic pollution reduction and waste management. Section IV of the project document outlines the strategy to ensure consistency and linkages among projects and deliver transformational impact.

IX. ANNEXES

Annex 1: Result Framework

Annex 2: Responses to the questions raised by Norad

Annex 3: Indicative Budget for the Project (2021-2023)

Annex 4: 1st Progress Report, Phase 1

Annex 5: Case Study UNDP India - Swacchta Kendra

Activities under Output 1.3 will utilise the lessons learned and the technical guidance from UNDP India, which successfully scaled-up in 25 cities a Material Recovery Facility model called *Swacchta Kendra*.

In this project the waste pickers (Safaii Mitras) are institutionalised with respective governance mechanisms and attained improved social conditions. Project's targets at the end of the period are, to better manage an amount more than 85,000 MT/year of plastic waste and to improve socio-economic conditions of 37,500 Safaii Mitras. The size of an MRF (Swachhta Kendra) is generally 10,000 – 15,000 sq. ft. (In cities like Mumbai where space is a major issue, the size is typically 5,000-6,000 sq. ft.). In this space, various machines are installed for segregation, processing and dispatch of plastic waste collected in the city. All the material recovery facilities across locations, under HCCB, have been equipped with robust machinery.

One of the key features is the institutionalisation aspect for the Swachhta Kendras with Safaii Mitras activities which is critical to the success and long-term sustainability of the model. The responsibility of waste management overall lies with urban local bodies (ULBs) at city levels, but no uniform mechanisms across cities exist. The mainstreaming for waste-pickers (Safaii Mitras) meant recognition of socio-economic security and dignity of labour. Hence, the model has been institutionalised them through the project with urban local bodies to be able to function in a sustainable manner.

Figure 4: Systemic Approach for Plastic Waste Collection, Segregation and Recycling

Photo: Operations at the MRF